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Winchester Local Plan Habitats Regulations Assessment

Addendum to Reg.19 HRA

Winchester City Council

Final report Prepared by LUC November 2024

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Chapter 1 Introduction

1.1 This addendum supplements the Habitats Regulations Assessment (HRA) report published for consultation alongside the Winchester District Proposed Submission Local Plan (Regulation 19 consultation).

1.2 The addendum provides an update on some parts of the HRA in response to comments received from Natural England during the Reg.19 consultation (see Appendix A), which also necessitated updates to the Statements of Common Ground with Southern Water and the Nutrient Neutrality topic paper. The implications of those changes are set out in this addendum. The addendum to the HRA has been prepared to support the submission of the Local Plan, and whilst it has addressed a number of outstanding points raised by Natural England, it has not been possible to resolve all the matters raised in their Regulation 19 representation. In view of this a further addendum to the HRA will be produced prior to the Hearings, along with an updated Statement of Common Ground with Natural England.

1.3 A HRA Scoping Report was prepared in July 2020, which set out the proposed methodology for the HRA of the Local Plan and identified key impact pathways that would require assessment. This was published alongside the Local Plan Issues & Options consultation in early 2021.

1.4 The HRA of the Draft Local Plan (October 2022) included a full HRA Screening and Appropriate Assessment of the plan's policies and site allocations and was published as part of the Local Plan Regulation 18 consultation in October 2022.

1.5 The HRA of the Proposed Submission Local Plan (July 2024) updated the HRA of the Regulation 18 Local Plan, in response to comments received during the Reg.18 consultation and changes to the plan due to updates in relation to the evidence base. The HRA and plan were published for consultation between August and October 2024.

1.6 Shortly before the Council published the Regulation 19 Local Plan (during the drafting of a Statement of Common Ground), Natural England advised the Council that they had concerns relating to how the Plan had addressed air quality on the natural environment, with particular reference to Bushfield Camp (Policy W5). Officers had previously agreed with Natural England that this issue could be addressed through criterion xv. in Policy W5; however Natural England advised that an air quality assessment should be undertaken as part of the Local Plan HRA. This was commissioned prior to the Regulation 19 consultation and the subsequent outcome of that work is summarised below.

Changes since Regulation19 HRA report

1.7 Since the Reg.19 HRA was published, the following have occurred:

Natural England response to Regulation19 consultation

1.8 Natural England's comments are appended to this report (Appendix A) and the key points of relevance to the HRA are summarised below.

Air pollution

1.9 As stated above, Natural England had advised prior to the Regulation19 consultation that reliance on project level HRA of site allocation W5 Bushfield Camp (found to be the main generator of traffic on roads past the River Itchen

SAC) would not provide the required certainty that adverse effects on integrity could be avoided. Winchester City Council therefore commissioned an air quality assessment of the effects of the Local Plan on the River Itchen SAC from vehicle emissions, based on updated traffic data (Appendix B). Ongoing discussions with Natural England on air pollution will be documented in a Statement of Common Ground (SOCG) with Natural England.

1.10 Chapter 2 and Appendix C of this addendum set out the findings of those studies and the Appropriate Assessment of the effects.

Compensatory habitats

1.11 Natural England in their Regulation 19 representation advised on changes to the status of compensation provided as a result of Southern Water abstraction proposals that would have an adverse effect on the integrity of the River Itchen SAC. Compensatory habitats are to be given the same protection as Habitats Sites (SAC, SPA and Ramsar sites), in line with paragraph 187 of the NPPF. They therefore require assessment in HRA in the same way as the Habitats Sites.

1.12 The implications for the HRA are set out in Chapter 3.

Functionally linked habitats associated with Solent Habitats Sites

1.13 Natural England also provided clarification on the requirements of the Solent Wader and Brent Goose Strategy, which need to be reflected in the Local Plan policies, i.e. that development on or adjacent to all habitats identified as functionally linked at all levels of classification require project level HRA, not just those identified as 'core' areas (as previously reported in the HRA). A minimum of one year's survey data is also required, although in some cases three years are required where the classification level is disputed.

1.14 The implications for the HRA are set out in Chapter 4.

Recreation pressure

1.15 Natural England clarified that the Solent Recreation Mitigation Partnership strategy (Bird Aware) is intended to mitigate in-combination effects and that there may be some instances where an individual development may have impacts alone. The Bird Aware strategy has also recently been updated to extend the period to which the strategy applies.

1.16 Similarly, Natural England requested that the HRA identifies which individual site allocations will require mitigation in relation to the New Forest Habitats sites.

1.17 These assessments are set out in Chapter 5.

Updated nutrient budget and topic paper

1.18 Winchester City Council has updated its nitrogen and phosphorus budget for the Local Plan (Appendix D), to assess and mitigate nutrient increases throughout the plan period, in line with an update to the housing trajectory. This is also referred to in Natural England's Reg.19 comments and the ongoing discussions have been documented in the Statement of Common Ground (SOCG) with Natural England.

1.19 The updated assessment of nutrient impacts is set out in Chapter 6.

Agreement of infrastructure provision with Southern Water

1.20 Southern Water has worked with the Council to ensure that its proposals for water infrastructure provision align with the quantum, location and timing of development in the Local Plan. The Statement of Common Ground (Appendix E) documents the agreements between Southern Water and the Council. The SOCG states that:

"Southern Water published a Water Resources Management Plan (WRMP) in 2019 which proposes measures to manage water supply during drought periods particularly in relation to the River Itchen. The WRMP identified compensatory work to permit proposals and this is addressed in the Plan Habitats Regulation Assessment. The Southern Water draft WRMP 2024 focuses on measures to balance supply and demand to ensure there is not an adverse effect on the River Itchen. The draft WRMP 2024 is currently subject to consultation and once the contents are finalised, the HRA to the local plan and the statement of common ground will be updated to reflect any changes as required.

The Council and Southern Water will continue to liaise in regard to the Southern Water WRMP 2024."

1.21 In terms of the provision of infrastructure for the Local Plan development, the areas of agreement are:

"The revisions to policies made in light of Southern Water's comments on the Regulation 18 Local Plan ensures that developers engage and collaborate with Southern Water to ensure there is adequate wastewater infrastructure and water supply capacity to serve development or that adequate future provision can be made. Planning conditions can be used to secure the necessary mitigation required.

The Council will continue to engage with Southern Water in respect of the progress on the Sutton Scotney pipeline and the works at Brambridge, and the future scheme at Harestock.

The Council will ensure that policy provisions are in place to protect existing and future wastewater and water infrastructure from the impacts of development."

1.22 The implications of this are set out in Chapter 6.

Chapter 2 Air pollution

2.1 Following comments from Natural England (see Chapter 1 and Appendix A of this addendum), an air quality assessment has been undertaken. This chapter assesses the effects of the Local Plan on air pollution at the River Itchen SAC, to identify whether mitigation is required to avoid adverse effects on the integrity of the SAC.

2.2 This assessment is set out with reference to Natural England guidance **[See reference** 1] on assessing vehicle emissions in HRA:

- Step 1: Does the proposal give rise to emissions which are likely to reach a Habitats Site?
- Step 2: Are the qualifying features of sites within 200m of a road sensitive to air pollution?
- Step 3: Could the sensitive qualifying features of the site be exposed to emissions?
- Step 4: Application of screening thresholds, alone (4a) and in-combination (4b and 4c).
- Step 5: Appropriate Assessment where thresholds are exceeded, either alone or in-combination.

Conclusions of Reg.19 HRA

2.3 The HRA Screening identified the potential for significant effects on the River Itchen SAC due to an increase in traffic on the M3 motorway between junctions 11 and 12 south of the city of Winchester (Step 1). The HRA identified that the SAC's qualifying habitat 'Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot' and the rich fens habitats

used by the site's qualifying species 'southern damselfly' are sensitive to air pollution (Step 2); principally nitrogen deposition, nitrogen oxides (NOx) and ammonia. These features are not sensitive to acid deposition (confirmed in discussion with Natural England; during a meeting on 24 September 2024).

2.4 The traffic data presented in the Regulation 19 HRA (Table 4.2 and paragraph 4.49) indicated that the Bushfield Camp site allocation (Policy W5) was responsible for the exceedance of traffic screening criteria, in combination with other plans and projects. The Appropriate Assessment in the HRA then relied on the following Local Plan policies in order to conclude 'no adverse effects on integrity':

- Policy W5 Bushfield Camp: requires applicants to undertake an air quality assessment of effects on River Itchen SAC and to demonstrate that measures will be put in place to avoid or mitigate effects at the SAC.
- Policy NE1 Protecting and enhancing biodiversity: provides general protection for Habitats Sites. Developments having adverse effects on Habitats Sites would not be permitted.
- Policies T1-T4: policies making general provision for sustainable transport measures.

2.5 These results provide initial answers to Steps 1 and 2 of the Natural England guidance:

- Step 1: Does the proposal give rise to emissions which are likely to reach a European site? Yes, Local Plan will increase traffic on roads within the plan area. Traffic screening criteria is exceeded at River Itchen SAC. This data has been updated, as set out below.
- Step 2: Are the qualifying features of sites within 200m of a road sensitive to air pollution? Yes, the qualifying features of the SAC are sensitive to nutrient nitrogen and possibly ammonia.

Additional information requiring assessment

Updated traffic data and air quality assessment

2.6 The traffic data was interrogated in greater detail in preparation for the air quality assessment as it was determined that the screening exceedances predicted by the traffic data presented in the Reg.19 HRA did not take account of the distribution of traffic on the M3 slip roads and minor roads in the vicinity. The updated traffic data is presented in Appendix B, and is based on traffic data and modelling scenarios from the Winchester Local Plan Strategic Transport Assessment **[See reference 2]**. These results update Step 1 of the Natural England guidance.

2.7 The updated data show that the traffic screening criteria are not exceeded on any of the roads within 200m of the River Itchen SAC (B3330 Chesil St; B3404 Alresford Rd; B3335 St Cross Rd; M3 between J10 and J11; M3 J11 onand off- slips and the M3 between them; A3090 Hockley Link to M3; B3335 between M3 J11 on/off slips and south of M3 J11) due to the Local Plan alone; and in most cases, traffic flows reduce on those roads. This is because the traffic modelling reflects anticipated changes in movement patterns resulting from the location and scale of new development, envisaged changes to transport networks and the relative attractiveness of traffic routes. The air quality assessment (Appendix C) based on this data confirms that there are no exceedances of the air pollution screening criteria for the Local Plan alone, and that the Local Plan improves air quality in the vicinity of these roads.

2.8 Therefore, although the Local Plan 'in combination' with other plans and projects shows an exceedance of air pollution screening criteria in some locations, it can be concluded that the Local Plan is not contributing to those impacts, and will not have an adverse effect on the integrity of the River Itchen SAC, due to air pollution.

2.9 Note that the air quality assessment also concluded that the in combination effects due to the background growth and traffic from other plans and projects would still be below the critical levels of the SAC's qualifying species and habitats.

2.10 The air quality assessment concludes:

"The assessment has demonstrated that the Local Plan does not result in any exceedances of the 1% screening threshold for NOx, NH3 or nutrient N deposition when considered in isolation and results in a marginal improvement in air quality at the River Itchen SAC.

In-combination, the Local Plan results in exceedances of the 1% screening threshold for NOx, NH3 and nutrient N deposition; however, the increases in pollutant concentrations/deposition rates are all due to in-combination plans and projects and the marginal air quality improvements due to the Local Plan should not require further assessment in-combination."

2.11 This provides the answers to the following steps of the Natural England guidance:

- Step 3: Could the sensitive qualifying features of the site be exposed to emissions? No, the Local Plan will improve air quality on the roads within 200m of the SAC.
- Step 4: Application of screening thresholds (4a alone; 4b & 4c in combination). The 'in combination' increases in air pollution do exceed screening thresholds, but the Local Plan is not contributing to these and the relevant critical loads are not exceeded, even in the 'in combination' scenario.
- Step 5: Advise on the need to Appropriate Assessment where thresholds are exceeded, either alone or in-combination. No Appropriate Assessment is required.

Conclusions

2.12 There will be no adverse effects on the integrity of the River Itchen SAC due to air pollution.

2.13 This means that the policy requirement for air quality assessment and project level HRA to assess the effects of air pollution as part of the planning application for Bushfield Camp is no longer required, as adverse effects have been ruled out. Amendments to Policy W5 Bushfield Camp will be proposed as part of the main modifications to the Local Plan.

Chapter 3 Compensatory habitats

3.1 This chapter responds to comments from Natural England on the Regulation 19 Local Plan on compensatory habitats associated with the River Itchen SAC (paragraph 1.11 and Appendix A).

Conclusions of Reg.19 HRA

3.2 In relation to compensatory habitats associated with the River Itchen SAC, the Reg.19 HRA stated:

"3.9 Natural England has also confirmed (see Appendix C) that following changes to Southern Water abstraction licences and to protect the River Itchen Special Area of Conservation (SAC), compensatory measures have been agreed between the Environment Agency, Natural England and Southern Water. The River Meon is being considered as compensatory habitat for Atlantic Salmon and chalk stream habitat; and the River Dever (River Test catchment) is being considered as compensatory habitat for chalk stream habitat.

3.10 A map is not currently available for the areas covered by the River Meon Compensatory SAC Habitat and the River Test Compensatory SAC Habitat, but the area considered for compensation currently includes the whole River Meon catchment including the winterbourne channels and the whole of the River Dever including the winterbourne channels. Once the locations are confirmed, this will have the effect of applying the Habitats Regulations to those compensatory habitats in line with UK policy; however, as this is not currently confirmed, the Compensatory SAC Habitats do not require assessment in this HRA."

Additional information requiring assessment

3.3 Details of the compensatory measures for the effects of abstraction on the River Itchen SAC are still emerging, but Natural England has confirmed in their response to the Regulation 19 Local Plan that they do require assessment in the HRA and that the compensation should be referred to as the 'River Test Compensatory SAC' for sites on the River Test (River Dun, River Dever, Bourne Rivulet, and Middle River Test) and the 'River Meon compensatory SAC' for the Meon. The compensatory habitats will cover all of the river catchments from the top of the winterbournes to the point where they join the River Test (for the Test tributaries) or Solent (for the Meon). The Cheriton Stream is also being used as compensatory habitat, however it is within the River Itchen SAC; there are no additional impact pathways on the Cheriton Stream that require assessment in the HRA.

3.4 In relation to the plan area, Natural England has stated that *"the River Meon and River Dever are being considered as compensatory habitat for Southern Water's Drought Plan. At the point the Drought Order is enacted the River Meon will be considered as the River Itchen Compensatory Habitat SAC, similarly the River Dever will become the River Test Compensatory Habitat SAC. This should be taken forward for consideration in the Plan HRA."*

3.5 The rivers which make up the compensatory habitats are all chalk streams with similar characteristics, habitats and species as the River Itchen SAC, i.e. otters, fish, invertebrates and freshwater habitats. However, not all of these features are being considered part of the River Itchen SAC compensation. Natural England has confirmed that the following features should be taken into consideration in this HRA:

- River Meon Compensatory SAC: Atlantic salmon and 'Water courses of plain to montane levels with *R. fluitantis*' (Chalk stream habitat).
- River Test Compensatory SAC: 'Water courses of plain to montane levels with *R. fluitantis*' (Chalk stream habitat).

3.6 Note that Natural England's Reg.19 consultation response refers to compensatory habitats in relation to functionally linked habitats, after the following sentence: *"Paragraph 5.6 refers to the location of functionally linked land associated with the River Itchen SAC is unconfirmed."* The functionally linked habitats referred to in paragraph 5.6 of the Reg.19 HRA are those associated with otters, rather than in relation to compensatory habitats. Safeguards within Local Plan policies were considered sufficient to avoid adverse impacts on potential functionally linked habitats associated with otters.

HRA Screening

3.7 The characteristics of the River Meon Compensatory SAC and River Test Compensatory SAC have been considered in relation to the impact pathways identified in the Reg.19 HRA, to identify likely significant effects, as set out below.

Physical damage and loss of habitat

3.8 The locations of the compensatory habitats within the plan area are as follows:

River Meon Compensatory SAC: Wickham to Knowle (from East Meon in the north, to the Solent in the south). Site allocations in Wickham (WK5 and WK6) are within 500m of the Meon, and allocation KN1 in Knowle is c.100m from the it. River Test Compensatory SAC (River Dever): West Stratton to Sutton Scotney (and then westwards towards the River Test). Site allocation SU01 is c.140m from the River Dever.

3.9 Development will therefore not take place within the Compensatory SACs and there is no likely significant effect.

3.10 There is also no functionally linked habitat that needs to be considered in relation to the River Meon's Atlantic salmon, which is in line with the approach taken in the HRA to the River Itchen SAC:

"4.17 Atlantic salmon spawn, and live as juveniles, in rivers such as the Itchen and Meon and then migrate to sea. The River Itchen SAC therefore has functional links to Southampton Water and beyond, but all of the supporting habitat within the Plan area is within the SAC. Therefore, effects on FLL within the Plan area do not need to be considered in relation to Atlantic salmon."

Non-physical disturbance

3.11 None of the features of the Compensatory SACs is sensitive to noise, vibration or light (the River Itchen SAC was screened for this impact in relation to otter, which is not a consideration for the Meon/Dever).

Air pollution

3.1 The Compensatory SACs, like the Habitats Sites assessed in the Regulation 19 HRA, could be affected by air pollution where sensitive features (e.g. qualifying habitats or plant species) are within 200m of roads; and where

changes in traffic flow / modelled air pollution exceed screening criteria (1,000AADT or 1% of critical level).

3.2 The JNCC's 'Guidance on decision-making thresholds for air pollution' **[See reference 3]** states that, when assessing the air pollution impacts of a development plan, 10km should be used as a zone of influence within which the plan is likely to have significant effects on air quality, i.e. Habitats Sites beyond 10km from the plan area can be screened out in relation to air pollution. Several roads are within 200m of the compensatory habitats and within 10km of the plan area, as summarised below.

3.3 River Meon – from East Meon (source) to Solent at Titchfield Haven:

- A32 from West Meon to Wickham: runs alongside the river (<200m) for most of this length;
- A334 at Wickham: crosses the river;
- M27 between jcn9 & jcn10: crosses the river; and
- A27 between B3334 and Mill Lane: crosses the river.

3.4 River Dever – from West Stratton (source) to River Test at Wherwell:

- A33 & M3 at West Stratton: c.100m/170m respectively from source of river;
- A30 from Sutton Scotney to A34 at Bullington: runs alongside river (<200m) for most of this length; and
- A34 at Bullington: crosses the river.

3.5 Bourne Rivulet – from Swampton to River Test at Hursbourne Priors (rest is >10km from plan area):

■ No A roads. B3048 runs alongside (<200m) for much of this length.

3.6 River Dun – from East Dean to River Test at Kimbridge (rest is >10km from plan area):

- No A road. East Dean Road and Lockerley Road run alongside (<200m) for much of this length.</p>
- **3.7** Middle River Test between Wherwell and Kimbridge/Mottisfont:
 - A3057 from Chilbolton to Stockbridge: runs alongside (<200m) for much of this length;
 - A30 at Stockbridge: crosses (several braids of) the river; and
 - A3057 from Compton to Kimbridge: runs alongside (<200m) for much of this length.

3.8 The Council is currently obtaining traffic data for these roads, so that the potential impacts of air pollution on the Compensatory SACs can be screened. It is considered likely that, because the Local Plan as a whole and in combination does not result in significant increases in traffic at the River Itchen SAC (which is next to the M3 and close to many of the Local Plan's site allocation), that traffic on the roads close to the Compensatory SACs, most of which are outside the plan area, will not be significant. However, this will be confirmed once the traffic data is available. If there are significant increases in traffic on these roads due to the Local Plan, an air quality assessment will be undertaken and the approach and results discussed with Natural England. This will be addressed in an updated addendum to the HRA which will be submitted prior to the Local Plan Hearings.

3.9 In the absence of traffic data, it is not currently possible to rule out likely significant effects in relation to air pollution at the Compensatory SACs.

Changes in water quantity or quality

Direct run-off

3.10 Impacts from direct run-off could occur where development is close to the compensatory habitats, for example from pollution during construction or via surface water drainage.

3.11 The following site allocations are close to the SAC compensatory habitats:

- River Meon Compensatory SAC: Wickham to Knowle (from East Meon in the north, to the Solent in the south). Site allocations in Wickham (WK5 and WK6) are within 500m of the Meon, and allocation KN1 in Knowle is c.100m from the it.
- River Test Compensatory SAC (River Dever): West Stratton to Sutton Scotney (and then westwards towards the River Test). Site allocation SU01 is c.140m from the River Dever.

3.12 The following policies also permit development in locations other than allocated and sites and could therefore, in theory, permit development close to the compensatory habitats on the River Meon or River Dever:

- Policy SP3: Development in the countryside;
- Policy CN5: Renewable and low carbon energy schemes;
- Policy CN6: Micro energy generation schemes;
- Policy CN7: Energy storage development;
- Policy NE12: Equestrian development;
- Policy NE13: Leisure and recreation in the countryside;
- Policy H1: Housing provision;
- Policy H4: Development within settlements;

- Policy H9: Purpose built student accommodation;
- Policy H12: Provision for Gypsies, Travellers and Travelling Showpeople;
- Policy E11: Visitor-related development within the countryside.

3.13 These impacts will be considered further in the Appropriate Assessment, below.

Abstraction

3.14 Southern Water's Water Resource Management Plan states that South Hampshire takes one third of its water from groundwater and two thirds from the River Test and River Itchen. These fall into two of Southern Water's planning areas; the Test and Itchen Catchment, and the East Hampshire Catchment (River Meon and River Hamble). The major chalk aquifer underlies much of the plan area and is connected to the chalk rivers in the area, including the River Itchen SAC (assessed in the Reg.19 HRA), and the River Meon Compensatory SAC, River Test Compensatory SAC (River Dever, Bourne Rivulet, River Dun, and Middle River Test). Abstraction from, or pollution of, groundwater could therefore affect these sites.

3.15 The following policies and associated site allocations (all of the Plan's allocated residential and employment sites) could result in changes to water quality or quantity within the Test & Itchen or East Hampshire Catchments:

- Policy SP3: Development in the countryside;
- Policy NE12: Equestrian development;
- Policy NE13: Leisure and recreation in the countryside;
- Policy H1: Housing provision;
- Policy H4: Development within settlements;
- Policy H9: Purpose built student accommodation;
- Policy H12: Provision for Gypsies, Travellers and Travelling Showpeople;

- Policy E3: Town centres strategy and hierarchy;
- Policy E8: Local shops, services and facilities;
- Policy E9: Economic development in the rural area;
- Policy E10: Farm diversification; and
- Policy E11: Visitor-related development within the countryside.

3.16 These impacts will be considered further in the Appropriate Assessment, below.

Wastewater

3.17 Residential development (defined as development resulting in increased overnight stays; including tourist accommodation, student accommodation, new homes), i.e. development which increases demand for wastewater treatment and discharge, increases nutrient levels in the receiving waters.

3.18 The Local Plan area falls within three river catchments that wastewater discharges into: the Test, the Itchen, and East Hampshire. Within the River Itchen catchment, new residential development must demonstrate that it is nutrient neutral for nitrogen and phosphorus. However, in the Test and East Hampshire catchments (where the compensatory habitats are located), nutrient neutrality applies only to nitrogen, as the Solent Habitats Sites that the Test catchment drains to (Solent & Southampton Water SPA/Ramsar, Solent Maritime SAC and Solent & Dorset Coast SPA) have high levels of nitrogen but not phosphorus. Table 3.1 below identifies the wastewater treatment works that discharge into the rivers that are compensatory habitats, and the site allocations that they would serve.

Table 3.1: Wastewater treatment works serving the Plan areathat discharge into Southern Water's East HampshireCatchment (River Meon) and River Test catchment (Dever)

| WTW | Area served | Residential site allocations in these areas | | | |
|---|--|---|--|--|--|
| East Hampshire catchment, River Meon | | | | | |
| Bishops Waltham | Bishop's Waltham, Waltham Chase, Shirrell Heath, Swanmore | BW1, BW2, BW3, BW4, SW1, H16 | | | |
| Wickham | Wickham | KN1, WC1, WK1, WK5, WK6 | | | |
| Test catchment, River Dever | | | | | |
| East Gratton | Sutton Scotney | SU01, SW01 | | | |
| Package treatment plants (PTPs) / septic tanks | n/a | H17 | | | |

3.19 These impacts will be considered further in the Appropriate Assessment, below.

Recreation pressure

3.20 None of the features of the Compensatory SACs is sensitive to recreation pressure.

Summary of screening

3.21 There are no likely significant effects on the SAC compensatory habitats due to physical damage and loss of habitat, non-physical disturbance, or recreation pressure.

3.22 Likely significant effects related to changes in water quality or quantity and air pollution could not be ruled out at the screening stage and are considered further in the Appropriate Assessment, below.

Appropriate Assessment

3.23 The HRA screening, above, could not rule out effects on the River Meon Compensatory SAC and River Test Compensatory SAC (River Dever), due to:

- Direct run-off: River Meon Compensatory SAC and River Test Compensatory SAC (River Dever, River Bourne, River Dun, Middle River Test).
- Abstraction and wastewater: River Meon Compensatory SAC and River Test Compensatory SAC (River Dever).
- Air pollution: River Meon Compensatory SAC and River Test Compensatory SAC (River Dever, River Bourne, River Dun, Middle River Test).

3.24 As set out in the Reg.19 HRA, Policy NE1: Protecting and enhancing biodiversity and the natural environment in the district provides general protection for habitats sites and other ecological assets. Policy safeguards and recommendations specific to changes in water quality / quantity are set out in the assessments below.

3.25 The need for mitigation in relation to air pollution has not yet been determined.

Water impacts

3.26 Policy NE5: Biodiversity and Policy NE17: Rivers, watercourses and their settings also provides general protection for ecological assets and rivers specifically. These are sufficient protection for the Habitats Sites, including the River Itchen, however, it recommended that the SAC compensatory habitats are referenced within these policies, to ensure that they are given equal protection as the Habitats Sites.

3.27 For example, reference to compensatory habitats could be made in paragraph iv) of Policy NE5 (underlined):

Policy NE5: Biodiversity

The Local Planning Authority will require, in accordance with the Environment Act 2022, development to deliver a minimum of 10% measurable net gain in biodiversity to be maintained for a period of 30 years in accordance with the Environment Act and latest DEFRA Biodiversity Metric; and

i. Protects sites of international, and national importance, and local nature conservation sites and SINCS, from inappropriate development;

ii. Supports habitats that are important to maintain the integrity of Habitats sites;

iii. Supports the delivery of nature-based solutions as part of the development proposals and shows how biodiversity can be retained, protected and enhanced through its design and implementation, for example by designing for wildlife, delivering measurable BNG and BAP targets and enhancing Biodiversity Opportunity Areas, Local Ecological

Networks/Local Nature Recovery Areas, Local Nature Recovery Network and include a management plan for a period of 30 years;

iv. <u>New development will be required to avoid adverse impacts, or if</u> <u>unavoidable ensure that impacts are appropriately mitigated, including</u> <u>impacts on functionally linked land. Developments within 500 metres of a</u> <u>Habitats Site or its FLL should produce a Construction Environmental</u> <u>Management Plan (CEMP) to address potential impacts to these habitats</u> <u>during the construction phase.</u>

v. Mitigates the effects of recreational pressure on Habitats Sites in line with Bird Aware Solent and the New Forest Recreational Management Strategy where appropriate, or an agreed approach with Natural England;

vi. Development proposals will only be supported if the benefits of the development clearly outweigh the harm to the habitat and/or species; with compensation measures used only as a last resort. However, in line with the Habitats Regulations, adverse effects on the integrity of Habitats Sites must be avoided; compensation will not be appropriate where there is harm to the habitats or species of a Habitats Site; [...]

3.28 And in paragraph i) of Policy NE17 (underlined):

Policy NE17: Rivers, Watercourses and their settings

Development proposals that affect rivers, watercourses or their settings will be permitted where they conserve and enhance the following; i. <u>Water quality and quantity, and help achieve requirements of the</u> <u>Water Framework Directive and Habitats Regulations or their replacement,</u> in the case of the River Itchen SAC and Upper Hamble (Solent Maritime <u>SAC, and Solent & Southampton Water SPA/Ramsar), and habitats relied</u> <u>upon as identified in the Solent Wader and Brent Goose Strategy</u> (<u>SWBGS);</u>

ii. Ability of groundwater, surface water features and watercourse
 corridors to function as natural flood management areas by natural
 processes throughout seasonal variations, within the immediate vicinity,
 and both upstream and downstream of the site of the proposal including for
 flood risk management purposes; and specifically for surface water features
 and watercourse corridors;

iii. Increasing biodiversity;

iv. Character, appearance and setting;

v. Public access to and along the waterway for recreational opportunities and the importance of providing canopy shading for both the natural water environment and for people walking beside the waterway;

vi. Include measures to eliminate risk of pollution to groundwater, surface water and watercourse corridor features which would harm their ecological and/or chemical status. [...]

3.29 Suggested amendments to this wording are provided in Chapter 7. These changes would need to be incorporated as main modifications to the Local Plan, with an explanation of the compensatory habitats in the supporting text.

3.30 The following policies also provide specific protection for the water environment and no changes are required:

- Policy NE6: Flooding, Flood Risk and the Water Environment required sustainable approaches to drainage and encourages natural flood risk management.
- Policy NE16: Nutrient Neutrality; water quality effects on the Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites of the Solent and the River Itchen – sets out the principles of nutrient neutrality.
- Policy D8: Contaminated Land requires known or suspected contaminated land to take measures to prevent the pollution of water.
- Policy CN4: Water efficiency standards in new developments sets a water efficiency standard of 100 litres per person per day.

3.31 Effects due to abstraction are also mitigated by the responsibilities of Southern Water to provide water supply infrastructure, in line with the Habitats Regulations and other legislation. As Southern Water's Water Resources Management Plan (WRMP) 2024 is still in draft form, the Reg.19 HRA had an outstanding matter to conclude in relation to this, which is set out in Chapter 6. There are no additional effects relating to abstraction on the compensatory habitats.

3.32 It is recommended that reference is made to the SAC compensatory habitats in policies NE5 and NE17 and their supporting text. With these in place, there will be no adverse effects on the integrity of the SAC compensatory habitats.

Air pollution

3.33 It has not been possible to screen out air pollution impacts on the Compensatory SACs, due to the lack of traffic data. The requirement for

mitigation is therefore not known. The next steps for the assessment of air pollution are set out in Chapter 7.

Chapter 4 Functionally linked land associated with Solent Habitats Sites

4.1 This chapter responds to comments from Natural England on functionally linked land (Chapter 1 and Appendix A).

Conclusions of Reg.19 HRA

4.2 The Screening stage of the Reg.19 HRA identified potential impacts on functionally linked habitats: "where development could occur on functionally linked land (FLL) associated with River Itchen SAC (riparian/wetland habitats used by otter, or lowland fens used by southern damselfly) or Solent & Southampton Water SPA/Ramsar (habitats within 2km of the coast/estuaries, including the Hamble, used by wildfowl/wading birds)." (paragraph 5.6).

4.3 The Appropriate Assessment relied on safeguards within the plan's policies, in order conclude 'no adverse effects on integrity' associated with functionally linked habitats. These safeguards are the general protection for Habitats Sites and biodiversity within Policies NE1 and NE5, and more specific measures within Policy NE17:

Policy NE17: Rivers, watercourses and their settings

Development proposals that affect rivers, watercourses or their settings will be permitted where they conserve and enhance the following; i) Water quality and quantity, and help achieve requirements of the European Water Framework Directive, and Habitats Regulations or their replacement, in the case of developments in proximity to the River Itchen SAC, and Upper Hamble (Solent Maritime SAC, and Solent & Southampton Water SPA/Ramsar), and habitats relied upon as identified in the Solent Wader and Brent Goose Strategy (SWBGS);

[...]

The loss of habitats identified as 'Primary Support Areas', 'Secondary Support Areas' or 'Low Use' sites in the SWBGS do not require HRA but mitigation / compensation should be provided in line with the SWBGS.

4.4 The HRA also summarised the requirements of the Solent Waders and Brent Goose Strategy (SWBGS) [See reference 4], which sets the framework for mitigation and off-setting requirements to protect the Solent Habitats Sites' bird species using FLL:

- Core areas: development having an impact on these must undertake HRA. Ideally they will be protect, or as a minimum replaced by a suitable replacement site of equal or greater size/quality, to fully replace its ecological function.
- Primary support areas: where loss cannot be avoided or mitigated on site, offsetting may be permitted to ensure the continued ecological function of the wader and brent goose sites is maintained and enhanced.
- Secondary support areas: loss or damage is discouraged and on-site avoidance/mitigation should be considered wherever possible. A more flexible approach may be taken to provide the continued ecological function of the network.
- Low use sites: The in-combination loss of these sites would impact on the continued ecological function of the wader and brent goose network; and proportionate mitigation, off-setting and/or enhancement measures will be required.

Candidate sites: Depending on the existing records for the site, a minimum of one year survey, in appropriate management conditions, will be necessary to confirm the classification of the site."

Additional information requiring assessment

4.5 The interpretation of the SWBGS in the Reg.19 HRA and Policy NE17 was incorrect. Natural England (Appendix A) has stated in their comments on the Reg.19 HRA that "Paragraph 5.14 of the Appropriate Assessment infers that only those sites identified as Core areas in the SWBGS require an HRA, this is incorrect all levels of classification will require an HRA where direct or indirect impacts from development are identified as these sites are supporting habitats for the qualifying features of the SPA regardless of classification level. It also refers to a minimum requirement of one year survey, in appropriate management conditions, will be necessary to confirm the classification of the site. The strategy sets out that where a classification is disputed, a minimum of three years survey will be required." And "As set out in Policy W&BG5 of the SWBGS, A project level HRA is required where a site is adjacent to or on land identified a FLL (of any classification). We would therefore advise that the policy in the Plan is updated to reflect this."

4.6 Winchester Council has agreed to update policy as a main modification, to better reflect the requirements of Policy W&BG5 of the SWBGS; i.e. any development on or adjacent to habitats identified as FLL will require project level HRA (a link to the mapping is provided in the supporting text of NE17), with a minimum requirement of one year's ecological survey to confirm the classification of the site (three years where the classification is disputed).

HRA Screening

4.7 The only site allocation on or adjacent to known FLL used by birds from the Solent Habitats Sites (Solent & Southampton Water SPA/Ramsar) is SH2 (North Whiteley; 200 homes), parts of which were surveyed as potential FLL and identified as 'low use site' as part of the Solent Waders and Brent Goose Strategy work. Further allocations may be present in areas of FLL that have not yet been surveyed/identified.

4.8 Changes to the interpretation of the SWBGS do not alter the screening findings presented in the Reg.19 HRA (see paragraph 4.2).

Appropriate Assessment

4.9 The policy wording for SH2 includes the requirement to: "Assess the impact of development both on site and in combination with other nearby sites on habitats and biodiversity (especially those of national and international importance such as the River Hamble and the Solent)". This will need to also require project level HRA, to align with Policy NE17; and the amendments to both SH2 and NE17 will be a main modification to the Local Plan.

4.10 The revised policy wording does not alter the Appropriate Assessment findings presented in the Reg.19 HRA (see paragraph 4.3).

Chapter 5 Recreation pressure

5.1 This chapter responds to comments from Natural England on recreation pressure (Chapter 1 and Appendix A).

Solent Habitats Sites

Conclusions of Reg.19 HRA

5.2 The Reg.19 HRA identified the potential for likely significant effects on the Solent Habitats sites, due to residential or tourism development within the 5.6km 'zone of influence' of the SPA/Ramsar sites. The following residential site allocations are within the ZOI for the Solent Habitats Sites:

- Solent & Southampton Water SPA/Ramsar: H16, H18, KN1, SH2, SH3,
 WC1 (510 homes and at least 30 traveller pitches, within 5.6km ZOI).
- Chichester & Langstone Harbours SPA/Ramsar: SH1 (250 homes within 5.6km ZOI).
- Portsmouth Harbour SPA: H18, KN1, SH1, SH3 (480 homes and 30 traveller pitches, within 5.6km ZOI). Note that a small part of D1 Denmead Neighbourhood Plan Area and its 100 homes also falls within the ZOI.
- Solent & Dorset Coast SPA: as for all three of the above (1240 homes and at least 30 traveller pitches, within 5.6km ZOI; plus any from D1 Denmead Neighbourhood Plan Area).

5.3 In relation to recreation pressure at the Solent Habitats Sites, the Reg.19 HRA concluded that the principal mitigation measure is the Bird Aware Solent strategic mitigation. Other policies contributing to the requirement for green infrastructure and open space in the district (Policies D5, NE3, NE4 and NE11)

would also contribute to mitigation. The supporting text to Policy NE5 Biodiversity stated that *"Bird Aware Solent are in the process of updating the Strategy to increase the period of coverage. This will ensure that the requirements of the Conservation of Habitats and Species Regulations 2017 are met past 2034."*

Additional information requiring assessment

5.4 The extension of the Bird Aware strategy has now been confirmed, with the updated strategy **[See reference 5]** approved at a meeting of the Partnership for South Hampshire on 30 September 2024 **[See reference 6]**. The strategy is expected to be formally agreed at Cabinet Member Decision Day on 11 December 2024 and is expected to be operational from 1 April 2025.

5.5 The revised strategy extends the period of operation of the strategy from 2034 to 2050 and states that:

"Subsequent to the 5 year review, which identified increased levels of anticipated housebuilding in the region, the Strategy has been extended to take into account the approximately 147,500 planned houses in the Solent between now and 2050. It has also been extended to provide mitigation to breeding birds around the Solent. As before, the Strategy includes the provision of in-perpetuity mitigation, this will now be delivered until 2130. This in-perpetuity element deals with the duration of the impact, which has been calculated as 80 years and accepted by Natural England as such."

5.6 This ensures that the in-combination effects of recreation pressure from the Local Plan will be mitigated.

5.7 Although the Bird Aware strategy provides mitigation for in-combination effects, Natural England have stated (Appendix A) that: *"Natural England agree*

that the Solent Recreation Mitigation Partnership (SRMP) a.k.a. 'Bird Aware' is an ecologically sound and robust mitigation and avoidance strategy. We would highlight that the SRMP is designed to mitigate and avoid in-combination impacts from development across the Solent region, but there may be instances where a development proposal may pose impacts to a site alone. This distinction is not made clear in the HRA or in Policy NE5."

HRA Screening

5.8 Of the c.1,270 new homes and traveller pitches expected to come forward within the ZOI of the Solent Habitats Sites (see paragraph 5.6, above), the majority are relatively small developments.

5.9 'Large' developments are considered to be those that would require Environmental Impact Assessment (EIA), i.e. developments of greater than 150 homes or 5ha, which is consistent with the precautionary approach recommended by Natural England in relation to the New Forest Habitats Sites; see below.

5.10 By this measure, large site allocations within the Solent zone of influence are:

- KN1: Ravenswood (200 homes);
- SH1: West of Waterlooville (250 homes); and
- SH2: North Whiteley (200 homes).

5.11 These sites could have a likely significant effect alone, which is considered further in the Appropriate Assessment, below.

Appropriate Assessment

5.12 Mitigation for recreation pressure, over and above contributions to management and monitoring within the Habitats Sites themselves (i.e. Bird Aware) usually involves the creation of new greenspace within the new developments, to provide local opportunities for recreation (e.g. dog walking) and reduce the number of trips to the more sensitive SPA/Ramsar sites.

5.13 Although the main mitigation for recreation pressure referred to in the Local Plan is developer contributions to Bird Aware, there is some provision for other forms of mitigation:

- Policy NE5: Biodiversity: states (with underlining indicating the key wording) that "The Local Planning Authority will require [development that]:
 v. Mitigates the effects of recreational pressure on Habitats Sites in line with Bird Aware Solent and the New Forest Recreational Management Strategy where appropriate, <u>or an agreed approach with Natural England</u>"
- Policy D5: Masterplans: requires 'significant development on sites occupied by major landowners/users' to incorporate a green infrastructure strategy, providing an integrated network of green spaces, taking advantage of opportunities for off-site links to the countryside, South Downs National Park where applicable and wider green network, and where necessary providing alternative recreational space.
- Policy NE3: Open space, sport and recreation: sets out standards for the provision of new open space with development.
- Policy NE4: Green and blue infrastructure: sets out principles for new green infrastructure with development.
- Policy NE11: Open space provision for new developments: sets standards for the provision of new open space, which may help to reduce recreation pressure effects.

5.14 However, to avoid adverse effects on the integrity of the Habitats Sites, it is important that new greenspace provides more than the minimum required to meet open space standards.

5.15 Policy SH2 includes the following site specific requirements:

- vii) Assess the impact of development both on site and in combination with other nearby sites on habitats and biodiversity (especially those of national and international importance such as the River Hamble and the Solent);
- viii) Implement a Green Infrastructure Strategy to avoid harmful impacts and mitigate the local and wider impacts of the development, including their phasing and long term management and any off-site measures required to mitigate harmful impacts on European sites.

5.16 It is recommended that paragraph viii) is amended to say that the new green infrastructure must seek to provide facilities for dog walking and local walks, to reduce trips to the SPA/Ramsar sites, and that design of the greenspace must be agreed with Natural England, as part of a project-level HRA. Similar requirements should also be added to policies SH1 and KN1; however, note that for KN1 and SH2 this requirement applies also to mitigation for the New Forest Habitats Sites (see below), whereas for SH1 it relates only to the Solent sites.

5.17 This will ensure that there will be no adverse effects on the integrity of Habitats Sites due to recreation pressure associated with large development sites.

New Forest Habitats Sites

Conclusions of Reg.19 HRA

5.18 The Reg.19 HRA identified the potential for likely significant effects on the New Forest Habitats sites, due to residential or tourism development within the 15km 'zone of influence' of the SAC/SPA/Ramsar sites.

5.19 The following residential site allocations are within ZOI for the New Forest Habitats Sites:

New Forest SAC, SPA & Ramsar: HU1, KN1, SH2 (400 homes in large (>150 homes / 5ha) developments within 15km ZOI). Note that HU1 is only allocated for 20 homes, but the Neighbourhood Plan area is >5ha so has been included as a precaution.

5.20 As with the assessment of impacts on the Solent sites, the Reg.19 HRA concluded that the principal mitigation measure is the Bird Aware Solent strategic mitigation. Other policies contributing to the requirement for green infrastructure and open space in the district (Policies D5, NE3, NE4 and NE11) would also contribute to mitigation.

Additional information requiring assessment

5.21 In their comments on the Reg.19 HRA, Natural England said: "*Natural England agree the approach that large developments within 15km should be assessed on a case-by-case basis. Policy NE5 sets out the requirement for mitigation and the criteria where mitigation is applicable. We recommend the HRA assesses whether any of the allocation policies are likely to meet this criteria and update the allocation policy text accordingly.*"

5.22 The assessment of site allocations meeting the criteria for large development is set out below.

HRA Screening

5.23 Large site allocations within the New Forest zone of influence are:

- KN1: Ravenswood (200 homes);
- SH2: North Whiteley (200 homes); and
- HU1: Hursley Neighbourhood Plan (20 homes but >5ha).

5.24 Although the Hursley Neighbourhood Plan area is greater than 5ha, only 20 new homes would be developed in this area. HU1 is therefore unlikely to have a significant effect on recreation pressure, alone.

5.25 KN1 and SH2 are both large sites that could have a significant effect alone; these site allocations are also within the zone of influence for the Solent Habitats Sites. These are considered further in the Appropriate Assessment, below.

Appropriate Assessment

5.26 As set out in paragraphs 5.12 to 5.17, above, there is some provision for recreation pressure mitigation other than contributions to Bird Aware (which does not apply to the New Forest Habitats Sites), within the Local Plan. However, it is recommended that policies SH2 and KN1 make specific reference to the need to demonstrate additional mitigation, which could include either new on-site greenspace to reduce trips to more sensitive sites to be agreed with Natural England as part of a project level HRA.

5.27 This will ensure that there will be no adverse effects on the integrity of Habitats Sites due to recreation pressure associated with large development sites.

Chapter 6 Water quality and water infrastructure

6.1 This chapter responds to Winchester Council's updated nutrient budget (Chapter 1 and Appendix D), which has been prepared in consultation with Natural England; and agreements made with Southern Water in relation to water supply infrastructure (Chapter 1).

Wastewater and nutrient neutrality

Conclusions of Reg.19 HRA

6.2 The Local Plan area falls within three river catchments that wastewater discharges into: the Test, the Itchen, and East Hampshire. Within the River Itchen catchment, new residential development must demonstrate that it is nutrient neutral for nitrogen and phosphorus, as the River Itchen SAC has high levels of both. In the Test and East Hampshire catchments, nutrient neutrality applies only to nitrogen, which the Solent Habitats Sites (Solent & Southampton Water SPA/Ramsar, Solent Maritime SAC and Solent & Dorset Coast SPA) have high levels of.

6.3 The Reg.19 HRA screened in all policies and site allocations resulting in new residential and tourism development, as they would have likely significant effects on the Habitats Sites due to increases in nitrogen and/or phosphorus, due to wastewater treatment.

6.4 The Reg.19 HRA concluded (in paragraphs 5.64 to 5.67) that:

6.5 *"Capacity within the Test and Itchen mitigation schemes does not fully meet the required Local Plan demand for nitrogen or phosphorus. About half of the*

nitrogen demand is met, but only a small proportion of the phosphorus demand. Work to identify additional mitigation is in progress and the topic paper states that "Winchester District Council are in line to receive a portion of the funding to deliver upgrades to two Council owned projects. This includes upgrades to Council owned waste water treatment works to Package Treatment Plants." and that "Further information will be provided in due course in the Natural England and Winchester City Council Statement of Common Ground." (see 'next steps' in Chapter 6).

6.6 The residual uncertainty around the potential for strategic mitigation applies to the following site allocations within the Test and Itchen catchments: HU1, W1, W2, W3, W4, W7, W8, W9, W11, KW1, KW2, SW01, SU01, NA2, CC1, CC2, CC3, CC4, OT01; and other windfall development that would use the Grafton, Harestock, Morestead, New Alresford, or Chickenhall WTWs, or otherwise discharge into the Test/Itchen catchment. The lack of strategic mitigation for some of the site allocations does not mean that there will be adverse effects on integrity of Habitats Sites, as Policy NE16 ensures that development would need to demonstrate that it was nutrient neutral (for example by proposing on-site wastewater treatment) before permission was granted; although this may prevent some development from coming forward.

6.7 Policy NE16 is sufficient to avoid adverse effects on the integrity of the River Itchen SAC and Solent Habitats Sites (Solent & Southampton Water SPA/Ramsar, Solent Maritime SAC and Solent & Dorset Coast SPA) due to wastewater treatment, by ensuring the new development would be nutrient neutral.

6.8 At the time of writing, additional capacity within Winchester Council's strategic mitigation is being agreed through a Statements of Common Ground with Natural England and Southern Water (see Chapter 6); once agreed, this will ensure that new development can contribute to off-site strategic mitigation measures, rather than relying on some developments to achieve nutrient neutrality on-site."

Additional information requiring assessment

6.9 Winchester Council has updated its nutrient budget for the plan area and accompanying topic paper (Appendix D), and has been in discussion with Natural England in relation to the updates. These discussions are referred to in Natural England's comments on the Reg.19 HRA:

"There are impacts on nationally and internationally designated sites in the Itchen and Solent catchments arising from excessive nutrients entering the water environment. It is Natural England's view that there is a likely significant effect on internationally designated sites in the River Itchen and Solent catchments due to an increase in wastewater from new housing. Policy NE16 ensures that any new development posing a likely significant effect to designated sites through wastewater will not cause an adverse effect to the integrity of the Habitats sites.

The Plan HRA is supported by a Nutrient Topic Paper setting out the plan level budget and expected mitigation requirements across the plan period. Paragraph 5.66 relies upon policy NE16 requiring allocations and windfall development to assess nutrient impacts and provide mitigation at project level. This is conclusion is not correct and would not meet the tests of the Habitats Regulations. Natural England has advised the Council that the plan must produce a nutrient budget and expected mitigation across the plan period, this work has been set out in the supporting Nutrient Topic paper.

Natural England have worked with the Council on agreeing the nutrient topic paper, we will continue to engage on strategic nutrient mitigation schemes as they come forward. The HRA should be updated to reflect this in the appropriate assessment conclusions." **6.10** The nutrient topic paper (Appendix D) summarises the strategic mitigation measures that have been secured:

"There is enough strategic supply in the East Hampshire catchment to meet the Winchester plan demand. Furthermore, projections of strategic supply and demand in the East Hampshire catchment demonstrated that supply had continued to meet strategic demand."

and "there is enough strategic supply from the Eastleigh Borough Council mitigation scheme to meet the phosphorus demand for development draining to Chickenhall. In terms of the Nitrogen mitigation in the Test and Itchen catchment there is currently enough strategic supply to meet approximately 52% of the Local Plan demand. However, the Council is also aware that there are further nitrogen credits available from the Eastleigh Borough Council nutrient mitigation scheme that will meet the strategic demand, including that of the Winchester Local Plan."

6.11 The shortfall in strategic mitigation supply is expected to be met through the upgrading of wastewater treatment works (WWTWs) to package treatment plants (PTPs), and through strategic mitigation being progressed by PfSH, as follows:

- The upgrading of the Council owned WWTWs to PTPs will generate 199.55Kgs/TP/Yr credit These phosphorus credits will unlock approximately 50% of the Local Plan's demand on sites that drain to the remaining WWTWs in the district.
- The Council are currently in the process of undertaking further work on an additional five Council-owned WWTWs to understand the nutrient mitigation that can be generated from these sites as well as being in a position to support third party PTP providers. A request for discretionary advice has been submitted to Natural England for the additional WWTWs to understand the nitrogen and phosphorus credits that can be generated from the upgrades.

Government have also recently announced the successful bid made by the Partnership for South Hampshire (PfSH) for Round 2 of the Local Nutrient Mitigation Fund. PfSH will be providing further details on the deployment of the fund in relation to additional nutrient mitigation projects in the coming months.

6.12 The nutrient topic paper concludes that:

"Policy NE16 of the Proposed Submission Local Plan (Regulation 19) aims to meet the plan requirements by ensuring that all new overnight accommodation is nutrient neutral. The policy will ensure that any developments allocated in the plan or that comes forward as 'windfall' must have nutrient mitigation either on or off site before they are occupied and subsequently have an impact on any international designated site.

The Council can conclude that there is adequate provision of nutrient mitigation for at least the first five years of the Local Plan. There are ongoing and proactive discussions with site promotors wishing to bring forward on site nutrient mitigation solutions such as the site promotors for Policy W2. The Council have worked closely with internal departments to delivery Council owned nutrient mitigation schemes as well as with the PfSH SEPT to understand the delivery of third part mitigation schemes. As highlighted in Chapter 5 of this report there are a number of current nutrient mitigation scheme with credits available for nitrogen as well as emerging schemes."

6.13 Significant progress has been made towards securing the strategic mitigation measures; with some strategic mitigation still emerging. Policy NE16 is therefore required as a 'backstop' to prevent development from coming forward that cannot demonstrate nutrient neutrality. Natural England's Regulation 19 comments (see paragraph 6.11) said that "the plan must produce a nutrient budget and expected mitigation across the plan period", rather than

relying on Policy NE16 for the mitigation of individual projects. However, the Council have sought agreement with Natural England in relation to the updated Nutrient Neutrality Topic Paper and the supply of nutrient mitigation.

Conclusions

6.14 The revised nutrient topic paper represents significant progress towards demonstrating capacity for all of the Local Plan development within the strategic mitigation. The Council have sought agreement with Natural England in relation to the conclusions of the Nutrient Neutrality Topic and this will be included in the Natural England Statement of Common Ground (SOCG). A SOCG with Southern Water also confirms that the proposed measures are feasible, so that there is certainty that the mitigation can be achieved.

6.15 Once Natural England has confirmed that they are happy that this approach provides the required certainty of mitigation, adverse effects on the integrity of the River Itchen SAC and Solent Habitats Sites (Solent & Southampton Water SPA/Ramsar, Solent Maritime SAC and Solent & Dorset Coast SPA), due to wastewater treatment, can be ruled out.

Water supply infrastructure

Conclusions of Reg.19 HRA

6.16 The Reg.19 HRA identified potential impacts due to abstraction for water supply, which could not be ruled out as Southern Water's 2024 Water Resources Management Plan is still in draft form. This is explained in paragraphs 5.43 to 5.51 of the Reg.19 HRA; excerpts below:

"Abstraction to supply water to new development could result in reduced water levels within River Itchen SAC. Southern Water's 2019 Water Resource Management Plan **[See reference 7]** states that South Hampshire takes one third of its water from groundwater (which feeds both the Itchen and the Meon) and two thirds from the River Test and River Itchen."; and:

"The 2024 WRMP is still in draft form, but the demand forecast **[See reference 8]** for the 2019 WRMP provides a connection forecast for Winchester District of 42,973 household connections in 2039-40 against a 2019-20 baseline of 36,267 (an increase of 6,706), which the Local Plan exceeds. However, Southern Water has confirmed (Appendix C) that they will assess the Local Plan's demand for water supply through the planning process and any capacity constraints will be managed through the current regulatory funding mechanism for the reinforcement of the network. Any reinforcements to the water supply infrastructure would be subject to their own HRA. Winchester Council also has a Statement of Common Ground (SOCG) in preparation with Southern Water, which will confirm agreements on water supply infrastructure such as ensuring compatibility between Southern Water's proposed infrastructure upgrades and Local Plan development."

Additional information requiring assessment

6.17 Southern Water and Winchester Council have now confirmed how the proposed infrastructure upgrades will align with the Local Plan proposals (quantum of development, location and timing), via a SOCG (Appendix E).

6.18 As stated in the SOCG, "The Southern Water draft WRMP 2024 focuses on measures to balance supply and demand to ensure there is not an adverse effect on the River Itchen. The draft WRMP 2024 is currently subject to consultation and once the contents are finalised, the HRA to the local plan and the statement of common ground will be updated to reflect any changes as

required. The Council and Southern Water will continue to liaise in regard to the Southern Water WRMP 2024." Confirmation from Southern Water that there are no additional impacts anticipated at the River Meon Compensatory SAC and River Test Compensatory SAC is therefore being sought, and will be documented in an updated Statement of Common Ground.

Conclusions

6.19 Following confirmation from Southern Water that there are no issues with water supply for the proposed Local Plan policies and site allocations, as a result of abstraction.

6.20 Confirmation will be sought from Natural England that there are no impacts on the Compensatory SACs and will be included in the updated Statement of Common Ground with Natural England.

Chapter 7 Conclusions and next steps

7.1 This chapter sets out the next steps for the HRA and recommended amendments to policy, necessary to conclude 'no adverse effects on integrity'.

Modifications to policy wording

Air pollution

7.2 The conclusion of the air pollution assessment means that the requirement for site allocation W5 Bushfield Camp to undertake air quality assessment and project level HRA to assess the effects of air pollution as part of the planning application are no longer required, as adverse effects have been ruled out for the Local Plan as a whole. The Council will consult on the proposed amendments to Policy W5 Bushfield Camp with Natural England and any changes made to the policy will be included in the Natural England Statement of Common Ground.

Compensatory habitats

7.3 Policy NE5: Biodiversity and Policy NE17: Rivers, watercourses and their settings also provides general protection for ecological assets and rivers specifically. These are sufficient protection for the Habitats Sites, including the River Itchen, however, it recommended that the SAC compensatory habitats are referenced within these policies, to ensure that they are given equal protection as the Habitats Sites.

7.4 For example, reference to compensatory habitats could be made in paragraph iv) of Policy NE5 Biodiversity (suggested amendments underlined):

iv. Criterion iv. New development will be required to avoid adverse impacts, or if unavoidable ensure that impacts are appropriately mitigated, including impacts on to functionally linked land and SAC compensatory habitats are appropriately avoided, mitigated or compensated in line with mitigation hierarchy and will be subject to HRA. Developments within 500 metres of the SPA/Ramsar FLL Habitats Site, compensatory Habitats Site or FLL should produce a Construction Environmental Management Plan (CEMP) to address potential impacts to these habitats during the construction phase

7.5 v. And in paragraph i) of Policy NE17 Rivers, watercourses and their settings:

Water quality and quantity, and help achieve requirements of the
 Water Framework Directive and Habitats Regulations or their replacement,
 in the case of the River Itchen SAC and Upper Hamble (Solent Maritime
 SAC, and Solent & Southampton Water SPA/Ramsar); Compensatory
 SACs (compensatory habitats) on the River Meon, River Dever, River Dun,
 Bourne Rivulet and River Test; and habitats relied upon as identified in the
 Solent Wader and Brent Goose Strategy (SWBGS);

7.6 These changes would need to be incorporated as proposed modifications to the Local Plan, with an explanation of the compensatory habitats in the supporting text.

Functionally linked habitats

7.7 The policy wording for SH2 includes the requirement to: "Assess the impact of development both on site and in combination with other nearby sites on habitats and biodiversity (especially those of national and international importance such as the River Hamble and the Solent)". This will need to also require project level HRA, to align with Policy NE17; and the amendments to both SH2 and NE17 will be a proposed modification to the Local Plan.

7.8 Winchester Council has agreed to update Policy NE17 as a proposed modification, to better reflect the requirements of Policy W&BG5 of the SWBGS; i.e. any development on or adjacent to habitats identified as FLL will require project level HRA (a link to the mapping is provided in the supporting text of NE17), with a minimum requirement of one year's ecological survey to confirm the classification of the site (three years where the classification is disputed).

Recreation pressure

7.9 Policy SH2 includes the following site specific requirements:

- ix) Assess the impact of development both on site and in combination with other nearby sites on habitats and biodiversity (especially those of national and international importance such as the River Hamble and the Solent);
- x) Implement a Green Infrastructure Strategy to avoid harmful impacts and mitigate the local and wider impacts of the development, including their phasing and long term management and any off-site measures required to mitigate harmful impacts on European sites.

7.10 It is recommended that paragraph viii) is updated to say that the new green infrastructure must seek to provide facilities for dog walking and local walks, to reduce trips to the SPA/Ramsar sites, and that design of the greenspace must be agreed with Natural England, as part of a project-level HRA. Similar requirements should also be added to policies SH1 and KN1.

Further assessment

Air pollution

7.11 In the absence of traffic data, it is not currently possible to rule out likely significant effects in relation to air pollution at the Compensatory SACs.

7.12 The Council is currently obtaining traffic data for these roads, so that the potential impacts of air pollution on the Compensatory SACs can be screened. If there are significant increases in traffic on these roads due to the Local Plan, an air quality assessment will be undertaken and the approach and results discussed with Natural England.

Statements of Common Ground

7.13 Statements of Common Ground (SOCGs) will confirm the following:

- Natural England: agreement of the strategic nutrient mitigation strategy and use of Policy NE16 as a safeguard to prevent individual developments being permitted that cannot demonstrate that they are nutrient neutral. Agreement in respect of the conclusions of the air quality assessment in combination and alone in relation to the Local Plan. Agreement in respect of any changes made by the Council in relation to the Regulation 19 representation from Natural England and the outstanding matter of the assessment of road impacts within 200m of the compensatory habitats site and whether this will necessitate air quality assessment.
- Southern Water: confirmation that water supply (abstraction) to serve the Local Plan development will not have adverse effects on the River Test Compensatory SACs or River Meon Compensatory SAC.

Next steps for the HRA

7.14 Proposed modifications to the Local Plan will be confirmed through the Examination process. The HRA will then be updated to reflect the proposed modifications and any further agreements made through the SOCGs. Any mitigation required must be agreed and secured in policy prior to adoption of the Local Plan, so that the final HRA report can conclude 'no adverse effects on integrity', in line with the Habitats Regulations.

LUC

November 2024

Appendix A

Natural England Reg.19 comments

Date: 11 October 2024 Our ref: 487013 Your ref: Regulation 19 Local Plan



Winchester City Council

BY EMAIL ONLY

Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

Dear Sir/Madam

Draft Submission Winchester District Local Plan 2020 – 2040 (Emerging) – Regulation 19

Thank you for your consultation on the Winchester District Local Plan.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England has one substantive comment to make in relation to the Habitats Regulations Assessment of this Local Plan.

Air Quality – River Itchen SAC - UNSOUND

We understand that the Local Planning Authority (LPA) are currently undertaking further air quality assessment work with the support of Natural England. There remains a possibility that this issue will still be resolved. However at the time of responding, the results of the assessment work were not available. In light of this, we advise that the Local Plan **does not currently pass the tests of soundness** described in Paragraph 35 of the National Planning Policy Framework (NPPF), for the reasons set out below.

The Plan should address the impacts of air quality on the natural environment. In particular, it should address the traffic impacts associated with new development, particularly where there are impacts on European sites and SSSIs. The environmental assessment of the plan (Sustainability Appraisal (SA) and Habitats Regulations Assessment (HRA)) should also consider any detrimental impacts on the natural environment alone and in-combination, <u>and suggest appropriate avoidance or mitigation measures</u> where applicable.

Natural England has engaged with the LPA regarding potential air quality impacts from the Bushfield Camp allocation (Policy W5), advice was provided in our Regulation 18 response dated 12th December 2022 on the evidence and assessment required for addressing traffic and air quality impacts at the Plan level. The air quality assessment provided does not assess potential impacts to ecological receptors and does not follow the methodology set out in the <u>NE001 Air Quality</u> <u>Assessment guidance</u> published by Natural England.

Therefore, currently we are not able to agree with the conclusion of the HRA (dated July 2024) prepared for the Reg 19 Plan, that there will be no adverse effect on integrity of the River Itchen SAC as a result of air quality (paragraphs 5.31).

Table 4.2 within the HRA sets out that in-combination the Plan has an expected increase of 2459 annual average daily traffic (AADT) within 200m of the River Itchen SAC. In addition, the Council

has identified that allocation W5 Bushfield Camp is also likely to have an alone impact on the River Itchen Special Area of Conservation (SAC) from increased traffic.

The HRA is relying on the alone impact from Bushfield Camp to be assessed and mitigated at project level. It is Natural England's advice that this is unlikely to meet the required criteria for mitigation in line with the Conservation of Species and Habitats Regulations 2017 (the Habitats Regulations). Appropriate Assessments cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. Natural England advises that more certain mitigation measures need to be provided to support the conclusion of No Adverse Effect on Integrity.

Whilst Natural England welcome the inclusion of Policy W5 Bushfield Camp within the Local Plan, reliance on this policy would not give the certainty required to meet the tests of the Habitats Regulations. Natural England expect the Local Plan to address the impacts of air quality on the natural environment

Paragraph 5.32 also relies on soft measures from other policies such as enabling sustainable transport. These soft measures relying on behavioural change cannot be relied upon with certainty to meet the tests of the Habitats Regulations.

In light of this, we advise that the Local Plan <u>would not pass the tests of soundness</u> described in Paragraph 35 of the NPPF. Namely:

- b) **Justified**: the air quality evidence base currently available as part of the HRA is not current and does not assess alone and in-combination impacts to ecological receptors.
- d) **National Policy**: the NPPF integrates the tests of the Habitats Regulations into national policies and the HRA is inconsistent with the NPPF.

We continue to work with the LPA on addressing this matter and welcome the opportunity to discuss the updated modelling and results when these are available.

A signed interim Statement of Common Ground dated September 2024 is available and sets out our commitment to work through outstanding issues with Winchester City Council.

Other Matters

The remaining matters raised within the letter are advisory and are not considered soundness issues. We would recommend the following changes are implemented within the Local Plan and supporting HRA to ensure completeness, clarity and inclusivity for users of the Plan.

Habitats Regulations Assessment (HRA)

Natural England note that a Habitats Regulations Assessment (HRA) dated July 2024 has been prepared by LUC for the Regulation 19 of the Winchester District Local Plan. Currently, for the reasons explained above concerning the uncertainty about air quality impacts, Natural England are not able to agree with the conclusions of the Habitat Regulations Assessment that the Plan will not have an adverse effect on integrity of the River Itchen SAC.

Air Quality

Please refer to our comments raised above in relation to Air Quality.

Physical Loss

Paragraph 5.6 refers to the location of functionally linked land associated with the River Itchen SAC is unconfirmed. Natural England has advised the Council that the River Meon and River Dever are

being considered as compensatory habitat for Southern Water's Drought Plan. At the point the Drought Order is enacted the River Meon will be considered as the River Itchen Compensatory Habitat SAC, similarly the River Dever will become the River Test Compensatory Habitat SAC. This should be taken forward for consideration in the Plan HRA.

We welcome that policy NE5 includes specific reference to functionally linked land and Solent Wader and Brent Goose Strategy (SWBGS) sites. Paragraph 5.14 of the Appropriate Assessment infers that only those sites identified as Core areas in the SWBGS require and HRA, this is incorrect all levels of classification will require an HRA where direct or indirect impacts from development are identified as these sites are supporting habitats for the qualifying features of the SPA regardless of classification level.

It also refers to a minimum requirement of one year survey, in appropriate management conditions, will be necessary to confirm the classification of the site. The strategy sets out that where a classification is disputed, a minimum of three years survey will be required.

Nutrient Impacts

There are impacts on nationally and internationally designated sites in the Itchen and Solent catchments arising from excessive nutrients entering the water environment. It is Natural England's view that there is a likely significant effect on internationally designated sites in the River Itchen and Solent catchments due to an increase in wastewater from new housing.

Policy NE16 ensures that any new development posing a likely significant effect to designated sites through wastewater will not cause an adverse effect to the integrity of the Habitats sites.

The Plan HRA is supported by a Nutrient Topic Paper setting out the plan level budget and expected mitigation requirements across the plan period. Paragraph 5.66 relies upon policy NE16 requiring allocations and windfall development to assess nutrient impacts and provide mitigation at project level. This is conclusion is not correct and would not meet the tests of the Habitats Regulations. Natural England has advised the Council that the plan must produce a nutrient budget and expected mitigation across the plan period, this work has been set out in the supporting Nutrient Topic paper.

Natural England have worked with the Council on agreeing the nutrient topic paper, we will continue to engage on strategic nutrient mitigation schemes as they come forward.

The HRA should be updated to reflect this in the appropriate assessment conclusions.

Recreational Pressure

Solent Habitats Sites

Natural England agree that the Solent Recreation Mitigation Partnership (SRMP) a.k.a. 'Bird Aware' is an ecologically sound and robust mitigation and avoidance strategy. We would highlight that the SRMP is designed to mitigate and avoid in-combination impacts from development across the Solent region, but there may be instances where a development proposal may pose impacts to a site alone. This distinction is not made clear in the HRA or in Policy NE5.

Natural England are engaging with the Bird Aware project board and the Partnership for South Hampshire (PfSH) on this issue to agree the approach to mitigation when the current strategy ends in 2034, this includes extension of the strategy beyond 2034. It is our understanding that the reviewed strategy has now been approved by PfSH and the Bird Aware project board. It is now with the relevant LPA's to consider adopting this revised strategy, it is Natural England's view that the strategy is ecologically sound. We recommend the HRA is updated to reflect this.

New Forest Habitats Sites

Natural England agree the approach that large developments within 15km should be assessed on a case-by-case basis. Policy NE5 sets out the requirement for mitigation and the criteria where

mitigation is applicable. We recommend the HRA assesses whether any of the allocation policies are likely to meet this criteria and update the allocation policy text accordingly.

Strategic Policies

SP3 Development in the Countryside

Natural England welcomes the inclusion of biodiversity and the water environment in this policy. It is still our view that this policy should be strengthened to address the importance of soils, particularly protection of those sites identified as Best Most Versatile in line with the NPPF (Paragraphs 180 and 181).

SP CN1 Climate Change

We note that this policy has been updated to include nature based solutions which is welcome. However, the policy could be strengthened through the inclusion of specific actions and targets for delivery of nature based solutions.

Similarly we note that this policy is also not referenced in the Local Plan Monitoring Framework with no requirement for reporting. Specific targets and monitoring will make the policy much more likely to deliver tangible outcomes.

SP NE1 Biodiversity and the Natural Environment

We welcome the inclusion of this policy and have no further comments to make.

SP NE3 Open Space, Sport and Recreation

It is welcomed that Natural England's Urban Greening Factor for England is mentioned in NE4 para 7.37, along with the concept of 20 min neighbourhoods in Strategic Policy T1 Sustainable and Active Transport and Travel. We recommend that the 20 minute neighbourhood concept is also referred to under Policy NE3, and NE4 as provision of Green Infrastructure (GI) can play a key role in delivering the objective of Strategic Policy T1.

The provision of enhanced GI and sites of nature conservation value can not only help address some of the mental and physical health problems experienced in the Borough's population but can also benefit society in other ways including improvements to local air and water quality, reducing the risk of flooding, alleviating noise levels and aiding climate change adaptation.

Natural England recommend the Local Plan sets out policy that links public health and wellbeing to the natural environment and seeks to enhance green infrastructure and ecological connectivity across the Borough that is managed for people and nature.

SP NE4 Green and Blue Infrastructure

Natural England welcomes reference to NE GI principles and the Urban Greening Factor. We also welcome specific targets for measurable net of GI that addresses deficits of infrastructure provision, biodiversity enhancement and is linked to policy NE3.

The Plan should also outline how new GI and habitat creation will be monitored to ensure that it develops in accordance with any targets identified within the Plan and the stated intention(s) of the GI. This policy is not mentioned under the Local Plan Monitoring Framework section and it is our view this policy would benefit from monitoring.

SP NE5 Biodiversity

We have the following comments on the policy supporting text:

- e) Paragraph 7.35 should refer to Itchen having international as well as national designation.
- f) Paragraph 7.44 Welcome this wording that a strategic approach to air quality management is required, this also should reference strategic assessment of the Plan for impacts from air quality. We have been working with the Council on this aspect, please refer to our further comments on this aspect under the Habitats Regulations Assessment (HRA) subheading above.
- g) Paragraph 7.48 New Forest Recreational Disturbance. The policy text references that development requiring EIA within the 15km zone will require a project level HRA to assess impacts of new development on the New Forest from increased recreational pressure. Please see our comments on the Plan HRA, it is not clear if the Plan has assessed the allocations meet this criteria. If so, these allocation policies should be updated to include specific reference to the requirement.

In the policy itself, point iv should say ensure impacts to functionally linked land are appropriately avoided, mitigated or compensated in line with mitigation hierarchy and will be subject to a HRA. We also advise that this section refers to the SWBGS and that any development coming forward which is likely to impact either directly or indirectly on this network of sites will be required to provide mitigation in line with the SWBGS mitigation guidance.

We recommend that this policy also has regard to the forthcoming Test & Itchen compensatory habitat. We have previously advised the Council that the River Meon and the River Dever are being considered as compensatory habitat for Southern Water's Drought Plan, at the point the Drought Order is enacted the compensatory habitat will become designated as the River Itchen Compensatory Habitat SAC and River Test Compensatory Habitat SAC and will be subject to The Conservation of Habitats and Species Regulations (2017) (as amended).

NE6 Flooding, Flood Risk and Water Environment

In our Regulation 18 response we advised that this policy should be strengthened to require sustainable drainage systems (SuDS) features to be incorporated into development in order to prevent pollution to the River Itchen SAC from surface water run-off. Supporting text could also reference relevant Ciria guidance for the design of SuDS treatment trains to reduce nutrient enrichment and that an extra treatment train should be considered if development drains to a protected site. This policy should be linked to policy NE4, NE16 and NE17.

NE15 Special Trees, Important Hedgerows and Ancient Woodlands

Natural England welcomes point iii which require adequate buffer zones to woodland and a minimum buffer of 15 to ancient woodland. The supporting text should reference to Natural England and the Forestry Commission's <u>standing advice</u> on Ancient Woodland and Veteran trees. This sets out that the buffer to ancient woodland should be a minimum of 15m, however this is a minimum starting point, we recommend the policy is strengthened to require assessment of tree root protection zones and that a larger buffer may be required. The Woodland Trust has provided further <u>advice</u> on impacts from development in the vicinity of ancient woodland and recommended buffer zones, we recommend this is referred to in the policy supporting text.

NE16 Nutrient Enrichment and Neutrality

We welcome this policy supporting mitigation schemes such as tree planting or wetlands in appropriate locations. The policy should also set out that mitigation schemes coming forward should be agreed with Natural England. For wetlands in particular, they must be designed and assessed in line with the Natural England Wetland Framework if they are to be suitable for nutrient credits. Wetlands coming forward in floodplains without well characterised and controllable inflows are unlikely to be suitable as constructed wetlands to generate nutrient credits. In such

circumstances a more naturalised wetland may be an appropriate alternative which would seek to generate biodiversity net gain or carbon credits but not nutrient credits.

Any development coming forward in mains sewage areas which seek to install an onsite wastewater treatment works will need to seek agreement of the Environment Agency and those draining to the River Itchen will need to assess impacts to flows and loads condition targets of the River Itchen SAC both from surface water and groundwater. This is particular is relevant to policy W5 Bushfield Camp.

The policy supporting text also states that the Local Plan may be able to help by allocating land for mitigation schemes using nature based solutions. The plan and nutrient topic paper do not set out any allocations for this purpose, we would encourage the Council to continue to engage with developers and landowners in their plan area to bring forward such schemes.

We would also advise that paragraph 7.112 makes reference to impacts on the River Itchen SAC from nitrogen and phosphorus.

NE17 Rivers, watercourses, and their settings

The policy wording also states that the loss of habitats identified as in the Solent Wader and Brent Goose Strategy do not require HRA. This is incorrect, the SWBGS has mapped a network of terrestrial sites located outside of the Solent SPAs boundaries which used by SPA species (including qualifying features and assemblage species) as alternative areas for roosting and foraging. These sites support the functionality of the designated sites and are therefore protected in this context, they should be referred to as functionally linked land. Any development coming forward which will impact these sites directly or indirectly will require a HRA and should provide mitigation in line with the SWBGS mitigation guidance, this includes Low Use sites. It is also a requirement of the SWBGS that should site classification be disputed, reclassification of a site will only be considered if confirmed by three consecutive years of winter surveys to the agreed methodology, under appropriate habitat management conditions for waders and/or brent geese usage throughout the survey period.

We recommend this policy is also linked to policy CN4.

Allocation Policies

W2 Sir John Moore Barracks

Welcome specific inclusion of protecting the nuns stream winterbournes and the onsite SINC. We understand there is also a candidate SINC located on the northern part of the site, you may wish to consider expanding paragraph x to include assessment and retention of the candidate site.

W5 Bushfield Camp

We have been in discussions with Winchester City Council regarding potential alone impacts through air pollution on the River Itchen SAC from this allocation. Please see the Habitat Regulations Assessment section of this letter for our further comments on this issue. We are also in discussions with the applicant regarding nutrient neutrality mitigation, we would advise that this policy is expanded to require any potential onsite wastewater treatment works is accompanied by an assessment of impacts to the River Itchen SAC through discharges from the WwTW including groundwater modelling, and will require the agreement of both Natural England and the Environment Agency.

SH2 North Whitely

There are a number of Ancient woodlands located throughout the allocation boundary. We have concerns regarding the policy wording recommending that the existing woodland on and adjoining the site should be used to provide recreational facilities and as a possible wood fuel source. Impacts associated with close proximity between a development and a woodland include tipping, soil compaction around tree roots, increased light pollution, localised enrichment and contamination of soils.

We recommend that the policy is amended to ensure that any development coming forward complies with the Ancient Woodland standing advice which requires a minimum 15 buffer from the canopy edge, larger buffers may be required particularly for any parcels coming forward which are adjacent to Botley Woods, and Everett's and Mushes Copses SSSI. They should also incorporate SuDS to prevent surface water run-off into the woodlands. Where possible access to these woodlands should be prevented or carefully managed to prevent damage to sensitive habitats.

This allocation policy should be linked to policy NE15.

KW2 Land adjoining Cart & Horses PH

In our previous response to the Regulation 18 draft Plan we advised that this policy should take into consideration the proximity to the River Itchen SAC and SSSI, we recommended strengthening this policy to require assessment of potential impacts from surface water run-off and incorporation of naturalised SuDS features. It is disappointing that the policy has not been strengthened to ensure there are no adverse effects on the protected sites, and there is no mention of the River Itchen SAC included in the policy text, protection of the River Itchen SAC should be a priority for this allocation.

Further general advice is provided in Annex A.

For any new consultations, or to provide further information on this consultation please send your correspondence to <u>consultations@naturalengland.org.uk</u>.

Yours faithfully,

Ellen Satchwell Sustainable Development – Senior Officer Thames Solent Area Team

Annex A - Natural England's Local Plan Advice

Biodiversity and Geodiversity

The Plan should set out a strategic approach, planning positively for the creation, protection, enhancement and management of networks of biodiversity. There should be consideration of geodiversity conservation in terms of any geological sites and features in the wider environment.

A strategic approach for networks of biodiversity should support a similar approach for green infrastructure (outlined below). Planning policies and decisions should contribute and enhance the natural and local environment, as outlined in para 180 of the NPPF. Plans should set out the approach to delivering net gains for biodiversity. Net gain for biodiversity should be considered for all aspects of the plan and development types, including transport proposals, housing and community infrastructure.

Priority habitats, ecological networks and priority and/or legally protected species populations

The Local Plan should be underpinned by up-to-date environmental evidence. This should include an assessment of existing and potential components of local ecological networks. This assessment should inform the Sustainability Appraisal, ensure that land of least environment value is chosen for development, and that the mitigation hierarchy is followed and inform opportunities for enhancement as well as development requirements for particular sites.

Priority habitats and species are those listed under Section 41 of the Natural Environment and Rural Communities Act, 2006 and UK Biodiversity Action Plan (UK BAP). Further information is available here: <u>Habitats and species of principal importance in England</u>. Local Biodiversity Action Plans (LBAPs) identify the local action needed to deliver UK targets for habitats and species. They also identify targets for other habitats and species of local importance and can provide a useful blueprint for biodiversity enhancement in any particular area.

Protected species are those species protected under domestic or European law. Further information can be found here <u>Standing advice for protected species</u>. Sites containing watercourses, old buildings, significant hedgerows and substantial trees are possible habitats for protected species.

Ecological networks are coherent systems of natural habitats organised across whole landscapes so as to maintain ecological functions. A key principle is to maintain connectivity - to enable free movement and dispersal of wildlife e.g., badger routes, river corridors for the migration of fish and staging posts for migratory birds. Local ecological networks will form a key part of the wider Nature Recovery Network proposed in the 25 Year Environment Plan. Where development is proposed, opportunities should be explored to contribute to the enhancement of ecological networks.

Planning positively for ecological networks will also contribute towards a strategic approach for the creation, protection, enhancement and management of green infrastructure, as identified in paragraph 181 of the NPPF.

Soil, Agricultural Land Quality and Reclamation

The Minerals and Waste Plan should give appropriate weight to the roles performed by the area's soils. These should be valued as a finite multi-functional resource which underpins our wellbeing and prosperity. Decisions about development should take full account of the impact on soils, their intrinsic character and the sustainability of the many ecosystem services they deliver for example:

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for instance as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably. The <u>Natural Environment</u> <u>White Paper</u> (NEWP) 'The Natural Choice: securing the value of nature' (Defra, June 2011), emphasises the importance of natural resource protection, including the conservation and sustainable management of soils, for example:

- A Vision for Nature: 'We must protect the essentials of life: our air, biodiversity, soils and water, so that they can continue to provide us with the services on which we rely' (paragraph 2.5).
- Safeguarding our Soils: 'Soil is essential for achieving a range of important ecosystem services and functions, including food production, carbon storage and climate regulation, water filtration, flood management and support for biodiversity and wildlife' (paragraph 2.60).
- 'Protect 'best and most versatile' agricultural land' (paragraph 2.35).
- 2. The conservation and sustainable management of soils also is reflected in the <u>National Planning</u> <u>Policy Framework</u> (NPPF), particularly in paragraph 180. When planning authorities are considering land use change, the permanency of the impact on soils is an important consideration. Particular care over planned changes to the most potentially productive soil is needed, for the ecosystem services it supports including its role in agriculture and food production. Plan policies should therefore take account of the impact on land and soil resources and the wide range of vital functions (ecosystem services) they provide in line with paragraph 180 of the NPPF, for example to:
 - Safeguard the long-term capability of best and most versatile agricultural land (Grades 1, 2 and 3a in the Agricultural Land Classification) as a resource for the future.
 - To avoid development that would disturb or damage other soils of high environmental value (e.g., wetland and other specific soils contributing to ecological connectivity, carbon stores such as peatlands etc) and, where development is proposed.
 - Ensure soil resources are conserved and managed in a sustainable way.
- 3. To assist in understanding agricultural land quality within the plan area and to safeguard 'best and most versatile' agricultural land in line with paragraph 180 of the National Planning Policy Framework, strategic scale Agricultural Land Classification (ALC) Maps are available. Natural England also has an archive of more detailed ALC surveys for selected locations. Both these types of data can be supplied digitally free of charge by contacting Natural England. Some of this data is also available on the www.magic.gov.uk website. The planning authority should ensure that sufficient site specific ALC survey data is available to inform decision making. For example, where no reliable information was available, it would be reasonable to expect that developers should commission a new ALC survey, for any sites they wished to put forward for consideration in the Local Plan.

General mapped information on soil types is available as 'Soilscapes' on the <u>www.magic.gov.uk</u> and also from the LandIS website <u>http://www.landis.org.uk/index.cfm</u> which contains more information about obtaining soil data.

Further guidance for protecting soils (irrespective of their ALC grading) both during and following development is available in Defra's <u>Construction Code of Practice for the Sustainable Use of Soils</u> <u>on Construction Sites</u>, to assist the construction sector in the better protection of the soil resources with which they work, and in doing so minimise the risk of environmental harm such as excessive run-off and flooding. The aim is to achieve positive outcomes such as cost savings, successful landscaping and enhanced amenity whilst maintaining a healthy natural environment, and we would advise that the Code be referred to where relevant in the development plan.

All of the allocated sites contain BMV agricultural land. In line with the Planning Practice Guidance (PPG) to support the NPPF; we welcome that the allocated sites are all accompanied by a detailed ALC Survey (Post-1988), available on the <u>magic</u> website. Where minerals underlie BMV agricultural land, it is particularly important that restoration and aftercare preserve the long-term potential of the land as a national, high-quality resource. Where alternative after-uses (such as forestry and some forms of amenity, including nature conservation) are proposed on BMV agricultural land, the methods used in restoration and aftercare should enable the land to retain its longer-term agricultural capability, thus remaining a high-quality resource for the future.

Reclamation to non-agricultural uses does not mean that there can be any reduced commitment to high standards in the reclamation. Such reclamations require equal commitment by mineral operators, mineral planning authorities and any other parties involved to achieve high standards of implementation.

Sustainable soil management should aim to minimise risks to the ecosystem services which soils provide, through provision of suitable soil handling and management advice. The planning authority should ensure that sufficient site-specific soil survey data is available to inform decision making. To include, for example, assessment of soil properties to inform appropriate soil management, restoration and drainage, where required.

The <u>25 Year Environment Plan</u> (25YEP) sets out government action to help the natural world regain and retain good health, including highlighting the need to:

- protect the best agricultural land.
- put a value on <u>natural capital</u>, including healthy soil.
- ensure all soils are managed sustainably by 2030.
- restore and protect peatland.

Air pollution

We would expect the plan to address the impacts of air quality on the natural environment. In particular, it should address the traffic impacts associated with new development, particularly where this impacts on European sites and SSSIs. The environmental assessment of the plan (SA and HRA) should also consider any detrimental impacts on the natural environment and suggest appropriate avoidance or mitigation measures where applicable.

Natural England advises that one of the main issues which should be considered in the plan and the SA/HRA are proposals which are likely to generate additional nitrogen emissions as a result of increased traffic generation, which can be damaging to the natural environment.

The effects on local roads in the vicinity of any proposed development on nearby designated nature conservation sites (including increased traffic, construction of new roads, and upgrading of existing roads), and the impacts on vulnerable sites from air quality effects on the wider road network in the area (a greater distance away from the development) can be assessed using traffic projections and the 200m distance criterion followed by local Air Quality modelling where required. We consider that the designated sites at risk from local impacts are those within 200m of a road with increased traffic, which feature habitats that are vulnerable to nitrogen deposition/acidification. APIS provides a searchable database and information on pollutants and their impacts on habitats and species: http://www.apis.ac.uk/

It is advised that <u>Natural England's approach to advising competent authorities on the assessment</u> of road traffic emissions under the Habitats Regulations is followed when assessing impacts on protected sites.

Please note that ammonia (NH3) from traffic emissions should also be assessed as the impact from this source on designated sites is currently unclear.

It is advised air quality impacts on interest features of nationally and locally designated sites is also carried out as part of an assessment of impacts on SSSIs and wider biodiversity.

Biodiversity Net Gain

Embedding biodiversity net gain

It is highly recommended that the Local Plan Update incorporates a policy for biodiversity net gain. Biodiversity net gain is a key tool to help nature's recovery and is also fundamental to health and wellbeing as well as creating attractive and sustainable places to live and work in. The NPPF highlights the role of policies and decision making to minimise impacts and provide net gains for biodiversity (para 180).

Planning Practice Guidance describes net gain as an 'approach to development that leaves the natural environment in a measurably better state than it was beforehand' and applies to both biodiversity net gain and wider environmental net gains. For biodiversity net gain, Natural England's <u>statutory metric</u>, can be used to measure gains and losses to biodiversity resulting from development. We advise you to use this metric to implement development plan policies on biodiversity net gain. Any action, as a result of development, that creates or enhances habitat features can be measured using the metric and as a result count towards biodiversity net gain.

The Chartered Institute of Ecology and Environmental Management, along with partners, has developed 'good practice principles' for biodiversity net gain, which can assist plan-making authorities in gathering evidence and developing policy.

The following may also be useful considerations in developing plan policies:

- Use of a map within the plan. Mapping biodiversity assets and opportunity areas ensures compliance with national planning policy and helps to clearly demonstrate the relationship between development sites and opportunities for biodiversity net gain.
- Use of a biodiversity net gain target. Any target should be achievable, and evidence based and may be best placed in lower tier documents or a Supplementary Planning Document, or similar, to allow for regular updates in line with policy and legislation.
- Consideration should be given to thresholds for different development types, locations or scales of development proposals and the justification for this. Setting out the scope and scale of expected biodiversity net gains within Infrastructure Delivery Plans can help net gain to be factored into viability appraisals and land values. Natural England considers that all development, even small-scale proposals, can make a contribution to biodiversity. Your authority may wish to refer to Technical Note 2 of the <u>CIEEM guide</u> which provide useful advice on how to incorporate biodiversity net gain into small scale developments.
- Policy should set out how biodiversity net gain will be delivered and managed and the priorities for habitat creation or enhancement in different parts of the plan area. The plan policy should set out the approach to onsite and offsite delivery. Natural England advises that on-site provision should be preferred as it helps to provide gains close to where a loss may have taken place. Off-site contributions may, however, be required due to limitations on-site or where this best meets wider biodiversity objectives set in the development plan. Further detail could be set out in a supplementary planning document.
- The policy could also usefully link to any complementary strategies or objectives in the plan, such as green infrastructure and Local Nature Recovery Strategies.

Wider environmental gains

Natural England focusses our advice on embedding biodiversity net gain in development plans, since the approach is better developed than for wider environmental gains. However, your authority should consider the requirements of the NPPF (paragraph 180, 185 and 186) and seek opportunities for wider environmental net gain wherever possible. This can be achieved by considering how policies and proposed allocations can contribute to wider environment enhancement, help adapt to the impacts of climate change and/or take forward elements of existing green infrastructure, open space of biodiversity strategies. Opportunities for environmental gains, including nature-based solutions to help adapt to climate chance, might include:

- Identifying opportunities for new multi-functional green and blue infrastructure.
- Managing existing and new public spaces to be more wildlife friendly (e.g., by sowing wild flower strips, changing cutting regime of open spaces and road verges*) and climate resilient

- Planting trees, including street trees, characteristic to the local area to make a positive contribution to the local landscape.
- Improving access and links to existing greenspace, identifying improvements to the existing
 public right of way network or extending the network to create missing footpath or cycleway
 links.
- Restoring neglected environmental features (e.g., a hedgerow or stone wall or clearing away an eyesore).
- Designing a scheme to encourage wildlife, for example by ensuring lighting does not pollute areas of open space or existing habitats

*Please see this <u>paper</u> regarding cost-effective and low-maintenance management for species-rich grassland on road verges and the value it can contribute to biodiversity and ecosystem services

Any habitat creation and/or enhancement as a result of the above may also deliver a measurable biodiversity net gain.

Evidence gathering

Existing environmental evidence can be gathered from various sources including online data sources like <u>MAGIC</u>, the <u>Hampshire Biodiversity Information Centre</u> (HBIC), and strategies for green infrastructure, open space provision, landscape character, climate and ecosystem services and biodiversity opportunity mapping. We advise that reference is made to the **Hampshire Ecological Network Mapping** dataset – this comprises the Local Ecological Network mapping for Hampshire, prepared by HBIC. The network comprises statutory designations, non-statutory designated sites, ancient woodlands, and other non-designated priority habitat, and other ecological features such as undesignated water bodies. Usefully, the Hampshire network mapping also identifies areas where there is the greatest potential to enhance the network, referred to as the network opportunities layer, based on habitat suitability indices. This can be useful where deciding where to create or enhance habitat.

Biodiversity data can also be obtained from developments that were subject to Environmental Impact Assessment (EIA) Monitoring, the discharge of conditions or monitoring information from legal agreements with a biodiversity element. This can help establish a baseline to understand what assets exist and how they may relate to wider objectives in the plan area. Cross boundary environmental opportunities can also be considered by working with neighbouring authorities, local nature partnership and/or the local enterprise partnership. The relationship between environmental assets and key strategic growth areas may help to highlight potential opportunities that development could bring for the natural environment. The following may also be useful when considering biodiversity priorities in your plan area:

- What biodiversity currently exists, what is vulnerable or declining?
- How are existing assets connected, are there opportunities to fill gaps and improve connectivity?
- How does the above relate to neighbouring authority areas, can you work collaboratively to improve links between assets or take strategic approaches to address issues or opportunities?

Applying the mitigation hierarchy

The plan's approach to biodiversity net gain should be compliant with the mitigation hierarchy, as outlined in paragraph 185 of the NPPF. The policy should ensure that biodiversity net gain is not applied to irreplaceable habitats and should also make clear that any mitigation and/or compensation requirements for European sites should be dealt with **separately** from biodiversity net gain provision.

Policies and decisions should first consider options to avoid adverse impacts on biodiversity from occurring. When avoidance is not possible impacts should be mitigated and finally, if there is no

alternative, compensation provided for any remaining impacts. Biodiversity net gain should be additional to any habitat creation required to mitigate or compensate for impacts. It is also important to note that net gains can be delivered even if there are no losses through development.

The policy for net gain, or its supporting text, should highlight how losses and gains will be measured. The <u>statutory metric</u> can be used for this purpose as a fully tested metric that will ensure consistency across the plan-area, and we would encourage its use. Alternatively, your authority may choose to develop a bespoke metric, provided this is evidenced based.

The following may also be useful considerations in developing plan policies:

- Use of a map within the plan. Mapping biodiversity assets and opportunity areas ensures compliance with national planning policy and also helps to clearly demonstrate the relationship between development sites and opportunities for biodiversity net gain.
- NB: The Hampshire Ecological Network Mapping dataset would be ideally placed to provide this evidence base.
- Use of a biodiversity net gain target. Any target should be achievable, and evidence based and may be best placed in lower tier documents or a Supplementary Planning Document, to allow for regular updates in line with policy and legislation.
- Consideration should be given to thresholds for different development types, locations or scales of development proposals and the justification for this. Setting out the scope and scale of expected biodiversity net gains within Infrastructure Delivery Plans can help net gain to be factored into viability appraisals and land values. Natural England considers that all development, even small-scale proposals, can make a contribution to biodiversity. Your authority may wish to refer to Technical Note 2 of the CIEEM guide which provide useful advice on how to incorporate biodiversity net gain into small scale developments.
- Policy should set out how biodiversity net gain will be delivered and managed and the priorities for habitat creation or enhancement in different parts of the plan area. The plan policy should set out the approach to onsite and offsite delivery. Natural England advises that on-site provision should be preferred as it helps to provide gains close to where a loss may have taken place. Off-site contributions may, however, be required due to limitations on-site or where this best meets wider biodiversity objectives set in the development plan. Further detail could be set out in a supplementary planning document.
- The policy could also usefully link to any complementary strategies or objectives in the plan, such as green infrastructure.

<u>Monitoring</u>

Your plan should include requirements to monitor biodiversity net gain. This should include indicators to demonstrate the amount and type of gain provided through development. The indicators should be as specific as possible to help build an evidence base to take forward for future reviews of the plan, for example the total number and type of biodiversity units created, the number of developments achieving biodiversity net gains and a record of on-site and off-site contributions.

LPAs should work with local partners, including the Local Environmental Record Centre and wildlife trusts, to share data and consider requirements for long term habitat monitoring. Monitoring requirements should be clear on what is expected from landowners who may be delivering biodiversity net gains on behalf of developers. This will be particularly important for strategic housing allocations and providing as much up-front information on monitoring will help to streamline the project stage.

Water Quality and Resources and Flood Risk Management

Natural England expects the Plan to consider the strategic impacts on water quality and resources as outlined in paragraph 180 of the NPPF. We would also expect the plan to address flood risk management in line with the paragraphs 166 and 167 of the NPPF.

The Plan should be based on an up-to-date evidence base on the water environment and as such

the relevant River Basin Management Plans should inform the development proposed in the Plan. These Plans implement the EU Water Framework Directive and outline the main issues for the water environment and the actions needed to tackle them. Competent Authorities must in exercising their functions, have regard to these plans.

The Local Plan should contain policies which protect habitats from water related impacts and where appropriate seek enhancement. Priority for enhancements should be focussed on European sites, SSSIs and local sites which contribute to a wider ecological network.

Plans should positively contribute to reducing flood risk by working with natural processes and where possible use Green Infrastructure policies and the provision of SUDs to achieve this.

Tranquillity

The Local Plan should identify relevant areas of tranquillity and provide appropriate policy protection to such areas as identified in paragraph 106 and 191 of the NPPF.

Tranquillity is an important landscape attribute in certain areas e.g. within National Parks/ AONBs/National Landscapes, particularly where this is identified as a special quality. The CPRE have mapped areas of tranquillity which are available <u>here</u> and are a helpful source of evidence for the Local Plan and SEA/SA.

Agri-environment schemes

Minerals sites may be under existing Higher Level Stewardship agreements before minerals are extracted and may be returned to agricultural use following landfilling. We advise early contact by agreement holders with the Rural Payments Agency to discuss individual cases so that any payments can be amended accordingly.

Annex B - Section 245 (Protected Landscapes) of the Levelling Up and Regeneration Act 2023

Section 245 (Protected Landscapes) of the Levelling Up and Regeneration Act 2023 places a duty on relevant authorities in exercising or performing any functions in relation to, or so as to affect, land in a National Park, the Broads or an Area of Outstanding Natural Beauty ("National Landscape") in England, to seek to further the statutory purposes of the area. The duty applies to local planning authorities and other decision makers in making planning decisions on development and infrastructure proposals, as well as to other public bodies and statutory undertakers.

It is anticipated that the government will provide guidance on how the duty should be applied in due course.

In the meantime, and without prejudicing that guidance, Natural England advises that:

- the duty to 'seek to further' is an active duty, not a passive one. Any relevant authority must take all reasonable steps to explore how the statutory purposes of the protected landscape (A National Park, the Broads, or an AONB) can be furthered.
- The new duty underlines the importance of avoiding harm to the statutory purposes of protected landscapes but also to seek to further the conservation and enhancement of a protected landscape. That goes beyond mitigation and like for like measures and replacement. A relevant authority must be able to demonstrate with reasoned evidence what measures can be taken to further the statutory purpose.
- The proposed measures to further the statutory purposes of a protected landscape, should explore what is possible in addition to avoiding and mitigating the effects of the development, and should be appropriate, proportionate to the type and scale of the development and its implications for the area and effectively secured. Natural England's view is that the proposed measures should align with and help to deliver the aims and objectives of the designated landscape's statutory management plan. The relevant protected landscape team/body should be consulted.

Appendix B Updated traffic data

B.1 Traffic data was updated as part of the air quality assessment and is presented below.

B.2 Where the traffic data exceeds the DMRB screening criteria [See reference 9] (1,000 AADT, the cell is highlighted in yellow.

Table B.1: Traffic data used in the air quality assessment: all vehicles

| Road | 2019 baseline | 2041 baseline | 'Do Minimum' (DM) | 'Do Something' (DS) | Difference: Local Plan alone (DS- DM) | Difference: Local Plan in combination (DS- 2019) |
|---|---------------|---------------|-------------------------|---------------------------|---|---|
| B3330 (Chesil St) | 11,217 | 12,488 | 12,263 | 12,453 | -225 | -35 |
| B3404 (Alresford Rd) | 6,435 | 8,737 | 9,188 | 9,010 | 451 | 273 |
| B3335 (St Cross Rd) | 10,149 | 14,198 | 14,078 | 15,815 | -120 | 1,617 |
| M3 between J10 and J11 | 125,654 | 153,408 | 152,694 | 152,477 | -713 | -931 |
| M3 J11 nb onslip | 9,339 | 11,630 | 10,820 | 11,780 | -810 | 151 |
| M3 J11 sb offslip | 9,738 | 10,682 | 10,333 | 11,784 | -349 | 1,102 |
| M3 between J11 on/offslips | 105,617 | 130,272 | 130,483 | 127,739 | 210 | -2,533 |
| A3090 (Hockley Link to M3 nb onslip) | 12,603 | 14,643 | 12,691 | 18,414 | -1,951 | 3,771 |
| B3335 between M3 J11 on/off slips | 14,204 | 17,374 | 16,685 | 20,335 | -688 | 2,962 |
| B3335 south of M3 J11 | 16,348 | 19,079 | 18,986 | 20,840 | -94 | 1,761 |

Appendix C

Air quality assessment



| Air Quality Assessment | | | | | |
|------------------------|-------------------------|--|--|--|--|
| HRA, Winchester | | | | | |
| Job number: | J0907 | | | | |
| Document number: | J0907/1/D5 | | | | |
| Date: | 14 November 2024 | | | | |
| Client: | Winchester City Council | | | | |
| Prepared by: | Mr Bob Thomas | | | | |

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1 Introduction

1.1. Background

- 1.1.1 Air Quality Assessments Ltd (AQA) has been commissioned by Winchester City Council to assess the air quality effects of the Winchester Local Plan 2020-2040 (referred to as the "Local Plan" from now on) on the UK National Site Network.
- 1.1.2 An initial screening using traffic data provided by SYSTRA, using the Solent Transport Sub Regional Transport Model (SRTM) which was used to inform the Strategic Transport Assessment that was prepared to support Winchester City Councils Proposed Submission Local Plan (Regulation 19), has identified roads where the Local Plan, in-combination with other plans and projects, could increase traffic by more than 1,000 annual average daily traffic (AADT). UK National Site Network sites within 200m of these roads may be affected by road traffic emissions, as advised in Natural England's Approach to Advising Competent Authorities on the Assessment of Road Traffic Emissions under the Habitats Regulations (Natural England, 2018). The following UK National Site Network site has been identified:
 - River Itchen Special Area of Conservation (SAC).
- 1.1.3 The increase in emissions due to the additional Local Plan in-combination traffic may have an adverse effect on the sensitive habitats within the River Itchen SAC.
- 1.1.4 The following roads, where the Local Plan in-combination could increase traffic by more than 1,000 AADT, have been identified within 200m of the River Itchen SAC:
 - The Hockley Link (A3090);
 - the M3 J11 southbound off slip; and
 - the B3335.
- 1.1.5 Data from documents submitted with the Bushfield Camp outline planning application (Planning Reference: 23/02507/OUT) also show that the Bushfield Camp development could increase traffic on the Hockley Link (A3090) by 1,314 AADT, which could have a significant effect on the River Itchen SAC in its own right. The traffic generated by the Bushfield Camp Local Plan allocation is included in the SRTM scenarios used in this assessment.

1.2. Scope of Assessment

- 1.2.1 This report describes the existing air quality conditions at the River Itchen SAC and assesses the likely impact that traffic generated by the Local Plan will have on air quality. The main air pollutants of concern related to road traffic emissions are ammonia (NH₃), nitrogen oxides (NOx), nutrient nitrogen deposition and acid nitrogen deposition. The assessment has been undertaken for the 2041 SRTM forecast year.
- 1.2.2 The assessment has been prepared taking into account all relevant local and national guidance and regulations and informs the Appropriate Assessment undertaken by Land Use Consultants Limited (LUC), completed with regard to Natural England's Guidance on Assessing Road Traffic Emission under the Habitats Regulations (Natural England, 2018).



1.2.3 The assessment has been completed with regard to the consultation response from Natural England on the Proposed Submission Winchester District Local Plan 2020 – 2040 (Regulation 19). Natural England stated the following in their response to the Plan Habitats Regulations Assessment in relation to air quality:

Air Quality – River Itchen SAC - UNSOUND

We understand that the Local Planning Authority (LPA) are currently undertaking further air quality assessment work with the support of Natural England. There remains a possibility that this issue will still be resolved. However at the time of responding, the results of the assessment work were not available. In light of this, we advise that the Local Plan does not currently pass the tests of soundness described in Paragraph 35 of the National Planning Policy Framework (NPPF), for the reasons set out below.

The Plan should address the impacts of air quality on the natural environment. In particular, it should address the traffic impacts associated with new development, particularly where there are impacts on European sites and SSSIs. The environmental assessment of the plan (Sustainability Appraisal (SA) and Habitats Regulations Assessment (HRA)) should also consider any detrimental impacts on the natural environment alone and in-combination, and suggest appropriate avoidance or mitigation measures where applicable.

Natural England has engaged with the LPA regarding potential air quality impacts from the Bushfield Camp allocation (Policy W5), advice was provided in our Regulation 18 response dated 12th December 2022 on the evidence and assessment required for addressing traffic and air quality impacts at the Plan level. The air quality assessment provided does not assess potential impacts to ecological receptors and does not follow the methodology set out in the NEO01 Air Quality Assessment guidance published by Natural England.

Therefore, currently we are not able to agree with the conclusion of the HRA (dated July 2024) prepared for the Reg 19 Plan, that there will be no adverse effect on integrity of the River Itchen SAC as a result of air quality (paragraphs 5.31).

Table 4.2 within the HRA sets out that in-combination the Plan has an expected increase of 2459 annual average daily traffic (AADT) within 200m of the River Itchen SAC. In addition, the Council has identified that allocation W5 Bushfield Camp is also likely to have an alone impact on the River Itchen Special Area of Conservation (SAC) from increased traffic.

The HRA is relying on the alone impact from Bushfield Camp to be assessed and mitigated at project level. It is Natural England's advice that this is unlikely to meet the required criteria for mitigation in line with the Conservation of Species and Habitats Regulations 2017 (the Habitats Regulations). Appropriate Assessments cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. Natural England advises that more certain mitigation measures need to be provided to support the conclusion of No Adverse Effect on Integrity.



Whilst Natural England welcome the inclusion of Policy W5 Bushfield Camp within the Local Plan, reliance on this policy would not give the certainty required to meet the tests of the Habitats Regulations. Natural England expect the Local Plan to address the impacts of air quality on the natural environment

Paragraph 5.32 also relies on soft measures from other policies such as enabling sustainable transport. These soft measures relying on behavioural change cannot be relied upon with certainty to meet the tests of the Habitats Regulations.

In light of this, we advise that the Local Plan would not pass the tests of soundness described in Paragraph 35 of the NPPF. Namely:

b) Justified: the air quality evidence base currently available as part of the HRA is not current and does not assess alone and in-combination impacts to ecological receptors.

d) National Policy: the NPPF integrates the tests of the Habitats Regulations into national policies and the HRA is inconsistent with the NPPF.

We continue to work with the LPA on addressing this matter and welcome the opportunity to discuss the updated modelling and results when these are available.

A signed interim Statement of Common Ground dated September 2024 is available and sets out our commitment to work through outstanding issues with Winchester City Council.



2 Air Quality Legislation & Planning Policy

2.1. Air Quality Legislation

- 2.1.1 European Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the "Habitats Directive") requires member states to introduce a range of measures for the protection habitats and species. The Conservation of Habitats and Species Regulations 2017 (as amended) transposes the Directive into law in England and Wales (The Stationary Office, 2017).
- 2.1.2 The United Kingdom left the European Union on 31st January 2020 and amendments to the Habitats Regulations have transferred functions from the European Commission to the appropriate authorities in England and Wales and SACs and Special Protection Areas (SPAs) now form part of the UK National Site Network.
- 2.1.3 The Habitats Regulations require the competent authority, which in this case is Winchester City Council, to firstly evaluate whether plans are likely to give rise to a significant effect on Habitats Regulations sites. Where this is the case, it has to carry out an 'appropriate assessment' in order to determine whether the plans will adversely affect the integrity of the site.
- 2.1.4 The Air Quality Standards Regulations 2010 (as amended) set legally binding limit values for concentrations of major air pollutants in outdoor air that impact public health and vegetation, including a critical level for NOx (The Stationary Office, 2010). The critical level for NOx is an annual mean concentration of 30µg/m³. Achievement of the critical levels is a national obligation rather than a local one. The critical levels only apply at sites more than 20 km from agglomerations, or more than 5 km away from other built up areas, industrial installations or motorways or major roads with traffic counts of more than 50,000 vehicles a day.
- 2.1.5 Part IV of The Environment Act 1995, as amended by the Environment Act 2021, requires the UK Government to prepare a national Air Quality Strategy. A new Air Quality Strategy for England was published in April 2023 (Defra, 2023). The Air Quality Strategy sets out the actions that Defra expects local authorities to take in support of long-term air quality goals and provides a framework to enable local authorities to make the best use of their powers and make improvements for their communities.
- 2.1.6 The strategy sets out air quality standards and objectives intended to protect human health and the environment. Standards are the concentrations of pollutants in the atmosphere, below which there is a minimum risk of health effects or ecosystem damage; they are set with regard to scientific and medical evidence. Objectives are the policy targets set by the Government, taking account of economic efficiency, practicability, technical feasibility and timescale, where the standards are expected to be achieved by a certain date. The Government has also published a Clean Air Strategy, which provides an overview of the actions that the government will take to improve air quality (Defra, 2019). The actions in the Clean Air Strategy focus on emissions from transport, the home, farming, and industry.



- 2.1.7 The national air quality objective for NOx is an annual mean of 30µg/m³, which is the same as the critical level; however, the compliance date by which the objective must be achieved, and maintained thereafter, is 31st December 2000.
- 2.1.8 The national objective only strictly applies away from urban areas and heavily trafficked roads; however, Natural England has adopted a precautionary approach and applies the objective across all Habitats Regulations sites.

2.2. National Policies

2.2.1 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these should be applied (Ministry of Housing, Communities & Local Government, 2023). It provides a framework within which locally prepared plans for development can be produced. At Paragraph 8c, the NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development and includes an overarching environmental objective:

"To protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

2.2.2 With regard to environmental impacts from traffic, the NPPF states at Paragraph 108 that:

"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: ...

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; ..."

2.2.3 The NPPF states at Paragraph 180 that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by: ...

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; ..."

2.2.4 The NPPF goes on to state at Paragraph 191:

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development."

2.2.5 With specific reference to air quality, the NPPF states at Paragraph 192 that:



"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan."

2.2.6 The NPPF also includes the following statement at Paragraph 194:

"The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities."

2.2.7 The NPPF is supported by air quality national Planning Practice Guidance (nPPG) (Ministry of Housing, Communities & Local Government, 2019). The PPG states that:

"The Department for Environment, Food and Rural Affairs carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with relevant Limit Values. It is important that the potential impact of new development on air quality is taken into account where the national assessment indicates that relevant limits have been exceeded or are near the limit, or where the need for emissions reductions has been identified."

2.2.8 The PPG also states:

"Air quality considerations may also be relevant to obligations and policies relating to the conservation of nationally and internationally important habitats and species."

2.2.9 With regard to development plans, the PPG states that:

"It is important to take into account air quality management areas, Clean Air Zones and other areas including sensitive habitats or designated sites of importance for biodiversity where there could be specific requirements or limitations on new development because of air quality. Air quality is also an important consideration in habitats assessment, strategic environmental assessment and sustainability appraisal which can be used to shape an appropriate strategy, including through establishing the 'baseline', appropriate objectives for the assessment of impacts and proposed monitoring."

2.2.10 The PPG goes on to state that:

"Whether air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to have



an adverse effect on air quality in areas where it is already known to be poor, particularly if it could affect the implementation of air quality strategies and action plans and/or breach legal obligations (including those relating to the conservation of habitats and species). Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity."

2.2.11 The PPG also sets out the information that may be required in an air quality assessment, stating that:

"Assessments need to be proportionate to the nature and scale of development proposed and the potential impacts (taking into account existing air quality conditions), and because of this are likely to be locationally specific."

2.2.12 It also provides guidance on options for mitigating air quality impacts, and makes clear that:

"Mitigation options will need to be locationally specific, will depend on the proposed development and need to be proportionate to the likely impact."



3 Methodology

3.1. Natural England Guidance

3.1.1 Natural England have published internal guidance to assist their staff when giving advice to competent authorities undertaking assessment of road traffic impacts under the Habitats Regulations (Natural England, 2018). The following methodology ensures that the competent authority is able to reach a conclusion with regards to air quality in the Habitats Regulations Assessment.

3.2. Baseline Conditions

- 3.2.1 Information on background NOx and NH₃ concentrations and nutrient and acid nitrogen deposition at the River Itchen SAC have been collated from the following sources:
 - Background pollutant concentration maps published by Defra (Defra, 2024). These cover the whole country on a 1 x 1 km grid; and
 - Background ammonia concentrations and nitrogen deposition fluxes published by the Air Pollution Information System (APIS, 2024).
- 3.2.2 Background concentrations of NOx are provided by Defra to support local authorities carrying out their duties under Local Air Quality Management (LAQM) and include projections up to 2030 only. Therefore, the 2041 background NOx concentrations required to align with the SRTM modelling scenarios (see **Paragraph 3.3.2**) are assumed to be the same as in 2030.
- 3.2.3 Background concentrations of NH₃ and nitrogen deposition rates are provided by APIS for an average of 2020-22, with no future projections. Therefore, background NH₃ concentrations and nitrogen deposition rates in 2041 are assumed to be the same as the 2020-22 average.

3.3. Road Traffic Impacts

Sensitive Locations

3.3.1 Concentrations have been modelled at receptors within the River Itchen SAC closest to the roads where the Local Plan in-combination is predicted to increase traffic flows by more than 1,000 AADT. Receptors have been modelled on transects located to the north of the A3090, between the A3090 and the M3, and to the south of the M3 at points spaced 1m apart from the edge of the River Itchen SAC up to 100m from the edge of the road. Full details of the transect receptors are provided in in **Table A1** in **Appendix A1**. The transect locations are shown in **Figure 1**. The initial screening focuses on the transect receptors closest to the roads, where the impacts will be greatest.



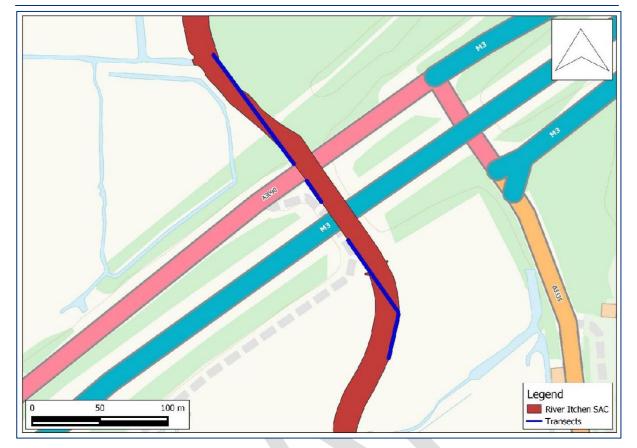


Figure 1: Location of Transects

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Assessment Scenarios

- 3.3.2 Concentrations of NOx and NH₃ have been predicted for the following scenarios, from the SRTM modelling scenarios for the Local Plan Strategic Transport Assessment (Hampshire Services, 2024):
 - 2019, the SRTM base year and air quality model verification year;
 - 2041 Baseline (no Winchester Local Plan development except for committed sites); and
 - 2041 with the Winchester Local Plan (which is the Do Minimum scenario in the Local Plan Strategic Transport Assessment).
- 3.3.3 A full description of each SRTM modelling scenario is available in the Local Plan Transport Assessment. The SRTM Do Minimum scenario assumes that, outside of Winchester, development growth is in line with the adopted Local Plans for the respective neighbouring authorities; therefore, a comparison with the Baseline scenario provides an assessment of the Local Plan air quality impact in isolation.
- 3.3.4 Contributions to future road transport emissions close to the River Itchen SAC will be due to many projects and plans. The SRTM 2041 Baseline scenario includes all committed development and infrastructure within Winchester District through to



2041, as well as growth due to Neighbouring Authorities adopted Local Plans. These in-combination emissions sources would need to be removed from the 2041 baseline in order to determine the in-combination effect of the Local Plan. Therefore, concentrations have been predicted for an additional 2041 baseline scenario that uses the 2019 SRTM base year traffic data with 2041 vehicle emissions and background concentrations. This provides an alternative 2041 no growth baseline against which to compare the 2041 with Local Plan scenario. A comparison of the 2041 with Local Plan scenario with this alternative 2041 no growth future baseline provides an assessment of the Local Plan air quality impact in-combination.

Modelling Methodology

3.3.5 Concentrations have been predicted using the ADMS Roads (v5.0.1.3) dispersion model (CERC, 2024). The model requires the input of a range of data, details of which are provided in **Appendix A1**, along with details of the model verification calculations.

Uncertainty

3.3.6 There are many factors that contribute to uncertainty when predicting pollutant concentrations. The emission factors utilised in the air quality model are dependent on traffic data, which have inherent uncertainties associated with them. There are also uncertainties associated with the model itself, which simplifies real world conditions into a series of algorithms. The model verification process, as described in **Appendix A1**, minimises the uncertainties; however, future year predictions use projected traffic data, emissions data, and background concentrations. The most recent emission factors and background data published by Defra and APIS have been used in this assessment.

3.4. Assessment Criteria and Significance

- 3.4.1 Critical levels are defined as concentrations of pollutants in the atmosphere above which direct adverse effects on plants or ecosystems may occur according to present knowledge. A critical level is the gaseous concentration of a pollutant in the air. Critical levels are not habitat specific, but have been set to cover broad vegetation types, with an ammonia annual mean critical level of $3\mu g/m^3$ set for higher plants, and $1\mu g/m^3$ set where sensitive lichens and bryophytes are an important part of the ecosystem integrity. The critical level for NOx is the $30\mu g/m^3$ annual mean national air quality objective.
- 3.4.2 Environment Agency online guidance also sets out a critical level for 24-hour NOx, which is a non-statutory level derived from the World Health Organisation (WHO) Air Quality Guidelines for Europe (WHO, 2000; Defra & EA, 2016). The WHO Guidelines state that:

"A strong case can be made for the provision of critical levels for short-term exposures. There are insufficient data to provide these levels with confidence at present, but current evidence suggests values of about 75 μ g/m³ for NOx ... as 24-hour means."

3.4.3 Institute of Air Quality Management (IAQM) guidance on assessing air quality impacts on nature conservation sites states (IAQM, 2020):



"This IAQM guidance, therefore, recommends that only the annual mean NOx concentration is used in assessments unless specifically required by a regulator; for instance, as part of an industrial permit application where high, short term peaks in emissions, and consequent ambient concentrations, may occur."

- 3.4.4 Given the uncertainty associated with the short-term critical level for NOx and its nonstatutory status, greater emphasis should be placed on the achievement of the annual mean NOx objective and an assessment of the impact on 24-hour NOx has not been included in this assessment.
- 3.4.5 Critical loads are defined as a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur, according to present knowledge. The critical load relates to the quantity of pollutant deposited from air to ground. Critical loads for nitrogen deposition onto sensitive ecosystems have been specified by the United Nations Economic Commission for Europe (UNECE).
- 3.4.6 It must be emphasised that an exceedance of the critical level/load does not provide a quantitative estimate of damage to an ecosystem, but only the *potential* for damage to occur.
- 3.4.7 The APIS GIS map tool provides site relevant critical levels and loads for designated conservation sites in the UK and Ireland (APIS, 2024). APIS has provided critical levels and loads for the River Itchen SAC interest features shown in **Table 1**.
- 3.4.8 The area that is 200m from the River Itchen SAC, and also within 200m of roads that may have an effect on the River Itchen SAC, is shown in **Figure 2**. The area of the River Itchen SAC within 200m of the roads where the Local Plan may have an effect corresponds exactly with the underlying River Itchen SSSI unit 107, which is a rivers and streams habitat. The River Itchen SAC boundary within the area that may be affected by the Local Plan covers the surface of the river only and does not include any adjacent areas of land that may include heath habitat. Therefore, the Northern wet heath habitat and the dwarf shrub heath habitat, the only habitats in the River Itchen SAC with critical loads for nitrogen deposition, will not be present within the affected area.
- 3.4.9 LUC have confirmed that 'rich fens habitats' is the supporting habitat for southern damselfly (Coenagrion mercurial) on the River Itchen SAC. Therefore, LUC have recommended that an assessment is undertaken for impacts on this habitat using a critical load of 15kgN/ha/yr, also shown in **Table 1**. The 15kgN/ha/yr critical load is the minimum critical load for rich fens established by UNECE, which are used in APIS.
- 3.4.10 The water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation interest feature of the River Itchen SAC is within 200m of roads that may have an effect on the SAC; however, there are no nitrogen deposition critical loads provided for this interest feature.
- 3.4.11 Therefore, the assessment of impacts on the River Itchen SAC has been completed for impacts on critical levels for NOx and NH₃ of $30\mu gNOx/m^3$ and $3\mu gNH_3/m^3$ respectively, but also considers the impact on the nitrogen critical load for Rich fens of 15kgN/ha/yr.



Table 1: Ammonia Critical Level and Nitrogen Critical Loads

| Designated Conservation Site | | | | Critica | l Level | Critical Load | |
|------------------------------------|--|---|-----------------------------------|--|--|--|---|
| | Feature Name | N Critical Load Class | Acidity Critical Load Class | Annual Mean NOx (µg/m³) | Annual Mean NH₃ (μg/m³) | Nutrient N Deposition (kg/ha/yr) | Acid Deposition (Nmax) (keq/ha/yr) |
| RiverItchen | Coenagrion mercuriale | Northern wet heath: 'L' Erica tetralix dominated wet heath (lowland) | Dwarf shrub heath | No critical level has been assigned for this feature, please seek site specific advice | No critical level has been assigned for this feature, please seek site specific advice | 5 | 0.922 |
| SAC | | Rich fens | n/a | 30 | 3 | 15 | n/a |
| | Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho- Batrachion vegetation | No comparable habitat with established critical load estimate available | Freshwater | 30 | 3 | n/a | Not provided in APIS |

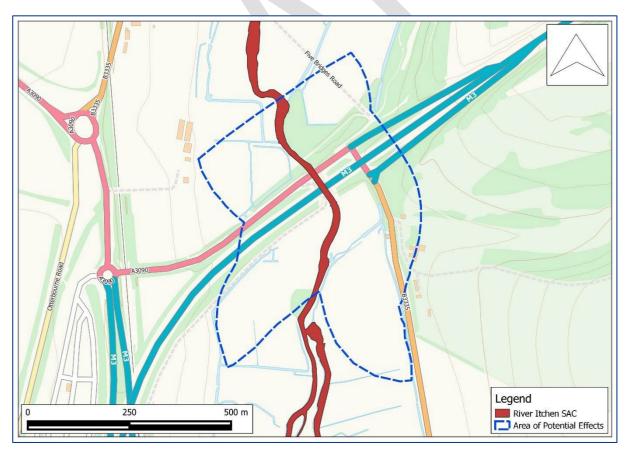


Figure 2: Area within 200m of the River Itchen SAC and within 200m of roads that may have an effect on the River Itchen SAC



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- 3.4.12 The Habitats Regulations require a competent authority to undertake a Habitats Regulations Assessment (HRA) for development schemes that may harm Habitats Regulations sites. The HRA process includes screening and appropriate assessment stages. The screening stage of the HRA identifies whether there is a risk of significant adverse effects on a Habitats Regulations site, which would then require further detailed examination through an appropriate assessment. If risks that might undermine a site's conservation objectives can clearly be ruled out at the screening stage, a development scheme will have no likely significant effect and no appropriate assessment will be needed.
- 3.4.13 A HRA screening assessment has been undertaken to determine whether the competent authority, in this case Winchester City Council, would need to progress to an appropriate assessment. A pollutant process contribution (PC) due to the Local Plan road traffic emissions alone, or in-combination with other potentially polluting schemes, greater than 1% of the relevant critical level or load would trigger a likely significant effect (LSE), and an appropriate assessment would be required.
- 3.4.14 For the purposes of deciding whether an appropriate assessment is required, the screening decision should not take into account any mitigation measures, as ruled in the Irish High Court case 'People Over Wind'. Where an LSE is triggered, mitigation can be taken into account at the appropriate assessment stage.
- 3.4.15 NE guidance on advising competent authorities on the assessment of road traffic Emissions under the Habitats Regulations states that:

"In general terms, it is important for a competent authority to remember that the subject plan or project remains the focus of any in-combination assessment. Therefore, it is Natural England's view that care should be taken to avoid unnecessarily combining the insignificant effects of the subject plan or project with the effects of other plans or projects which can be considered significant in their own right. The latter should always be dealt with by its own individual HRA alone. In other words, it is only the appreciable effects of those other plans and projects that are not themselves significant alone which are added into an in-combination assessment with the subject proposal (i.e., 'don't combine individual biscuits (=insignificant) with full packs (=significant)')."

3.4.16 Where the initial screening cannot rule out a likely significant effect, the predicted environmental concentration (PEC) has been provided. The PEC is the PC plus the concentration/deposition rate of the pollutant already present in the environment (the baseline concentration/deposition rate). The PEC can then be used in the appropriate assessment to determine whether the impact of the Local Plan would have an adverse effect on site integrity at the designated site. The integrity of a designated site is the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated.



- 3.4.17 In their internal guidance on road traffic impacts under the Habitats Regulations, NE advise that no threshold value is applied at appropriate assessment, with the focus on detailed modelling and case specific professional judgement using a suite of tools and evidence. The competent authority would need to determine whether an adverse effect on site integrity can be ruled out with regard to the following:
 - Whether the sensitive qualifying features of the site would be exposed to emissions;
 - The Habitats Regulations site's conservation objectives;
 - Whether or not there are current exceedances of the critical levels/loads;
 - Background pollution and concentrations/deposition trends;
 - Appropriate use of the critical levels/loads;
 - The designated site in its national context;
 - Site survey information;
 - The evidence on small incremental impacts from nitrogen deposition;
 - The spatial scale and duration of the predicted impact and the ecological functionality of the affected area;
 - National, regional and local initiatives or measures which can be relied upon to reduce background levels at the site; and
 - Measures to avoid or reduce the harmful effects of the plan or project on site integrity.
- 3.4.18 The IAQM, the professional body for air quality professionals, has set out the following opinion with regard to the use of the 1% screening threshold (IAQM, 2020):

"In the IAQM's opinion, the 1% and 10% screening criteria should not be used rigidly and, not to a numerical precision greater than the expression of the criteria themselves. Whilst it is straightforward to generate model results for the PC to any level of precision required, the accuracy of the result is much less certain and it is unwise to place too much emphasis on whether the PC is 0.9% or 1.1%, for example. In practice, because the magnitude of impacts attributable to new sources is often around 1% of the criterion, a regulator may require the results to be presented at greater resolution, i.e. having one (or more) decimal places. The distinction here is between the presentation of the model results and the weight given to fine differences around the criterion itself in making a judgement."

3.4.19 An increase above the screening threshold of 0.1-0.4% of the critical load/level, i.e. 1.1% to 1.4%, would round to 1% of the screening threshold. Changes at this level of magnitude would be difficult to distinguish from normal fluctuations, such as those due to weather and emissions variations, and there would be a high level of uncertainty associated with the predicted change. Percentages have been presented to one decimal place and PECs provided at receptors where the process contribution is greater than 1.0% of the screening threshold; however, the competent authority would need to judge whether a process contribution of 1.1-1.4% of the screening threshold should trigger an appropriate assessment.



4 Baseline Conditions

4.1. Background Concentrations

- 4.1.1 Estimated background concentrations and nitrogen deposition rates for short vegetation within the assessment area are shown in **Table 2**.
- 4.1.2 The background NOx and NH₃ concentrations are below the critical levels at the River Itchen SAC within the study area. The background nutrient N deposition rate is just below the critical load for Rich fens.

| Receptor | Annual Mean NOx (μg/m³) | | Annual Mean NH₃ (µg/m³) | | Nutrient N Depostion (kg/ha/yr) | | Acid N Deposition (Nmax) (keq/ha/yr) | | |
|---------------------|----------------------------|------|----------------------------|---------|---------------------------------------|---------|---|---------|------------------|
| | 2019 | 2030 | Critical Level | 2020-22 | Critical Level | 2020-22 | Critical Load | 2020-22 | Critical Load |
| River Itchen SAC | 27.5 | 15.4 | 30 | 1.394 | 3 | 14.760 | 15 | 1.090 | n/a ª |

Table 2: Estimated Background Concentrations and Deposition Rates

a No relevant critical loads for acid nitrogen deposition within the study area.

4.2. Predicted Baseline Concentrations

- 4.2.1 Baseline concentrations and nutrient N deposition rates at the transect receptors closest to the road sources are set out in **Table 3**.
- 4.2.2 Annual mean NOx concentrations are predicted to be above the NOx critical level at receptors closest to the road sources in 2019; however, due to the projected increase in lower emission vehicles in the UK fleet and the associated decrease in background concentrations, by 2041 the critical level is predicted to be achieved by a wide margin.
- 4.2.3 Annual mean NH₃ concentrations are predicted to be below the NH₃ critical level at receptors closest to the road sources in 2019 and 2041.
- 4.2.4 Nutrient nitrogen deposition rates are predicted be above the critical load in 2019 and 2041.

| Receptor | NOx (µg/m³) | | NH₃ (μ | g/m³) | Nutrient N (kg/ha/yr) | |
|------------------------|-------------|------|--------|-------|-----------------------|------|
| | 2019 | 2041 | 2019 | 2041 | 2019 | 2041 |
| NO | 49.1 | 18.7 | 2.150 | 2.364 | 20.3 | 20.0 |
| M0 | 49.1 | 18.6 | 2.151 | 2.356 | 20.3 | 20.0 |
| M20 | 49.8 | 18.8 | 2.177 | 2.393 | 20.5 | 20.2 |
| SO | 45.7 | 18.1 | 2.022 | 2.188 | 19.4 | 19.1 |
| Critical Level/Load | 30 | | 3 | | 15 | |

Table 3: Predicted Baseline Concentrations and Deposition Fluxes in 2019 and 2041



5 Screening Assessment

5.1. Local Plan Impact In Isolation

- 5.1.1 This section considers the impact of the Local Plan in isolation. The maximum predicted PCs to annual mean NOx and NH₃ concentrations and the PCs as a percentage of the critical levels at the River Itchen SAC are shown in Table 4 and Table 5 respectively. The maximum predicted PCs to nutrient N deposition are shown in Table 6.
- 5.1.2 The Local Plan in isolation does not lead to any exceedances of the 1% screening threshold for NOx, NH₃ or nutrient N deposition at the receptors closest to the road sources.
- 5.1.3 The Local Plan in isolation results in lower concentrations/deposition rates when compared with baseline concentrations/deposition rates; therefore, there is a marginal improvement in air quality at the River Itchen SAC due to the Local Plan.

| Decenter | Predicted | Road Contribut (μgNOx/m³) | tion 2041 | Critical Level | PC as % of Critical | Further | |
|----------|-----------|------------------------------|-----------|-------------------|------------------------|------------------------|--|
| Receptor | Baseline | Do Minimum | PC | (μgNOx/m³) | Level | Assessment Required | |
| NO | 3.243 | 3.172 | -0.071 | 30 | -0.2 | No | |
| MO | 3.194 | 3.143 | -0.051 | 30 | -0.2 | No | |
| M20 | 3.314 | 3.254 | -0.059 | 30 | -0.2 | No | |
| SO | 2.682 | 2.650 | -0.032 | 30 | -0.1 | No | |

Table 4: NOx PCs and PCs as % of Critical Level – In Isolation

Table 5: NH₃ PCs and PCs as % of Critical Level – In Isolation

| Receptor | Predicted | l Road Contribut (µgNH₃/m³) | tion 2041 | Critical Level | PC as % of | Further |
|----------|-----------|--------------------------------|-----------|----------------|----------------|------------------------|
| | Baseline | Do Minimum | PC | (µgNH₃/m³) | Critical Level | Assessment Required |
| NO | 0.970 | 0.946 | -0.023 | 3 | -0.8 | No |
| MO | 0.962 | 0.944 | -0.018 | 3 | -0.6 | No |
| M20 | 0.999 | 0.979 | -0.020 | 3 | -0.7 | No |
| SO | 0.794 | 0.782 | -0.012 | 3 | -0.4 | No |



| Decenter | Predicted | l Road Contribut (kgN/ha/yr) | tion 2041 | Critical Load (kgN/ha/yr) | PC as % of Critical Load | Further Assessment Required |
|----------|-----------|---------------------------------|-----------|------------------------------|-----------------------------|-----------------------------------|
| Receptor | Baseline | Do Minimum | PC | | | |
| NO | 5.286 | 5.161 | -0.125 | 15 | -0.8 | No |
| M0 | 5.244 | 5.147 | -0.097 | 15 | -0.6 | No |
| M20 | 5.446 | 5.335 | -0.111 | 15 | -0.7 | No |
| SO | 4.328 | 4.264 | -0.063 | 15 | -0.4 | No |

Table 6: Nutrient N PCs and PCs as % of Critical Load – In Isolation

5.2. Local Plan Impact In Combination

- 5.2.1 This section considers the impact of the Local Plan in-combination with other plans and projects. As explained at **Paragraph 3.3.4**, the Local Plan in isolation PEC (Local Plan PC plus background), minus the 2041 no growth baseline PEC (no growth PC plus background), determines the in-combination pollutant process contribution (PC).
- 5.2.2 The maximum predicted in-combination PCs to annual mean NOx and NH₃ concentrations and the PCs as a percentage of the critical levels at the River Itchen SAC are shown in **Table 7** and **Table 8** respectively. The maximum predicted in-combination PCs to nutrient N deposition are shown in **Table 9**.
- 5.2.3 With no growth assumed between the 2019 baseline and the 2041 assessment year, the 2041 baseline concentration/deposition rates are lower; therefore, the incombination impact is greater than the impact of the Local Plan in isolation. Although the in-combination PCs exceed the 1% screening threshold for NOx, NH₃ and nutrient N deposition, the Local Plan in isolation results in a decrease in predicted concentrations/deposition rates; therefore, the in-combination impacts are all due to other plans and projects. NE guidance is clear that insignificant effects of a plan should not be unnecessarily combined with the effects of other plans or projects that could be considered significant in their own right (see **Paragraph 3.4.15**); therefore, the marginal air quality improvements due to the Local Plan should not require further assessment in-combination with other plans and projects.
- 5.2.4 The with Local Plan PECs are below the critical levels for NOx and NH₃; however, nutrient N deposition rates remain above the critical load.



| Table 7: NUX PELS. PLS and PLS as % OF CHUCal Level – in-combination | ': NOx PECs, PCs and PCs as % of Critical Level – I | n-combination |
|--|---|---------------|
|--|---|---------------|

| Describer | | | ECs and In-combination PCs 041 (μgNOx/m ³) | | PC as % of | Further |
|-----------|---------------------------|------------------------|---|----|-------------------|------------------------|
| Receptor | No Growth Baseline PEC | With Local Plan PEC | Level (μgNOx/m³) | | Critical Level | Assessment Required |
| NO | 18.090 | 18.610 | 0.520 | 30 | 1.7 | No |
| MO | 18.040 | 18.582 | 0.542 | 30 | 1.8 | No |
| M20 | 18.142 | 18.693 | 0.551 | 30 | 1.8 | No |
| SO | 17.613 | 18.089 | 0.475 | 30 | 1.6 | No |

Table 8: NH₃ PECs, PCs and PCs as % of Critical Level – In-combination

| December | Predicted PECs and In-combination PCs 2041 (μgNH ₃ /m ³) | | | | Further | |
|----------|--|------------------------|-------|------------|----------------|------------------------|
| Receptor | No Growth Baseline PEC | With Local Plan PEC | PC | (µgNH₃/m³) | Critical Level | Assessment Required |
| NO | 1.659 | 2.340 | 0.682 | 3 | 22.7 | No |
| MO | 1.656 | 2.338 | 0.682 | 3 | 22.7 | No |
| M20 | 1.667 | 2.373 | 0.706 | 3 | 23.5 | No |
| SO | 1.610 | 2.176 | 0.566 | 3 | 18.9 | No |

Table 9: Nutrient N PECs, PCs and PCs as % of Critical Load – In-combination

| Pacantor | | ECs and In-combination PCs 2041 (kgN/ha/yr) | | Critical Load | PC as % of | Further |
|----------|---------------------------|--|--------------------------|---------------|---------------|------------------------|
| Receptor | No Growth Baseline PEC | With Local Plan PEC | (kgN/ha/yr) Critic PC | | Critical Load | Assessment Required |
| NO | 16.339 | 19.921 | 3.582 | 15 | 23.9 | No |
| MO | 16.322 | 19.907 | 3.585 | 15 | 23.9 | No |
| M20 | 16.384 | 20.095 | 3.711 | 15 | 24.7 | No |
| SO | 16.049 | 19.024 | 2.975 | 15 | 19.8 | No |



6 Conclusions

- 6.1.1 The assessment has demonstrated that the Local Plan does not result in any exceedances of the 1% screening threshold for NOx, NH₃ or nutrient N deposition when considered in isolation and results in a marginal improvement in air quality at the River Itchen SAC. The improvement is due to reduced traffic flows due to the Local Plan on the M3 and A3090 where they cross the River Itchen SAC.
- 6.1.2 The Local Plan in isolation results in a decrease in predicted concentrations/deposition rates at the River Itchen SAC; therefore, the in-combination impact is all due to other plans and projects. NE guidance is clear that insignificant effects of a plan should not be unnecessarily combined with the effects of other plans or projects that could be considered significant in their own right. In-combination exceedances of the 1% screening threshold for NOx, NH₃ and nutrient N deposition are predicted; however, the increases in pollutant concentrations/deposition rates are all due to in-combination sources. As the Local Plan itself results in a marginal improvement in air quality, no further assessment should be required.
- 6.1.3 As the Local Plan would decrease pollutant concentrations/deposition rates at the River Itchen SAC, the Local Plan would not have an adverse effect on site integrity at the River Itchen SAC. This conclusion would need to be confirmed by an ecologist in the Appropriate Assessment.



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8 Appendices

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| A2 | Professional Experience | 7 |



A1 Modelling Methodology

A1.1. Receptors

A1.1.1 Receptors have been modelled on transects located to the north of the A3090, between the A3090 and the M3, and to the south of the M3 at points spaced 1m apart from the edge of the River Itchen SAC up to 100m from the edge of the road. Full details of each transect point are shown in **Table A1**.

| | Description | OS Coordinate | | |
|----------|----------------|---------------|----------|---|
| Point ID | | x | у | z |
| NO | North of A3090 | 447772.2 | 126659.6 | 0 |
| N1 | North of A3090 | 447771.6 | 126660.4 | 0 |
| N2 | North of A3090 | 447771.0 | 126661.2 | 0 |
| N3 | North of A3090 | 447770.4 | 126662.0 | 0 |
| N4 | North of A3090 | 447769.8 | 126662.8 | 0 |
| N5 | North of A3090 | 447769.2 | 126663.6 | 0 |
| N6 | North of A3090 | 447768.6 | 126664.4 | 0 |
| N7 | North of A3090 | 447768.0 | 126665.2 | 0 |
| N8 | North of A3090 | 447767.4 | 126666.0 | 0 |
| N9 | North of A3090 | 447766.8 | 126666.8 | 0 |
| N10 | North of A3090 | 447766.2 | 126667.6 | 0 |
| N11 | North of A3090 | 447765.6 | 126668.4 | 0 |
| N12 | North of A3090 | 447765.0 | 126669.2 | 0 |
| N13 | North of A3090 | 447764.4 | 126670.0 | 0 |
| N14 | North of A3090 | 447763.8 | 126670.8 | 0 |
| N15 | North of A3090 | 447763.3 | 126671.6 | 0 |
| N16 | North of A3090 | 447762.7 | 126672.4 | 0 |
| N17 | North of A3090 | 447762.1 | 126673.2 | 0 |
| N18 | North of A3090 | 447761.5 | 126674.1 | 0 |
| N19 | North of A3090 | 447760.9 | 126674.9 | 0 |
| N20 | North of A3090 | 447760.3 | 126675.7 | 0 |
| N21 | North of A3090 | 447759.7 | 126676.5 | 0 |
| N22 | North of A3090 | 447759.1 | 126677.3 | 0 |
| N23 | North of A3090 | 447758.5 | 126678.1 | 0 |
| N24 | North of A3090 | 447757.9 | 126678.9 | 0 |
| N25 | North of A3090 | 447757.3 | 126679.7 | 0 |
| N26 | North of A3090 | 447756.7 | 126680.5 | 0 |
| N27 | North of A3090 | 447756.1 | 126681.3 | 0 |
| N28 | North of A3090 | 447755.5 | 126682.1 | 0 |
| N29 | North of A3090 | 447754.9 | 126682.9 | 0 |

Table A1: Points on the Transects



| | Description | OS Coordinate | | | |
|----------|----------------|---------------|----------|---|--|
| Point ID | | x | У | z | |
| N30 | North of A3090 | 447754.3 | 126683.7 | 0 | |
| N31 | North of A3090 | 447753.8 | 126684.5 | 0 | |
| N32 | North of A3090 | 447753.2 | 126685.3 | 0 | |
| N33 | North of A3090 | 447752.6 | 126686.1 | 0 | |
| N34 | North of A3090 | 447752.0 | 126686.9 | 0 | |
| N35 | North of A3090 | 447751.4 | 126687.7 | 0 | |
| N36 | North of A3090 | 447750.8 | 126688.5 | 0 | |
| N37 | North of A3090 | 447750.2 | 126689.3 | 0 | |
| N38 | North of A3090 | 447749.6 | 126690.1 | 0 | |
| N39 | North of A3090 | 447749.0 | 126691.0 | 0 | |
| N40 | North of A3090 | 447748.4 | 126691.8 | 0 | |
| N41 | North of A3090 | 447747.8 | 126692.6 | 0 | |
| N42 | North of A3090 | 447747.2 | 126693.4 | 0 | |
| N43 | North of A3090 | 447746.6 | 126694.2 | 0 | |
| N44 | North of A3090 | 447746.0 | 126695.0 | 0 | |
| N45 | North of A3090 | 447745.4 | 126695.8 | 0 | |
| N46 | North of A3090 | 447744.8 | 126696.6 | 0 | |
| N47 | North of A3090 | 447744.3 | 126697.4 | 0 | |
| N48 | North of A3090 | 447743.7 | 126698.2 | 0 | |
| N49 | North of A3090 | 447743.1 | 126699.0 | 0 | |
| N50 | North of A3090 | 447742.5 | 126699.8 | 0 | |
| N51 | North of A3090 | 447741.9 | 126700.6 | 0 | |
| N52 | North of A3090 | 447741.3 | 126701.4 | 0 | |
| N53 | North of A3090 | 447740.7 | 126702.2 | 0 | |
| N54 | North of A3090 | 447740.1 | 126703.0 | 0 | |
| N55 | North of A3090 | 447739.5 | 126703.8 | 0 | |
| N56 | North of A3090 | 447738.9 | 126704.6 | 0 | |
| N57 | North of A3090 | 447738.3 | 126705.4 | 0 | |
| N58 | North of A3090 | 447737.7 | 126706.2 | 0 | |
| N59 | North of A3090 | 447737.1 | 126707.0 | 0 | |
| N60 | North of A3090 | 447736.5 | 126707.8 | 0 | |
| N61 | North of A3090 | 447735.9 | 126708.7 | 0 | |
| N62 | North of A3090 | 447735.3 | 126709.5 | 0 | |
| N63 | North of A3090 | 447734.8 | 126710.3 | 0 | |
| N64 | North of A3090 | 447734.2 | 126711.1 | 0 | |
| N65 | North of A3090 | 447733.6 | 126711.9 | 0 | |
| N66 | North of A3090 | 447733.0 | 126712.7 | 0 | |
| N67 | North of A3090 | 447732.4 | 126713.5 | 0 | |



| | Description | OS Coordinate | | | |
|----------|----------------------|---------------|----------|---|--|
| Point ID | | x | У | z | |
| N68 | North of A3090 | 447731.8 | 126714.3 | 0 | |
| N69 | North of A3090 | 447731.2 | 126715.1 | 0 | |
| N70 | North of A3090 | 447730.6 | 126715.9 | 0 | |
| N71 | North of A3090 | 447730.0 | 126716.7 | 0 | |
| N72 | North of A3090 | 447729.4 | 126717.5 | 0 | |
| N73 | North of A3090 | 447728.8 | 126718.3 | 0 | |
| N74 | North of A3090 | 447728.2 | 126719.1 | 0 | |
| N75 | North of A3090 | 447727.6 | 126719.9 | 0 | |
| N76 | North of A3090 | 447727.0 | 126720.7 | 0 | |
| N77 | North of A3090 | 447726.4 | 126721.5 | 0 | |
| N78 | North of A3090 | 447725.8 | 126722.3 | 0 | |
| N79 | North of A3090 | 447725.3 | 126723.1 | 0 | |
| N80 | North of A3090 | 447724.7 | 126723.9 | 0 | |
| N81 | North of A3090 | 447724.1 | 126724.7 | 0 | |
| N82 | North of A3090 | 447723.5 | 126725.6 | 0 | |
| N83 | North of A3090 | 447722.9 | 126726.4 | 0 | |
| N84 | North of A3090 | 447722.3 | 126727.2 | 0 | |
| N85 | North of A3090 | 447721.7 | 126728.0 | 0 | |
| N86 | North of A3090 | 447721.1 | 126728.8 | 0 | |
| N87 | North of A3090 | 447720.5 | 126729.6 | 0 | |
| N88 | North of A3090 | 447719.9 | 126730.4 | 0 | |
| N89 | North of A3090 | 447719.3 | 126731.2 | 0 | |
| N90 | North of A3090 | 447718.7 | 126732.0 | 0 | |
| N91 | North of A3090 | 447718.1 | 126732.8 | 0 | |
| N92 | North of A3090 | 447717.5 | 126733.6 | 0 | |
| N93 | North of A3090 | 447716.9 | 126734.4 | 0 | |
| N94 | North of A3090 | 447716.3 | 126735.2 | 0 | |
| N95 | North of A3090 | 447715.8 | 126736.0 | 0 | |
| N96 | North of A3090 | 447715.2 | 126736.8 | 0 | |
| N97 | North of A3090 | 447714.6 | 126737.6 | 0 | |
| N98 | North of A3090 | 447714.0 | 126738.4 | 0 | |
| N99 | North of A3090 | 447713.4 | 126739.2 | 0 | |
| N100 | North of A3090 | 447712.8 | 126740.0 | 0 | |
| M0 | Between A3090 and M3 | 447792.3 | 126631.6 | 0 | |
| M1 | Between A3090 and M3 | 447791.8 | 126632.3 | 0 | |
| M2 | Between A3090 and M3 | 447791.3 | 126633.1 | 0 | |
| M3 | Between A3090 and M3 | 447790.7 | 126633.9 | 0 | |
| M4 | Between A3090 and M3 | 447790.2 | 126634.7 | 0 | |



| | Description | OS Coordinate | | | |
|----------|----------------------|---------------|----------|---|--|
| Point ID | | x | У | z | |
| M5 | Between A3090 and M3 | 447789.7 | 126635.5 | 0 | |
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| M8 | Between A3090 and M3 | 447788.0 | 126637.8 | 0 | |
| M9 | Between A3090 and M3 | 447787.5 | 126638.6 | 0 | |
| M10 | Between A3090 and M3 | 447787.0 | 126639.3 | 0 | |
| M11 | Between A3090 and M3 | 447786.4 | 126640.1 | 0 | |
| M12 | Between A3090 and M3 | 447785.9 | 126640.9 | 0 | |
| M13 | Between A3090 and M3 | 447785.3 | 126641.7 | 0 | |
| M14 | Between A3090 and M3 | 447784.8 | 126642.5 | 0 | |
| M15 | Between A3090 and M3 | 447784.3 | 126643.2 | 0 | |
| M16 | Between A3090 and M3 | 447783.7 | 126644.0 | 0 | |
| M17 | Between A3090 and M3 | 447783.2 | 126644.8 | 0 | |
| M18 | Between A3090 and M3 | 447782.7 | 126645.6 | 0 | |
| M19 | Between A3090 and M3 | 447782.1 | 126646.3 | 0 | |
| M20 | Between A3090 and M3 | 447781.6 | 126647.1 | 0 | |
| SO | South of M3 | 447812.1 | 126603.3 | 0 | |
| S1 | South of M3 | 447812.7 | 126602.4 | 0 | |
| S2 | South of M3 | 447813.2 | 126601.6 | 0 | |
| S3 | South of M3 | 447813.8 | 126600.8 | 0 | |
| S4 | South of M3 | 447814.3 | 126600.0 | 0 | |
| S5 | South of M3 | 447814.9 | 126599.2 | 0 | |
| S6 | South of M3 | 447815.5 | 126598.4 | 0 | |
| S7 | South of M3 | 447816.1 | 126597.6 | 0 | |
| S8 | South of M3 | 447816.6 | 126596.8 | 0 | |
| S9 | South of M3 | 447817.2 | 126595.9 | 0 | |
| S10 | South of M3 | 447817.8 | 126595.1 | 0 | |
| S11 | South of M3 | 447818.3 | 126594.3 | 0 | |
| S12 | South of M3 | 447818.9 | 126593.5 | 0 | |
| S13 | South of M3 | 447819.5 | 126592.7 | 0 | |
| S14 | South of M3 | 447820.0 | 126591.9 | 0 | |
| S15 | South of M3 | 447820.6 | 126591.1 | 0 | |
| S16 | South of M3 | 447821.2 | 126590.3 | 0 | |
| S17 | South of M3 | 447821.7 | 126589.5 | 0 | |
| S18 | South of M3 | 447822.3 | 126588.6 | 0 | |
| S19 | South of M3 | 447822.9 | 126587.8 | 0 | |
| S20 | South of M3 | 447823.4 | 126587.0 | 0 | |
| S21 | South of M3 | 447824.0 | 126586.2 | 0 | |



| | Description | OS Coordinate | | | |
|----------|-------------|---------------|----------|---|--|
| Point ID | | x | У | z | |
| S22 | South of M3 | 447824.6 | 126585.4 | 0 | |
| S23 | South of M3 | 447825.1 | 126584.6 | 0 | |
| S24 | South of M3 | 447825.7 | 126583.8 | 0 | |
| S25 | South of M3 | 447826.3 | 126583.0 | 0 | |
| S26 | South of M3 | 447826.8 | 126582.1 | 0 | |
| S27 | South of M3 | 447827.4 | 126581.3 | 0 | |
| S28 | South of M3 | 447828.0 | 126580.5 | 0 | |
| S29 | South of M3 | 447828.5 | 126579.7 | 0 | |
| S30 | South of M3 | 447829.1 | 126578.9 | 0 | |
| S31 | South of M3 | 447829.7 | 126578.1 | 0 | |
| S32 | South of M3 | 447830.3 | 126577.3 | 0 | |
| S33 | South of M3 | 447830.8 | 126576.5 | 0 | |
| S34 | South of M3 | 447831.4 | 126575.6 | 0 | |
| S35 | South of M3 | 447831.9 | 126574.8 | 0 | |
| S36 | South of M3 | 447832.5 | 126574.0 | 0 | |
| S37 | South of M3 | 447833.1 | 126573.2 | 0 | |
| S38 | South of M3 | 447833.7 | 126572.4 | 0 | |
| S39 | South of M3 | 447834.2 | 126571.6 | 0 | |
| S40 | South of M3 | 447834.8 | 126570.8 | 0 | |
| S41 | South of M3 | 447835.3 | 126570.0 | 0 | |
| S42 | South of M3 | 447835.9 | 126569.1 | 0 | |
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| S44 | South of M3 | 447837.1 | 126567.5 | 0 | |
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| S46 | South of M3 | 447838.2 | 126565.9 | 0 | |
| S47 | South of M3 | 447838.8 | 126565.1 | 0 | |
| S48 | South of M3 | 447839.3 | 126564.3 | 0 | |
| S49 | South of M3 | 447839.9 | 126563.5 | 0 | |
| S50 | South of M3 | 447840.5 | 126562.6 | 0 | |
| S51 | South of M3 | 447841.0 | 126561.8 | 0 | |
| S52 | South of M3 | 447841.6 | 126561.0 | 0 | |
| S53 | South of M3 | 447842.2 | 126560.2 | 0 | |
| S54 | South of M3 | 447842.8 | 126559.4 | 0 | |
| S55 | South of M3 | 447843.3 | 126558.6 | 0 | |
| S56 | South of M3 | 447843.9 | 126557.8 | 0 | |
| S57 | South of M3 | 447844.4 | 126557.0 | 0 | |
| S58 | South of M3 | 447845.0 | 126556.2 | 0 | |
| S59 | South of M3 | 447845.6 | 126555.3 | 0 | |



| | Description | OS Coordinate | | | |
|----------|-------------|---------------|----------|---|--|
| Point ID | | x | У | z | |
| | South of M3 | 447846.2 | 126554.5 | 0 | |
| S61 | South of M3 | 447846.7 | 126553.7 | 0 | |
| S62 | South of M3 | 447847.3 | 126552.9 | 0 | |
| S63 | South of M3 | 447847.8 | 126552.1 | 0 | |
| S64 | South of M3 | 447848.4 | 126551.3 | 0 | |
| \$65 | South of M3 | 447849.0 | 126550.5 | 0 | |
| \$66 | South of M3 | 447849.3 | 126548.7 | 0 | |
| S67 | South of M3 | 447849.1 | 126547.8 | 0 | |
| S68 | South of M3 | 447848.9 | 126546.8 | 0 | |
| S69 | South of M3 | 447848.7 | 126545.8 | 0 | |
| \$70 | South of M3 | 447848.5 | 126544.9 | 0 | |
| \$71 | South of M3 | 447848.3 | 126543.9 | 0 | |
| \$72 | South of M3 | 447848.1 | 126543.0 | 0 | |
| \$73 | South of M3 | 447847.8 | 126542.0 | 0 | |
| \$74 | South of M3 | 447847.6 | 126541.1 | 0 | |
| \$75 | South of M3 | 447847.4 | 126540.1 | 0 | |
| \$76 | South of M3 | 447847.2 | 126539.2 | 0 | |
| S77 | South of M3 | 447847.0 | 126538.2 | 0 | |
| S78 | South of M3 | 447846.8 | 126537.3 | 0 | |
| S79 | South of M3 | 447846.5 | 126536.3 | 0 | |
| S80 | South of M3 | 447846.3 | 126535.4 | 0 | |
| S81 | South of M3 | 447846.1 | 126534.4 | 0 | |
| S82 | South of M3 | 447845.9 | 126533.5 | 0 | |
| S83 | South of M3 | 447845.7 | 126532.5 | 0 | |
| S84 | South of M3 | 447845.5 | 126531.6 | 0 | |
| S85 | South of M3 | 447845.3 | 126530.6 | 0 | |
| S86 | South of M3 | 447845.0 | 126529.7 | 0 | |
| S87 | South of M3 | 447844.8 | 126528.7 | 0 | |
| S88 | South of M3 | 447844.6 | 126527.8 | 0 | |
| S89 | South of M3 | 447844.4 | 126526.8 | 0 | |
| S90 | South of M3 | 447844.2 | 126525.9 | 0 | |
| S91 | South of M3 | 447844.0 | 126524.9 | 0 | |
| S92 | South of M3 | 447843.8 | 126524.0 | 0 | |
| S93 | South of M3 | 447843.5 | 126523.0 | 0 | |
| S94 | South of M3 | 447843.3 | 126522.1 | 0 | |
| S95 | South of M3 | 447843.1 | 126521.1 | 0 | |
| \$96 | South of M3 | 447842.9 | 126520.2 | 0 | |
| S97 | South of M3 | 447842.7 | 126519.2 | 0 | |



| | Description | OS Coordinate | | | |
|----------|-------------|---------------|----------|---|--|
| Point ID | | x | У | Z | |
| S98 | South of M3 | 447842.5 | 126518.2 | 0 | |
| S99 | South of M3 | 447842.3 | 126517.3 | 0 | |
| S100 | South of M3 | 447842.0 | 126516.3 | 0 | |

A1.2. Model Inputs

Traffic Data

- A1.2.1 The AADT flows and vehicle fleet composition data have been provided by SYSTRA and come from the SRTM. The traffic data are shown in **Table A2** and the modelled road network used for the assessment is shown in **Figure 3**. Diurnal flow profiles for the traffic have been derived from the national diurnal profiles published by the DfT (DfT, 2024a). Vehicle speeds have been estimated based on the speed limit for the road, reduced to 20km/h within 25m of a junction stop line. Some roads used for model verification, located within Winchester, have been modelled as street canyons using the advanced street canyon module in ADMS Roads and are shown in **Figure 5**.
- A1.2.2 The River Itchen SAC lies below the A3090 and M3 and LIDAR data published by the Environment Agency has been used to estimate the height of the roads above the SAC (Environment Agency, 2024). The A3090 has been modelled at a height of 3.5m above the SAC and the M3 at a height of 7.5m above the SAC.

| Label on Figure | Road Description | AADT | | | % HDV | | |
|-----------------------|--|---------|----------|--------------------|-------|----------|--------------------|
| | | 2019 | 2041 | | | 2041 | |
| | | | Baseline | With Local Plan | 2019 | Baseline | With Local Plan |
| 1 | B3330 (Chesil St) | 11,217 | 12,488 | 12,263 | 3.0 | 7.1 | 6.1 |
| 2 | B3404 (Alresford Rd) | 6,435 | 8,737 | 9,188 | 3.7 | 3.9 | 3.9 |
| 3 | B3335 (St Cross Rd) | 10,149 | 14,198 | 14,078 | 10.2 | 8.8 | 9.1 |
| 4 | M3 between J10 and J11 | 125,654 | 153,408 | 152,694 | 11.6 | 11.0 | 10.8 |
| 5 | M3 J11 nb onslip | 9,339 | 11,630 | 10,820 | 5.4 | 7.8 | 8.0 |
| 6 | M3 J11 sb offslip | 9,738 | 10,682 | 10,333 | 6.7 | 9.7 | 10.5 |
| 7 | M3 between J11 on/offslips | 105,617 | 130,272 | 130,483 | 12.7 | 11.4 | 11.1 |
| 8 | A3090 (Hockley Link to M3 nb onslip) | 12,603 | 14,643 | 12,691 | 3.3 | 4.4 | 5.8 |

Table A2: Summary of Traffic Data used in the Assessment

HRA, Winchester, J0907 Air Quality Assessment J0907/1/D5



| Label on Figure | Road Description | AADT | | % HDV | | | |
|-----------------------|---|--------|----------|--------------------|------|----------|--------------------|
| | | | 20 |)41 | 2019 | 2041 | |
| | | 2019 | Baseline | With Local Plan | | Baseline | With Local Plan |
| 9 | B3335 between M3 J11 on/off slips | 14,204 | 17,374 | 16,685 | 4.8 | 7.5 | 8.1 |
| 10 | B3335 south of M3 J11 | 16,348 | 19,079 | 18,986 | 6.9 | 11.0 | 11.6 |

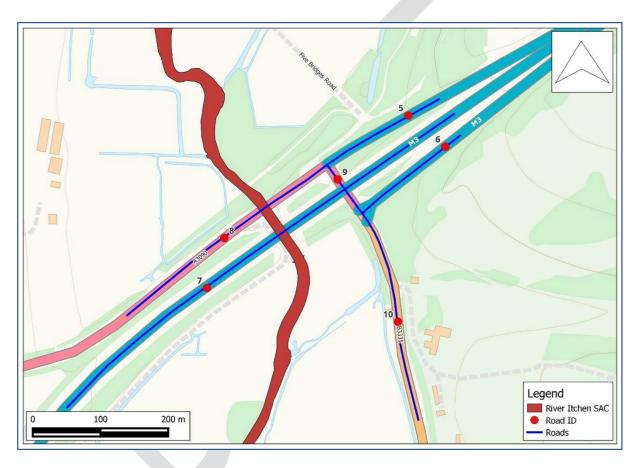


Figure 3: Modelled Roads

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Emissions

A1.2.3 NOx emissions have been calculated using the most recent version of the Emissions Factor Toolkit (EFT) v12.1, which provides fleet projections and emission rates through to 2050 (Defra, 2024). The traffic data have been entered into the EFT in order to calculate a combined emission rate for each of the road links in the modelled network. Supporting LAQM tools published by Defra, i.e., the background mapping data and NOx to NO₂ Calculator, only support assessment years up to 2030;



therefore, 2041 emissions data from the EFT have been used, along with 2030 data from the LAQM tools.

- A1.2.4 There is evidence that excluding NH₃ from road traffic emissions assessments may underestimate impacts on sensitive habitats (Air Quality Consultants Ltd, 2020). Emissions of NH_3 from individual vehicle types are highly uncertain as they are not regulated, which would also mean that the level of nitrogen deposition derived from the ambient NH₃ concentrations would be highly uncertain. There is currently no tool publicly available for the assessment of road traffic emissions of NH₃ from National Highways, Defra, Natural England, or other nature conservation bodies; therefore, NH₃ emissions have been calculated using the Calculator for Road Emissions of Ammonia (CREAM) tool (V1A) published by Air Quality Consultants Ltd (Air Quality Consultants Ltd, 2020). The NH₃ emissions in the tool have been derived from the results of remote sensing, real-world fuel consumption data, and ambient ammonia measurements recorded in Ashdown Forest (2014-2016). There are no results from direct testing of ammonia emissions from vehicles made over representative drive cycles which are considered suitable to generate robust, fleetwide emissions factors for use in the UK. There is a high level of uncertainty associated with the CREAM NH₃ emissions data; however, Air Quality Consultants Ltd consider that using the emissions factors to make future-year predictions will be an improvement on any assessment that omits ammonia and that the emissions can be considered to provide the most robust estimate of traffic-related ammonia possible at the present time.
- A1.2.5 The CREAM tool currently uses vehicle fleet information from Defra's EFT v9 which has now been superseded by EFT v12.1. EFT v9 used base 2018 fleet composition data that assumes that there are no electric vehicles in rural areas in England in 2035, the latest year that CREAM emissions data are available. EFT v12.1 uses base 2022 fleet composition data that assumes that 25% of the vehicle fleet in rural areas and on motorways will be electric in 2041. Air Quality Consultants Ltd is currently working on an update to the CREAM tool that will use the DfT's Transport Analysis Guidance (TAG) to estimate the proportion of electric vehicles on the road in future years (Air Qualtiy Consultants Ltd, 2023). The UK government has announced a ban on new diesel and petrol cars from 2035, with a requirement that 80% of new cars and 70% of new vans be zero emission by 2030, and the TAG assumes that 63% of cars and 31% of LGVs will be electric in 2036 (DfT, 2024b). Therefore, as electric vehicles do not have any on road emissions, the current CREAM tool significantly underestimates the number of electric vehicles on the road in future years and is likely to overestimate ammonia emissions.
- A1.2.6 In order to account for the expected fleet composition of electric vehicles in 2041, 25% of the light vehicle flows have been removed from the annual average daily traffic flows input to the CREAM tool. This results in estimated ammonia emissions



in 2041 that use CREAM 2035 emissions data and the 2041 EFT v12.1 fleet composition data.

Meteorological Data

A1.2.7 The model has been run using the full year of 2019 meteorological data taken from the monitoring station located at Southampton Airport, approximately 9km to the south of the study area. A wind rose of the data is shown in **Figure 4**.

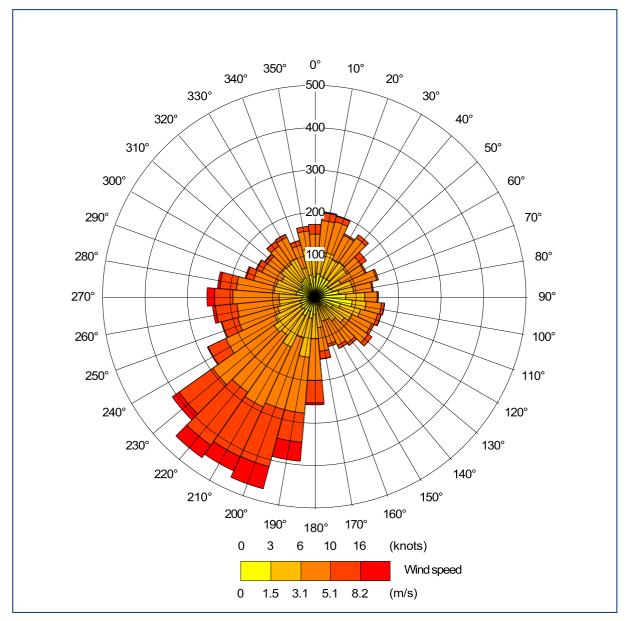


Figure 4: Wind Rose Southampton Airport 2019

A1.3. Background Concentrations

A3.1.1 Background NOx and NO₂ concentrations have been derived from those published by Defra (Defra, 2024). These cover the whole country on a 1 km by 1 km grid and are published for each year from 2018 to 2030. The current maps have been verified



against measurements undertaken during 2018. As the background maps are only available up to 2030, it has been assumed that background concentrations in 2041 will be the same as those in in the Defra 2030 map.

- A3.1.2 Background NH₃ and nitrogen and acid deposition data have been taken from the APIS database (APIS, 2024). Future year background concentrations and deposition fluxes have been assumed to be the same as the 2020-2022 average provided by APIS.
- A3.1.3 Future estimates of atmospheric ammonia concentrations and nitrogen deposition rates are not provided by APIS and the assessment assumes there will be no reduction in background ammonia concentrations and nitrogen deposition rates. This is a conservative assumption as, under the National Emissions Ceilings Regulations (NECR), the UK must meet legally binding ammonia emissions reductions of 16% compared with the relevant 2005 baseline emission levels by 2030, and this should result in a reduction in background concentrations and deposition rates. A National Air Pollution Control Programme (NAPCP) sets out how the UK can meet the legally binding 2030 emission reduction commitments (ERCs). The Nitrogen Futures project has developed a quantitative spatial dataset of 2030 ammonia emissions based on future projections of source activities for NAPCP scenarios (JNCC, 2024). The results from the Nitrogen Futures 2030 NAPCP+DA (NECR NOx) baseline scenario provide the most likely future baseline for ammonia concentrations and nutrient nitrogen deposition (JNCC, 2020). DA refers to modifications due to input from the Devolved Administrations and NECR NOx refers to NOx emissions meeting the 2030 NECR targets. The Nitrogen Futures project compared a current baseline (2017) with 2030 baseline scenario NAPCP+DA (NECR NOx) to evaluate the likely effects of NECR related polices on atmospheric ammonia and nutrient nitrogen deposition.
- A3.1.4 The Nitrogen Futures project estimates that implementation of the NAPCP would result in a 12% reduction in UK ammonia emissions when compared to the 2017 baseline, with a corresponding decrease in atmospheric ammonia concentrations of between 0.05-0.25µg/m³ in the study area. Nutrient nitrogen deposition to low growing semi-natural vegetation features is predicted to decrease by 1-2.5kgN/ha/yr in the study area.

A1.4. Verification

A1.4.1 The verification process seeks to minimise uncertainties associated with the air quality model by comparing the model output with locally measured concentrations. The model has been verified against 2019 data from four nitrogen dioxide (NO₂) diffusion tube monitoring sites located in Winchester. The monitoring sites are shown in **Figure 5**. The data used for model verification is provided in **Table A3**. The verification methodology is described below.



| Table A3: Data Used for Model | Verification |
|-------------------------------|--------------|
|-------------------------------|--------------|

| Monitoring Site ID | Monitoring Site Location | Measured Annual Mean NO2 Concentration 2019 (μg/m ³) | Annual Mean Background NO ₂ Concentration 2019 (µg/m ³) |
|--------------------|--------------------------|--|---|
| Site 11 | Southgate St | 28.3 | 14.1 |
| Site 16 | Alresford Rd (M3) | 30.0 | 17.8 |
| Site 17 | Chesil St | 35.3 | 14.6 |
| Site 22 | St Cross Rd | 20.2 | 14.1 |

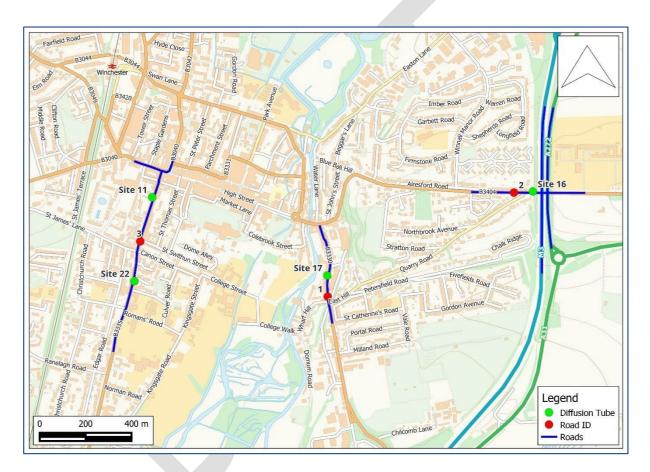


Figure 5: Diffusion Tube Monitoring Sites and Roads Used for Model Verification Contains Ordnance Survey data © Crown copyright and database right, OS Licence Number: OS AC 000809217 (2024)

*NO*₂

A1.4.2 Most NO₂ is produced in the atmosphere by reaction of nitric oxide (NO) with ozone. It is therefore most appropriate to verify the model in terms of primary pollutant



emissions of nitrogen oxides (NOx = NO + NO_2). The model has been run to predict the 2019 annual mean NOx concentrations at the monitoring sites.

- A1.4.3 The model output of road-NOx has been compared with the 'measured' road-NOx, calculated from the measured annual mean NO₂ concentrations and the background concentrations using the NOx from NO₂ calculator v8.1 published by Defra (Defra, 2024).
- A1.4.4 The slope of the best-fit line between the 'measured' road-NOx contribution and the model derived road-NOx contribution, forced through zero, has been used to determine the adjustment factor (**Figure 6**). The adjustment factor of 1.22 has been applied to the modelled road-NOx concentration for each receptor to provide adjusted modelled road-NOx concentrations. The NOx to NO₂ calculator has then been used to determine total NO₂ concentrations from the adjusted modelled road-NOx concentrations.
- A1.4.5 A comparison of the final adjusted modelled total NO₂ at each monitoring site to the measured total NO₂ shows close agreement (**Figure 7**). The results imply that the model has over-predicted the road-NOx contribution. An evaluation of the model performance using statistical methods is shown in **Table A4**.

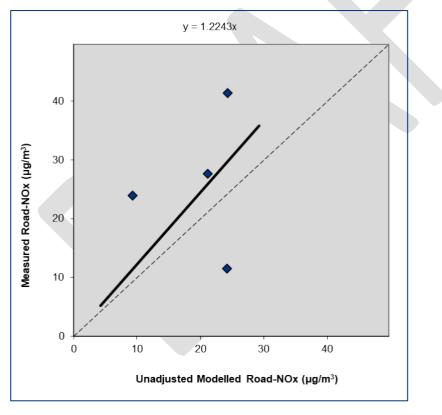


Figure 6: Comparison of Measured Road NOx to Unadjusted Modelled Road NOx Concentrations.



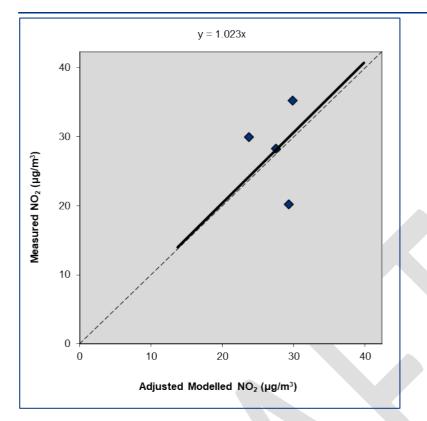


Figure 7: Comparison of Measured Total NO₂ to Primary Adjusted Modelled Total NO₂ Concentrations.

| | | | Values | alues | |
|-------------------------------------|--|--------------------------------------|-------------------------------------|-------|--|
| Statistical Parameter | Description | Before verification (Figure 6) | After verification (Figure 7) | Ideal | |
| Correlation coefficient | Linear relationship between predicted and observed data. Less useful for small datasets as single high/low values can have a large effect. | 0.12 | -0.08 | 1 | |
| Fractional bias | Identifies systematic tendency to over/under predict (negative = over- predict, positive = under-predict). | 0.28 | 0.03 | 0.0 | |
| Root mean square error (RMSE) | Average error of the model (μg/m ³). Ideally within 10% of the annual mean NO ₂ objective, i.e., 4 μg/m ³ ; however, within 25% acceptable, i.e., 10 μg/m ³ . | 13.32 | 6.16 | 0.0 | |



A2 Professional Experience

Bob Thomas, BSc (Hons) PgDip MSc MIEnvSc MIAQM CSci

Bob Thomas is a Director at AQA, with over 21 years working in the sciences and 17 years' experience in the field of air quality management and assessment. He has carried out air quality assessments for a wide range of developments, including residential, commercial, industrial, minerals and waste developments. He has been responsible for air quality projects that include ambient air quality monitoring of nitrogen dioxide, dust and PM₁₀, the assessment of nuisance odours and dust, and the preparation of Review and Assessment reports for local authorities. He has extensive dispersion modelling experience for road traffic, energy centre and industrial sources, and has completed many stand-alone reports and chapters for clients to provide expert air quality services and advice, including local authorities, planners, developers, architects and process operators, and has provided expert witness services at public inquiry. He is a Chartered Scientist, a Member of the Institute of Air Quality Management and a Member of the Institution of Environmental Sciences.

A full CV for Bob Thomas is available at <u>http://aqassessments.co.uk/about</u>

Appendix D Nutrient budget and topic paper

WCC Local Plan Nutrient Budget - November 2024

East Hampshire Catchment (Nitrogen only)

| Site Reference | Site Name | Total Discharge of TN after WWTW treatment, including 20% buffer (Kg/TN/Yr) | | |
|-------------------|--------------------------|--|--|--|
| Diahana Wa | | | | |
| Bishops Wal | | | | |
| BW3 | Tollgate Mill | 52.95 | | |
| BW4 | Rareridge Lane | 173.30 | | |
| H16 | The Nurseries, Shedfield | 4.43 | | |
| SW1 | The Lakes, Swanmore | 80.38 | | |
| | Windfall | 118.75 | | |
| Budds Farm | WWtW | | | |
| | | | | |
| D1 | Denmead NP | 87.48 | | |
| SH1 | West of Waterlooville | 262.43 | | |
| | Windfall | 38.46 | | |
| Peel Common WWtW | | | | |

| H18 | Ravenswood | 23.86 |
|-----------|------------------------|---------|
| 1110 | Traveliswood | 20.00 |
| SH2 | Whiteley | 159.05 |
| | | |
| SH3 | Whiteley Green | 50.93 |
| | | |
| Wickham W | <i>NtW</i> | |
| | | |
| WC1 | Morgans Yard | 166.69 |
| | | |
| KN1 | Ravenswood | 674.16 |
| | | |
| WK5 | Land at Mill Lane | 19.50 |
| | | |
| WK6 | Land at Southwick Road | 82.86 |
| | | |
| | Windfall | 77.92 |
| | | |
| | TOTAL | 2073.15 |

Test Catchment (Nitrogen only)

| Site Reference | Site Name | Total Discharge of TN after WWTW treatment, including 20% buffer (Kg/TN/Yr) | | | | |
|-------------------|---------------------|--|--|--|--|--|
| Gratton WW | Gratton WWtW | | | | | |
| SU01 | Land at Brightlands | 33.65 | | | | |
| | Windfall | 31.12 | | | | |

| PTP'S/Septic Tanks | | | | | |
|--------------------|----------------------------|--------|--|--|--|
| H17 | Carousel Park, Micheldever | 88.61 | | | |
| | TOTAL | 153.38 | | | |

Itchen Catchment (Nitrogen and Phosphorus)

| Itchen Catchment (Nitrogen and Phosphorus) | | | | |
|--|---------------------------------------|--|---|--|
| Site Reference | Site Name | Total Discharge of TN after WWTW treatment, including 20% buffer (Kg/TN/Yr) | Total Discharge of TP after WWTW treatment, including 20% buffer (Kg/TP/Yr) | |
| Harestock | WWtW | | | |
| W1 | Barton Farm | 1974.24 | 71.91 | |
| W2 | Sir John Moore Barracks | 2366.78 | 112.57 | |
| W4 | Land west of Courtenay Road | 57.45 | 15.45 | |
| KW1 | Cornerways and Merrydale | 142.01 | 1.28 | |
| KW2 | Land adjoining the Cart and Horses | 138.56 | 11.42 | |
| SW01 | Land at West Hill Road North | 41.26 | 4.62 | |
| | Windfall | 916.34 | 14.68 | |

| Morestead WWtW | | | | | |
|----------------|------------------------------------|--------|-------|--|--|
| | | | | | |
| W3 | St Peters Car Park | 98.2 | 3.84 | | |
| W5 | Bushfield Camp | 11.92 | 1.17 | | |
| W7 | Central Winchester Regeneration | 525.44 | 20.08 | | |
| W8 | Station Approach | 665.89 | 29.18 | | |
| W9 | Bar End Depot | 105 | 4.05 | | |
| W11 | University and RCH | 361.05 | 16.74 | | |
| | Windfall | 807.30 | 28.46 | | |
| New Alres | ford WWtW | | | | |
| NA2 | Sun Lane | 8.18 | N/A | | |
| NA3 | NP Designated Area | 90.87 | 2.84 | | |
| | Windfall | 140.4 | 30.15 | | |
| Chickenha | Chickenhall WWtW | | | | |
| CC1 | Clayfield Park | 128.01 | 2.27 | | |
| CC2 | Colden Common Farm | 58.09 | 4.10 | | |
| CC3 | Land at Main Road | 22.7 | 2.22 | | |

Appendix D Nutrient budget and topic paper

| CC4 | Land adjoining 85 Church Lane | 16.99 | 1.32 |
|-----|----------------------------------|---------|--------|
| OT1 | Land east of Main Road | 0 | 10.32 |
| | Windfall | 140.40 | 4.95 |
| | TOTAL | 8783.13 | 393.62 |



Winchester District Local Plan 2040

Nutrient Neutrality Topic Paper

November 2024



| Nutrient Neutrality Topic Paper | |
|--|----|
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1.0 Introduction

- 1.1 The National Planning Policy Framework (NPPF) states that strategic policies in development plan documents should make 'sufficient provision' for infrastructure for 'water supply' and 'waste water'.
- 1.2 A series of topic papers have been produced to accompany the Winchester District Proposed Submission Local Plan (Regulation 19). The background papers provide an understanding of the latest evidence, wider context and justifications for the proposed policy approach.
- 1.3 This Topic Paper supersedes the Nutrients Topic Paper that was published in August 2024. It has been updated with the latest information and progress that has been made on nutrients and it sets out the key water quality issues, provides analysis of the demand and supply of nutrient mitigation in the plan and provides justification for Policy NE16 as set out in the Local Plan. Significant progress has been made on nutrients in the past twelve months and the key outcomes to date are as follows:
 - The Council have successfully completed the upgrades of two Council owned waste water treatment works (WWTWs) to package treatment plants (PTP's) to generate phosphorus and nitrogen credits. The upgrades have successfully generated 10.55Kgs/TP/Yr which is enough to meet the current backlog of planning applications and the demand for approximately 70 homes in the Local Plan supply.
 - The Council have received endorsement from Natural England on the upgrading of ten WWTW to PTP's and are actively looking to roll out a programme of upgrading the works to package treatment plants in the next 3 months. The Council are in the process of undertaking work on a further five WWTW's in the Itchen catchment, as set out in paragraph 5.14 of this paper.
 - The Levelling Up and Regeneration Act (LURA) was enacted in October 2023. The Act includes the provision for upgrading waste water treatment works to the best technically achievable limits (TAL). Therefore, any development in the Local Plan that will be occupied post 2030 can take account of TAL in the nutrient budget.
 - The Partnership for South Hampshire (PfSH) Strategic Environmental Planning Team (SEPT) are in receipt of £9.6 million of funding for round one of the bidding process from the Local Nutrient Mitigation Fund (LNMF) and have agreed the Capital Programme for the deployment of funding. Further details of the funding are provided in Appendix 1 of this report and the PfSH Joint Committee Report on the 23rd July 2024¹.
 - Round two of the LNMF bids have been announced during the Autumn 2024 Budget. The PFSH SEPT are in receipt of a further £6.93 million for the delivery of nutrient mitigation schemes. Further details are provided in Appendix 5 of this report.
 - The Council are in the process of entering into an Inter Authority Agreement (IAA) with PfSH to ensure the Council has a share of strategic mitigation credits across all riverine catchments.
 - The Council are working proactively to deliver nutrient mitigation through the creation of a cross department working group that meet on a regular basis.
 - PfSH are proactively re-investing the revenue from the nutrient credits generated from the Council owned sewage treatment works in order to undertake further upgrades on a rolling basis.

¹ (Public Pack)Agenda Document for Partnership for South Hampshire (PfSH) Joint Committee, 23/07/2024 17:00 (push.gov.uk)

- The Council are proactively supporting third party PTP upgrades that have are currently emerging. A heads of term and monitoring fee have been formalised to ensure the monitoring arrangements for any third party schemes coming forward are in place.
- The Council are in receipt of a Position Statement in relation to nutrient neutrality from the site promotors of Sir John Moore Barracks (Policy W2). Appendix 6 of this report provides further details of the assumptions used to calculate the nutrient mitigation for the site in order for the development to be nutrient neutral.
- The Council have refreshed the <u>webpages</u> dedicated to nutrient neutrality to provide residents and developers with more user-friendly information. The pages also provide greater assistance in the information provided for developers in order to ensure development in the plan area is nutrient neutral.
- 1.4 This updated topic paper provides an analysis of the demand and supply of nutrient mitigation for development in the Winchester Local Plan. In addition to this topic paper a Statement of Common Ground has been agreed between Natural England and Winchester City Council addressing matters relating to water quality, including nutrient neutrality.

2.0 National Policy Requirements and Legislation

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017

2.1 The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (ref 13.2)² establishes a framework for a European-wide approach to action in relation to water policy. Its overarching aim is to ensure all inland and near shore watercourses and water bodies (including groundwater) are of 'Good' status or better, in terms of ecology, and also chemical, biological and physical parameters, by the year 2027. Therefore, any activities or developments that could cause detriment to a nearby water resource or prevent the future ability of a water resource to reach its potential status, must be mitigated to reduce the potential for harm and allow the aims of the Directive to be realised.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

- 2.2 The objective of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019³ is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Habitats Directive is legislation for the protection, management and exploitation of such habitats and species. The first non-statutory stage is a preliminary 'screening' to determine whether the plan or project is likely to have a significant effect on a protected site and the second stage is for an assessment to be undertaken to determine the impact of development proposals on the site's conservation objectives.
- 2.3 Regulation 63 is assessment of implications for European sites and European offshore marine sites. Which states before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which is likely to have a significant effect on a European site or a European offshore marine site must make an appropriate assessment of the implication of the plan or project for that site in view of that site's conservation objectives.

National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG)

- 2.4 Paragraph 180 (e) of the National Planning Policy Framework (NPPF) states that 'Development should, wherever possible' help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans'.
- 2.5 Paragraph 007 of the PPG⁴ (Reference ID:34-007-20140306) states that 'Plan-making may need to consider the capacity of the environment to receive effluent from development in different parts of a strategic policy-making authority's area without preventing relevant statutory objectives being met'. The PPG also re-iterates that water quality is often best considered on a catchment basis with liaison with key stakeholders such as the Environment Agency, Natural England and water companies.

Current Legal Cases – Jurston Farm, Wellington

² <u>The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017</u> (legislation.gov.uk)

³ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (legislation.gov.uk)

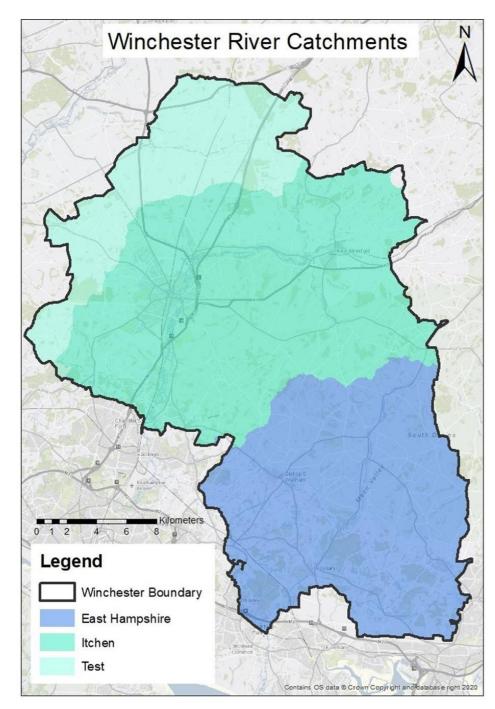
⁴ Water supply, wastewater and water quality - GOV.UK (www.gov.uk)

- 2.6 On the 30th June 2023, the High Court dismissed a challenge⁵ by CG Fry to the operation of the Habitats Regulations Assessment. CG Fry was granted outline permission in December 2015 for development of up to 650 homes on Jurston Farm in Somerset. The construction of the first two phases have commenced (190 homes) with an application submitted for the discharge of conditions for the third phase. However, following the Dutch N Court ruling, Natural England issued advice to four Councils in October 2020, which raised concerns about phosphorus levels within the Somerset Levels and Moors Ramsar sites. As a consequence, the Councils had to undertake Habitats Regulations Assessment (HRA) before making a decision on any new planning applications which may lead to an increase in phosphorus.
- 2.7 In order for phase three of the site to gain permission the Council required several conditions to be discharged before construction could take place. CG Fry subsequently appealed the decision on the basis that the Council refused to agree the conditions until a full HRA had been carried out for the entire Jurston Farm site, instead of the site area covered by phase three. The Planning Inspector dismissed the appeal and agreed with the Council's decision that appropriate assessment was required for any planning application including reserved matters approval and/or the discharge of conditions stage to ensure adverse effects on integrity of the site is ruled out and the in-combination effects of the project are considered.
- 2.8 CG Fry appealed the decision on the 6th July 2023 but the High Court dismissed the challenge and upheld the Council's judgement as a consequence. CJ Fry decided to take the matter further and the case was held in the Court of Appeal on the 19th and 20th March 2024.
- 2.9 On the 28th June 2024 the Court of Appeal handed down a decision on the CJ Frv case Court of Appeal Judgment Template (nationalarchives.gov.uk) The Court of Appeal upheld the High Court's decision and dismissed the appeal. The Judgment confirmed that a planning authority determining an application may require an "appropriate assessment" to be undertaken at the discharge of conditions stage where, in discharging such condition, the authority is making an "implementing decision" which would authorise the effects of the whole development required to be subject to such assessment. When applying for discharge of conditions where outline permission and reserved matters have been granted before any nutrient neutrality requirements, then the Judgment confirms that you will need to factor in an "appropriate assessment" where required prior to the discharge of conditions. Equally, where a developer is considering taking on a site which is already subject to outline permission and reserved matters approval, then they may wish to factor in potential requirements for "appropriate assessment" in the timeline of the whole application as part of the due diligence process before acquiring the site. This Judgement, therefore, has important implications for the number of nutrients credits that have been calculated in this Topic Paper as it has now been confirmed by the Court of Appeal that sites that have already been granted outline planning permission also need nutrient credits.
- 2.10 Following the decision CJ Fry filed an application to the Supreme Court seeking permission to appeal the Court Order made by the Court of Appeal on the 28th June 2024 and of the notices of objection filed by respondents. On the 1st November the Supreme Court granted permission to appeal in the test litigation whether Appropriate Assessment under the Habitats Regulations, in the context of nutrient neutrality, can be required as the discharge of conditions stage in relation to development which already has planning permission. A date for the hearing has yet to be determined.

⁵ <u>Heading 9 (landmarkchambers.co.uk)</u>

3.0 Background to Nutrients in Winchester

3.1 The Winchester district falls within three riverine catchments in relation to nutrient neutrality. This constitutes the East Hampshire catchment and the Test and the Itchen catchment.



Source: Partnership for South Hampshire Strategic Environmental Planning Team

3.2 In November 2018 the European Court of Justice issued a ruling 'Dutch N' which introduced the concept of nutrient neutrality, i.e. the level of nutrients in the river or protected site is the same after a development as it was before. In 2019 Natural England issued guidance to 32 Local Planning Authorities, including Winchester City Council, adding nutrient neutrality in relation to total nitrogen as a requirement for

overnight accommodation that impacts protected sites in the Solent, i.e. that no additional nitrogen enters the protected site⁶. These nutrients are in the effluent from waste water treatment works (WWTWs). Any new overnight accommodation in the catchment of the WWTW will increase the amount of effluent they discharge and therefore the amount of nutrients entering the protected site. Winchester district is served by a range of waste water treatment works (WWTW's). Discharge permit levels for wastewater leaving WWTW's are set by the Environment Agency and these permits seek to limit the discharge of pollutants such as total nitrogen and total phosphorus. In addition, any onsite Package Treatment Plants (PTP's within the catchment areas could also result in increased nutrient loading and should therefore demonstrate nutrient neutrality.

- 3.3 The Partnership for South Hampshire (PfSH) started working on developing total nitrogen mitigation solutions⁷ with the first scheme in the East Hampshire Catchment becoming available across the Solent in 2021.
- 3.4 In March 2022 Natural England issued additional guidance to a further 42 LPA's in respect to nutrient neutrality for habitat sites. The guidance introduced phosphorus neutrality in relation to the Itchen catchment as a requirement for overnight accommodation. This means that any new overnight accommodation in the River Itchen catchment area is required to mitigate the impacts of phosphorus as well as total nitrogen.
- 3.5 On 26th October 2023 the Levelling Up and Regeneration Act (LURA) received Royal Assent. The Act includes the requirement for upgrading the waste water treatment works (WWTW's) to technically achievable limits by 2030. For total nitrogen the TAL is 10mg/l and for phosphorus this is 0.25mg/l.
- 3.6 On the 19th of December 2023 Central Government wrote to Local Authorities stating that: To stop pollution at source, the Levelling-up and Regeneration Act 2023 creates a new duty on water companies to upgrade wastewater treatment works (WwTW) by 1 April 2030, in catchments of Habitats Sites identified by the Secretary of State as being in an unfavourable condition due to nutrient pollution. This duty will be in effect from 26 January 2024 and the government will publish designated catchments and specific wastewater treatment works to be upgraded. The Act also requires planning decision makers to consider these upgrades as certain for the purposes of an assessment under the Habitats Regulations.
- 3.7 The Secretary of State (SoS) gave notice that the River Itchen SAC and Solent Catchment were designated as catchment areas under the Water Industry Act 1991 as sensitive for phosphorus or nitrogen where a habitats site is an unfavourable condition by virtue of pollutions from nutrient in water on 25th January 2024⁸. The effect of this notice is that water companies now have a duty to meet the requirement of the LURA in paragraph 3.5 of this paper. An exemption process was completed by the Government on 24th May 2024⁹ which confirmed the wastewater treatment works to be exempt from the upgrades specified in the LURA. The list confirmed that all WWtW's that affect the Winchester Plan area will be upgraded to met the nutrient pollution standards for nitrogen and phosphorus depending on the catchment within which they are located¹⁰.

Habitats Regulations Assessment/Integrated Impact Assessment

⁶ The Importance of the Solent - Partnership for South Hampshire (push.gov.uk)

⁷ Potential Nutrient Mitigation Schemes - Partnership for South Hampshire (push.gov.uk)

⁸ Notice of designation of sensitive catchment areas 2024 - GOV.UK (www.gov.uk)

⁹ Housebuilding supported as government tackles water pollution at source - GOV.UK (www.gov.uk)

¹⁰ Information about nutrient significant plants - GOV.UK (www.gov.uk)

3.8 The Submission Local Plan is supported by an Integrated Impact Assessment and a Habitats Regulations Assessment. The HRA addendum includes further information on an updated nutrient budget.

WCC Nutrients Webpage and Relevant Nutrients Guidance Documents

3.9 WCC have a dedicated web page to nutrient neutrality¹¹. The web page provides information to developers and residents with information in relation to nutrients and ensure nutrient neutrality at the earliest opportunity as planning applications are progressed. The website provides links to a number of documents by other stakeholders to understand nutrient neutrality.

¹¹ Nutrient Neutrality - Nitrates and Phosphates - Winchester City Council

4.0 Nutrient Demand in Winchester

- 4.1 It remains the case that permissions for new overnight developments would be unlawful unless it can be demonstrated that no significant impacts on Habitat sites will arise. Overnight development is defined by Natural England in their Advice on Achieving Nutrient Neutrality for New Development in the Solent Region guidance¹² as "development that would result in a net increase in population served by a wastewater system, including new homes, student accommodation, tourism attractions and tourist accommodation".
- 4.2 Site promotors will need to demonstrate how their developments proposals for overnight development will result in no further nitrogen or phosphorus entering the designated sites. This requires a nutrient budget to be created and then mitigation to be identified in order for the development to be considered nutrient neutral as shown in Figure 1 below. In order to understand the demand for nutrients in the Local Plan individual nutrient budgets have been calculated for all strategic sites, windfall and existing Local Plan Part 2 (LPP2) sites that include overnight development. In addition, a breakdown by each site allocation will be provided in the updated Habitats Regulation Assessment to support the Winchester District Proposed Submission Local Plan (Regulation 19).

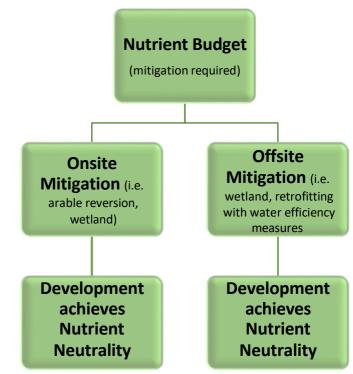


Figure 1. Process required by developer to achieve nutrient neutrality.

4.3 It is important to note that the nutrient mitigation demand from the Local Plan contained within this Topic Paper is based on the proposed housing trajectory with a baseline of the 1st April 2024. Any new greenfield allocations in the housing trajectory are phased from 2030. As set out in the Housing Topic Paper, if the Local Plan did not have this greenfield phasing policy then the nutrient mitigation demand for sites allocated in the Local Plan would be significantly higher and would need to be recalculated.

¹² Advice on achieving nutrient neutrality for new development in the Solent region (fareham.gov.uk)

- 4.4 Individual nutrient budgets are calculated using Natural England's nutrient budget calculators for the Solent¹³ and River Itchen SAC¹⁴ which were recently updated in February 2024. The updates include pre and post 2030 figures to account for the TAL upgrades and the option to include on site SuDS as part of the nutrient calculation. Natural England published a guidance document¹⁵ and methodology¹⁶ to undertake the calculations.
- 4.5 There are four stages in the calculator which result in the net change in the total nitrogen and/or phosphorus load to the relevant catchment with the proposed development. These stages are as follows:
 - Stage 1 Calculate the nutrient loading from additional wastewater.
 - Stage 2 Calculate the nutrient loading from current land use(s).
 - Stage 3 Calculate the nutrient loading from future land use(s).
 - Stage 4 Provides the overall nutrient budget for Nitrogen and or/Phosphorus.
- 4.6 The nutrient demand assessment for Local Plan development applies each of the four stages of the calculator above for each catchment in the plan area The assessment is explained in more detail in paragraphs 4.8 and 4.9 of this paper.
- 4.7 The assessment of nutrient demand in the plan area includes the proposed technically achievable limits (TAL) as set out in the LURA for any development expected to be delivered post 2030 for WWTWs that do not already meet this technical standard. The TAL for nitrogen is 10mg/l and for phosphorus is 0.25mg/l. The demand calculations below treat the upgrades anticipated to take place after 1st January 2030 as certain, unless the WWTW's already employ similar levels of technology to TAL.
- 4.8 The total amount of demand for nutrient mitigation required per catchment in the WCC plan area is set out below.

East Hampshire Catchment

- 4.9 Winchester development in the East Hampshire Catchment is served by WWTW's at Peel Common, Wickham, Bishops Waltham and Budds Farm. Peel Common and Budds Farm employ a level of technology that is similar to that of the technically achievable limits set out in the Levelling Up and Regeneration Act (LURA). As such these WWTW's will not be upgraded as part of the TAL requirements.
- 4.10 The nutrient mitigation demand for the East Hampshire catchment is calculated by understanding the amount of overnight development over the plan period, including all sites allocated in the Local Plan, reserved matters applications and windfall development. The capacity of the sites are then entered into the nutrient budget calculators as well as the date of site delivery, occupancy rate, daily water usage and the waste water treatment works that the site development would drain to derive the nutrient mitigation required from the waste water.
- 4.11 The second stage of the calculation is to calculate the pre-existing nutrient load from the current land use by entering in data from the site which includes soil types, rainfall catchment, nitrate vulnerable zone and the pre-development land cover type and area. This provides the amount of nutrients from the current land use. The third stage is to calculate the future nutrient load from land use on development. This requires entering

¹³ Solent: nutrient neutrality calculator - GOV.UK (www.gov.uk)

¹⁴ <u>River Itchen SAC: nutrient neutrality calculator - GOV.UK (www.gov.uk)</u>

¹⁵ Nutrient-Neutrality-a-summary-guide-March-2022.pdf (push.gov.uk)

¹⁶ NECR459 Edition 1 Nutrient Neutrality Generic Methodology.pdf

data into the calculator on the proposed future land use. The majority of sites in the Winchester Local Plan are recorded as residential urban land where the Council do not have information from a masterplan provided by the site promoter. The completion of all of the steps above calculate the net change in nutrient loading from residential development and provides the amount of nutrient mitigation required for the site to be nutrient neutral. This process is the same for sites in the Test and Itchen for nitrogen and phosphorus.

- 4.12 The approach taken in calculating the nutrient budget adopt a precautionary approach in light of any uncertainty. For example, assuming future land uses for allocation sites with be 'residential urban' in the absence of a master plan, whereas in practice some of the larger sites may include areas of open urban land or greenspace).
- 4.13 The overall net change for total nitrogen mitigation over the WCC Local Plan period for the catchment equates to 2,073.15Kgs/TN/Yr.

Test and Itchen Catchment - Nitrogen

4.14 Winchester development that falls within the Test and Itchen Catchment is served by WWTW'S at Harestock, Morestead Road, New Alresford and Chickenhall. Apart from Chicikenhall (which falls within the Eastleigh borough) all other WWTW's fall within the Winchester district. Table 1 shows the current permit levels for waste water treatment works in the Itchen Catchment. The waste water treatment works will receive a further upgrade in 2030 to the TAL, apart from the phosphorus permit at Harestock which will achieve TAL in 2025.

| Wastewater Treatment Works | Nitrogen Permit Level (mg/L) | Current Phosphorus Permit Level (mg/L) | Post 2025 Phosphorus Permit Level (mg/L) | Post 2030 (TAL) Phosphorus Permit Limit (mg/L) |
|-------------------------------|------------------------------------|---|---|--|
| Chickenhall | 27 | 1 | 0.6 | 0.25 |
| Harestock | 27 | 1 | 0.25 | 0.25 |
| Morestead Road | 27 | 1 | 1 | 0.25 |
| New Alresford | 27 | 8 | 8 | 0.25 |

Table 1: Permit levels for wastewater treatment works in the Itchen catchment

- 4.15 Prior to 2030 the amount of nutrient mitigation required for WWTW's in the Itchen catchment will be at a higher permit level.
- 4.16 The demand for total nitrogen over the WCC Local Plan period for the catchment equates to 8,936.51/TN/Yr.

Itchen Catchment - Phosphorus

- 4.17 Due to the way in which development impacts phosphorus levels in the Itchen, and the need to deliver mitigation where the impact of mitigation is upstream of the proposed development, two assessments have been made in relation to the demand and supply of phosphorus in the Itchen.
- 4.18 WCC have entered into S33 agreement with the Eastleigh Borough Council (EBC) mitigation scheme. The agreement allows development in Winchester district draining to Chickenhall WWTW's to secure nitrogen and phosphorus mitigation from the EBC scheme. Therefore, an assessment has been made in relation to the supply and demand of nutrient mitigation for site allocations and windfall development draining to Chickenhall

WWTWs. A separate assessment has been made for phosphorus mitigation that is required for the site allocations and windfall development draining to the Harestock, Morestead Road and New Alresford waste water treatments works in the Itchen catchment area.

Chickenhall

4.19 The data used to calculate the demand and supply of nutrient mitigation for development that drains to Chickenhall WWTW assumes the programme upgrade to the permit limit will take place by March 2025¹⁷, and takes account of the tighter permit limit¹⁸ in 2030 following the enactment of the LURA. The demand for total phosphorus over the WCC Local Plan period for Chickenhall WWTW's equates to 25.17Kgs/TP/Yr.

Remaining WWTW's in the District

- 4.20 Winchester development in the Test and Itchen Catchment is also served by WWTW'S at Harestock, Morestead Road and New Alresford.
- 4.21 The demand for total phosphorus over the WCC Local Plan period for the remaining WWTW's in the Itchen catchment equates to 368.45Kgs/TP/Yr
- 4.22 It should be noted that the above demand figures do not take account of any on site mitigation that have been put forward by site promotors. There are some allocations within the Plan where site promotors are proactively seeking to provide on-site mitigation and/or have provided their own nutrient budget calculations. As highlighted in Appendix 6 of this report the site promotors of the Plan's largest allocation at Sir John Moore Barracks, in Winchester (Policy W2) have provided a Position Statement on nutrient neutrality. The statement provides the assumptions made in calculating the nutrient mitigation required for the development and seeks to Submit a DAS to Natural England in early 2025.

¹⁷ Reduction from 1mg/l to 0.6mg/l

¹⁸ Reduction from the planned 0.6mg/l to 0.25mg/l

5.0 Nutrient Mitigation Supply in Winchester

- 5.1 In order to understand the demand for nutrients in the Local Plan individual nutrient budgets have been calculated for all housing sites and windfall. If there is a nutrient surplus identified in the budget then mitigation is required to achieve nutrient neutrality.
- 5.2 In the plan area there are two potential routes to provide nutrient mitigation. Firstly, direct (on site) mitigation¹⁹ provided by the applicant or site promoter as part of the development such as taking the land out of agricultural use and using the land for an alternative use, e.g. open space. Secondly the purchase of mitigation credits via off-site delivery such as the creation of wetlands. It is also possible that third party markets in nutrient credits will emerge but currently there is no such activity in the Solent area. Mitigation measures are secured for the duration over which the development is causing the effects, for the Winchester plan area this is 125 years.

East Hampshire Catchment

5.3 There are currently three nutrient mitigation schemes available in the East Hampshire Catchment as shown in Appendix 2. The table below provides the latest position in terms of the available schemes and the total number of kilograms of total nitrogen per year (Kg/TN/yr) available for use by development in Winchester.

| Mitigation schemes ²⁰ | Kgs/TN/Year that is available from the scheme |
|----------------------------------|---|
| Whitewool (wetlands) | 253 |
| Warnford Park (arable reversion) | 3144 |
| Knowle (interceptor wetlands) | 811 |
| Shalfleet | 1,700 |
| Total | 5,908 |

 Table 2: Nitrogen Mitigation Schemes available to date for Winchester within the East Hampshire

 Catchment

- 5.4 As Table 1 demonstrates there are currently three strategic nutrient mitigation schemes in the East Hampshire catchment available for development in Winchester and the total capacity of the schemes equates to 5,908 Kgs/TN/Yr as of March 2024.
- 5.5 Furthermore, the Partnership for South Hampshire Strategic Environmental Planning Team (PFSH SEPT) provide bi-yearly reports on the availability of nutrient mitigation in the East Hampshire Catchment. The report publicised at PfSH Joint Committee in September 2023 provided the latest update on the projected supply and demand of nutrient mitigation as shown on Figure 2 below.

¹⁹ The development at Fawley Power Station uses a combination of onsite measures to offset nutrient demand - <u>Report.pdf (newforest.gov.uk)</u>. This includes the creation of a new wetland, land use change, the removal of the existing sewage treatment works and the use of cover crops.
²⁰ Potential Nutrient Mitigation Schemes - Partnership for South Hampshire (push.gov.uk)

Nutrient neutrality

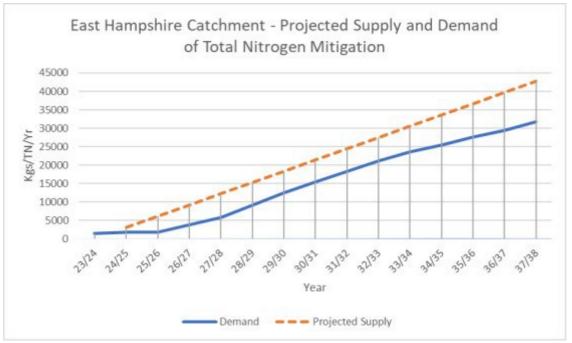


Figure 2: Project Supply and Demand of Total Nitrogen Mitigation in the East Hampshire Catchment (Source: PFSH SEPT April 2024)

5.6 The first nitrogen mitigation scheme in the East Hampshire catchment was established in 2020. Over the last four years a number of strategic mitigation schemes have come forward with an average delivery rate of 3,052Kgs/Tn/Yr. This highlights that strategically there is enough supply to continue to meet demand in the catchment, including the development in the Winchester plan area that falls within the East Hampshire catchment. Furthermore, Fareham Borough Council have purchased agricultural land within Stubbington to undertake long term cessation of agricultural activities. Natural England have endorsed the scheme through the DAS process and confirmed the quantum of mitigation. The PfSH SEPT have confirmed that credits will be sold from the scheme to relevant authorities in the East Hampshire catchment towards the end of October 2024 and there is the potential for further Council owned waste water treatment work upgrades.²¹

Test and Itchen Catchment - Nitrogen

5.7 The Council can confirm that there are six strategic nitrogen mitigation schemes available in the Test and Itchen catchment. The table below provides the latest position in terms of the available schemes and the total number of kilograms of total nitrogen per year (Kg/TN/yr) available for use by development in Winchester.

| Mitigation schemes ²² | Kgs/TN/Year that is available from the scheme |
|---|---|
| Eastleigh Borough Council (wetlands) | 1,468.53 |
| Roke Manor Farm/Awbridge Danes (arable reversion) | 711 |
| The Grange Estate, Abbotstone (arable reversion) | 33.59 |
| Hinton Ampner | 650 |

²¹ (Public Pack)Agenda Document for Partnership for South Hampshire (PfSH) Joint Committee, 30/09/2024 18:00 (push.gov.uk)

²² Potential Nutrient Mitigation Schemes - Partnership for South Hampshire (push.gov.uk)

| Blackbarn Farm | 239.34 |
|-------------------------------|---------|
| Winchester City Council owned | 1571 |
| WWTW's | |
| Total | 4673.46 |

 Table 3: Nitrogen Mitigation Schemes available for Winchester to date within the Test and Itchen

 Catchments

- 5.8 Table 2 demonstrates that there is some strategic supply of nitrogen mitigation currently available in the Itchen.
- 5.9 The PfSH SEPT provide bi-yearly reports on the availability of nutrient mitigation in the Test and Itchen Catchment. The report publicised at PfSH Joint Committee in September 2023 provided the latest update on the projected supply and demand of nutrient mitigation as shown on Figure 3 below.

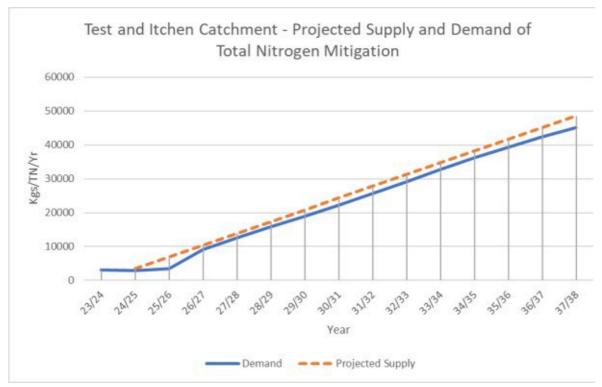


Figure 3: Project supply and demand of Total Nitrogen Mitigation in the Test and Itchen catchment (Source: PFSH SEPT April 2024)

- 5.10 The first nitrogen mitigation scheme was established in 2021. Over the last three years a number of strategic mitigation schemes have been delivered in the Test and Itchen catchment with an average delivery rate of 3,470Kgs/TN/Yr. Figure 3 demonstrates that if mitigation continues to come forward at a similar rate than the strategic supply will continue to match demand.
- 5.11 The availability of supply from strategic mitigation schemes across each catchment is currently reported by the PfSH SEPT. The PFSH SEPT are currently in receipt of £9.6million of funding from the Government for nutrient mitigation for the Solent and River Itchen Catchment as outlined in Appendix 1. The SEPT are currently undertaking work to deploy the funding and deliver further nutrient mitigation schemes. The proposed capital programme of nutrient mitigation schemes as outlined in the 23rd July 20024 PfSH Joint Committee Report is as follows:

| | Proposed Capital Programme | | |
|--|--|------------------------------|---|
| Projects | Scope | Total LNMF Budget Allocation | Catchment(s) |
| Water Efficiency (Council Led) | Design water efficiency measures for council owned housing stock and social tenanted property for the purposes of nutrient reduction. Commission local authorities to implement new measures and collate data for reporting mitigation of water resource savings and lower water bills to residents without the need to access the private market. | £540,000 | East Hampshire Test and Itchen New Forest Rivers |
| Water Efficiency (Registered Providers) | Design water efficiency measures for affordable stock managed by registered housing providers for the purposes of nutrient reduction. Commission registered housing providers to implement new measures and collate data for reporting mitigation of water resource savings and lower water bills to residents without the need to access the private market. | £360,000 | East Hampshire Test and Itchen, Arun (Western Streams) |
| Upgrades to Council Owned Sewerage Infrastructure | The identification of authority owned Sewerage Treatment Works (PtP and septic tank) which are suitable for upgrades to enable reductions in Nitrogen and Phosphorus into waterways and improves discharge point to Controlled Waters. Lead design planning and obtain Authority agreement to proceed with upgrade and manage oversight of the upgrade. | | Test and Itchen, Itchen (P) |
| Wetland Delivery | Using collated evidence on the deliverability of different wetlands to proposed several schemes where land is in control of an LPA. Proposed full feasibility on projects and obtain agreement on most suitable option(s). Setup mechanism to implement delivery of preferred option. | £1,200,000 | Test and Itchen |
| Reduction of Intensive Agriculture | Strategy predicated on all sites providing, in addition to nutrient mitigation, additional benefits such as public access, BNG, and national and local policy objectives. Where possible sites should also aim to deliver further benefits, such as providing mitigation for recreational disturbance and assisting in water resource management. Initial projects should be focused on the Test and Itchen and East Hampshire catchments | £6,560,000 | All |
| Institutional Framework | Develop a long-term delivery vehicle, that address state aid and public v's private classification issues, to manage and provide a local authority led nutrient credit offer by creating and maintaining mitigation schemes. | £40,000 | All |
| | TOTAL | £9,600,000 | |

 Table 4: PfSH Proposed Capital Programme for Nutrient Mitigation Schemes

- 5.12 The programme has been set out to enable growth as set out in authorities Local Plan's to continue. Updates on the progression of the deployment of the funds to relevant catchment authorities and the progress of the projects will be reported to future PfSH Joint Committee meetings. The Council have now formally accepted the PfSH funding at a meeting of Cabinet on the 11th September 2024 (see Appendix 5) and are able to enter into agreements in order to implement the Council's WWtW project. The Council's Cabinet agreed on the 16th July 2024 (see Appendix 4) the conditions for utilising and disposing of the credits generated from the upgrades.
- 5.13 As part of the successful funding allocation from the Government Winchester District Council are in line to receive a portion of the funding to deliver upgrades to Council owned projects. This includes upgrades to Council owned wastewater treatment works to Package Treatment Plants.
- 5.14 The Council have already undertaken the upgrading of waste water treatment works which has generated both Nitrogen and Phosphorus credits. The initial two upgrades delivered 118.35Kgs/TN/Yr and 10.55Kgs/TP/Yr further details are provided in paragraphs 5.10 and 5.11 of this paper. The Council have received endorsement from Natural England through the DAS process that the ten Sewage Treatment Plants to be upgraded to Package Treatment Plants are suitable for mitigating nitrogen. The upgrading of the ten WWTW'S is anticipated to generate approximately 1571 Kgs/TN/Yr. In addition, the Council have commissioned feasibility work to assess the potential of a further five WWTW's in the Itchen catchment to be upgraded to PTP's in order to generate both Nitrogen and Phosphorus credits.

5.15 The total amount of Nitrogen to be generated through Strategic mitigation schemes amounts to 4673.46Kgs/TN/Yr.

Emerging Nitrogen Mitigation Schemes

- 5.16 A report from the PfSH SEPT was published at PfSH Joint Committee on the 30th September 2024 outlining a number of project updates following a successful bid to the Local Nutrient Mitigation Fund (LNMF). This includes work on the Eastleigh Borough Council wetlands where further work is progressing to determine the amount of nutrient mitigation that can be generated on site. A condition of the grant funding for the schemes listed in Table 4 is to re-circulate revenue made from the sale of nutrient credits. Therefore, any revenue made will be focused towards further emerging nutrient schemes in the Test and Itchen.
- 5.17 Furthermore, the PfSH SEPT have received news of a successful bid to DEFRA for the receipt of £6.73 million to progress further nutrient mitigation schemes covering the Solent and Itchen catchments. Further details of the projects of the nutrient mitigation projects will be provided to PfSH Joint Committee in due course.

Test and Itchen Catchment - Phosphorus

Chickenhall WWTW's

5.18 Figure 1 provides an analysis of the strategic supply and demand of phosphorus mitigation to Chickenhall WWTW across a 15 year period. As highlighted in paragraph 4.11 of this paper the Local Plan demand for phosphorus for development draining to Chickenhall equates to 25.17Kgs/TP/Yr.





Source: PfSH Nutrient Mitigation Update

5.19 There is currently 115.91Kgs/TN/Yr available from the Eastleigh Borough Council Mitigation Scheme. Figure 1 demonstrates that there is enough strategic mitigation up until 2037/38 for development draining to Chickenhall within the Winchester plan area. This will be sufficient to cover the nutrient demand for Local Plan development draining to Chickenhall as it is not anticipated that the delivery of sites will surpass 2034/35. Remaining WWTW's in the District

5.20 The Council have completed a substantial amount of work on the delivery of two phosphorus mitigation solutions that can mitigate phosphorus and nitrogen in the River Itchen catchment. These solutions are set out below.

Council owned Sewage Treatment Works

- 5.21 The first solution is the upgrading of Council owned wastewater treatment works to package treatment plants to generate the reduction of phosphorus. Appendix 3 shows the location of all Council owned waste water treatment works. The reduction of phosphorus can then be used to mitigate the development draining to the remaining WWTW's (Harestock, Morestead Road and New Alresford) in the district. The Council have completed the upgrades for the first two waste water treatment works to provide phosphorus mitigation in the short term. The initial improvements generated 10.55Kgs/TP/Yr this is enough to unlock the current backlog of planning applications and meet the nutrient mitigation demand for the Local Plan allocations in the first year of the plan period.
- 5.22 The upgrading of the two pilot Council owned Sewage Treatment Works's to Package Treatment Plants have been endorsed by Natural England through the Discretionary Advice Service (DAS).
- 5.23 The Council are in line to receive £900,000 of the £9.6 million as set out in paragraph 5.12 of this paper to upgrade further Council owned Sewage Treatment Works. The Council have received endorsement from Natural England through the DAS process for a further ten Council owned Wastewater Treatment Works to be upgraded to PTP's. The upgrades will generate approximately 189Kgs/TP/Yr.

| Council Owned WWtW | Kgs/TN/Yr | Kgs/TP/Yr |
|-------------------------------|-----------|-----------|
| Beech Grove, Owslebury | 476 | 54 |
| The Pastures, Cheriton | 162 | 20 |
| Couch Green, Martyr Worthy | 150 | 17 |
| Baring Close, Itchen Abbas | 102 | 13 |
| Itchen View, Itchen Stoke | 77 | 10 |
| North Drive, Littleton | 83 | 11 |
| Hobbs Close, Bishops | 231 | 29 |
| Sutton | | |
| Kiln Lane, Old Alresford | 120 | 15 |
| The Brook, Old Alresford | 136 | 16 |
| Woodlark Cottages, | 34 | 4 |
| Bighton | | |
| TOTAL | 1571 | 189 |

Table 5: Nutrient mitigate credits generated from the WWtW upgrades.

Water Efficiency Measures in Council Owned Housing Stock

5.24 The second solution is the retrofitting of Council owned housing stock with water efficiency measures. The reduction of water use has an associated effect on the amount of phosphorus entering the relevant WWTW's. This reduction in phosphorus and nitrogen

can be used to mitigate new development. The PFSH SEPT commissioned Royal Haskoning to undertake a report on the amount of nutrient mitigation (both phosphorus and nitrogen) that could be generated by retrofitting of Council owned stock with water efficiency measures. The proposed water efficiency measures would have multiple benefits including bringing existing Council housing stock in line with the requirement of Policy CN4, meeting the plans aim for the district to be carbon neutral 2030.

- 5.25 The water efficiency measures have also been endorsed by Natural England through the DAS process. Further information will be provided in due course in the Natural England and Winchester City Council Statement of Common Ground. The programme of the water efficiency measures has commenced with the SEPT recording details of the upgrades undertaken. The mitigation generated from the water efficiency measures will be used for the development of new Council built affordable homes. Therefore, the mitigation generated for the upgrading of the Council owned WWtW's can channelled towards the Local Plan demand.
- 5.26 The total amount of Phosphorus to date to be generated through Strategic mitigation schemes amounts to 199.55Kgs/TP/Yr Furthermore, as highlighted in paragraph 5.15 of this paper the Council are currently commissioning feasibility work to upgrade a further five WWtW's in the Itchen catchment to PTP's to generate further phosphorus credits.

Nutrient Credit Viability

- 5.27 The costs associated with developers needing to purchase nitrogen and phosphorus credits in the Itchen where this has been indicated in the nutrient budget has been reflected in the Local Plan Viability Assessment. The majority of allocated sites in the Plan in the Itchen catchment are expected to deliver post 2030 and therefore the amount of mitigation required will be reduced by the introduction of the technically achievable limit for waste water treatment works on 1st January 2030.
- 5.28 The Proposed Submission Plan (Regulation 19) Viability Assessment reflects the policy costs associated with purchasing nitrogen and phosphorus credits for development delivered in the Itchen catchment pre and post 2030.

6.0 Conclusion

- 6.1 The Council consider that the approach undertaken in relation to the demand and supply of nutrient mitigation is in line with the guidance provided by Natural England and provides a reasonable estimate in relation to the Local Plan's nutrient demand requirement. The main sources of data are the Plan Housing Trajectory, Natural England's Nutrient Budget Calculator and the data from the PfSH Strategic Environmental Planning Team in relation to strategic nutrient mitigation supply and demand.
- 6.2 The current demand for nutrient mitigation in the Winchester plan area is set out in Chapter 4 of this background paper and summarised below:

| Riverine Catchment | Nitrogen Demand (kgs/TN/Yr) | Phosphorus Demand (kgs/TP/Yr) |
|------------------------|--------------------------------|----------------------------------|
| <u>E</u> ast Hampshire | 2073.15 | N/A |
| Test | 8,936.51 | N/A |
| Itchen | | 393.62 |

- 6.3 Chapter 5 provides an analysis of the supply of nutrient mitigation in each riverine catchment against the demand highlighted above and in Chapter 4. There is enough strategic supply in the East Hampshire catchment to meet the Winchester plan demand. Furthermore, projections of strategic supply and demand in the East Hampshire catchment demonstrated that supply had continued to meet strategic demand.
- 6.4 Chapter 5 also highlights that there is enough strategic supply from the Eastleigh Borough Council mitigation scheme to meet the phosphorus demand for development draining to Chickenhall. In terms of the Nitrogen mitigation in the Test and Itchen catchment there is currently enough strategic supply to meet approximately 52% of the Local Plan demand. However, the Council is also aware that there are further nitrogen credits available from the Eastleigh Borough Council nutrient mitigation scheme that will meet the strategic demand, including that of the Winchester Local Plan.
- 6.5 The upgrading of the Council owned WWtW's to PTP's will generate 199.55Kgs/TP/Yr. The phosphorus credits will unlock approximately 50% of the Plan's demand that drain to the remaining WWtW's in the district. The Council are currently in the process of undertaking further work on an additional five Council owned WWTW's to understand the nutrient mitigation that can be generated from these sites as well as being in a position to support third party PTP providers. A DAS has been submitted to Natural England for the additional WWtW's to understand the nitrogen and phosphorus credits that can be generated from the upgrades.
- 6.6 In addition, PfSH are progressing a number of strategic mitigation projects in all three riverine catchments which are reported to PfSH Joint Committee on a quarterly basis as highlighted in Chapter 5 of this report. The Government have also recently announced the successful bid made by the PfSH SEPT for Round 2 of the LNMF. PfSH will be providing further details on the deployment of the fund in relation to additional nutrient mitigation projects in the coming months.

- 6.7 Policy NE16 of the Proposed Submission Local Plan (Regulation 19) aims to meet the plan requirements by ensuring that all new overnight accommodation is nutrient neutral. The policy will ensure that any developments allocated in the plan or that comes forward as 'windfall' must have nutrient mitigation either on or off site before they are occupied and subsequently have an impact on any international designated site.
- 6.8 The Council can conclude that there is adequate provision of nutrient mitigation for at least the first five years of the Local Plan. There are ongoing and proactive discussions with site promotors wishing to bring forward on site nutrient mitigation solutions such as the site promotors for Policy W2. The Council have worked closely with internal departments to delivery Council owned nutrient mitigation schemes as well as with the PfSH SEPT to understand the delivery of third part mitigation schemes. As highlighted in Chapter 5 of this report there are a number of current nutrient mitigation scheme with credits available for nitrogen as well as emerging schemes.

Nutrient Neutrality and Local Nutrient Mitigation Fund update

Dear Council Leader

On 13 September 2023, the House of Lords voted against government proposals intended to unlock 100,000 homes between now and 2030, whilst protecting and improving the environment.

The government has carefully considered the case for reintroducing these measures through new primary legislation in the fourth session of this Parliament. While primary legislation will not be brought forward in this Parliament, the government remains committed to making rapid progress to unlock homes. We have published an <u>update on GOV.UK</u> setting out the range of measures that are being taken by the government.

I want to draw particular attention to the measures in the Levelling-up and Regeneration Act 2023 to reduce the mitigation burden on development and funding announced today through the Local Nutrient Mitigation Fund to significantly boost the supply of mitigation measures coming forward.

To stop pollution at source, the Levelling-up and Regeneration Act 2023 creates a new duty on water companies to upgrade wastewater treatment works (WwTW) by 1 April 2030, in catchments of Habitats Sites identified by the Secretary of State as being in an unfavourable condition due to nutrient pollution. This duty will be in effect from 26 January 2024 and the government will publish designated catchments and specific wastewater treatment works to be upgraded. The Act also requires planning decision-makers to consider these upgrades as certain for the purposes of an assessment under the Habitats Regulations. These upgrades will significantly reduce nutrient loads from WwTW in designated catchments, while also reducing the average costs of nutrient mitigation for developers. For new development connecting to WwTW subject to the upgrade duty, the reduction in costs is estimated to range between 37% to 95% for phosphorus and between 46% to 64% for nitrogen (depending on the catchment and subject to final analysis). This is alongside the continued delivery of the Natural England £30 million Nutrient Mitigation Scheme in line with the Environment Secretary's direction of 28 July 2022.

To boost the supply of mitigation, the Chancellor has announced as part of the Autumn Statement that the Local Nutrient Mitigation Fund will spend £110 million of taxpayer money over this year and next. This will enable local authorities to boost the supply of mitigation, by bringing forward innovative mitigation schemes and providing mitigation credits. The funding will be recycled locally until nutrient mitigation is no longer needed, at which point it will be used for measures to help restore the relevant Habitats Sites. This will enable sustainable development, unlocking stalled housing delivery, whilst delivering secondary benefits like enhanced public access to nature and supporting our commitment to leave our environment in a better state than we found it.

Today, as part of the Local Nutrient Mitigation Fund (LNMF), I am pleased to announce that the department is:

- Making available the first tranche of up-to £57 million capital funding to eight successful bidders (Annex A),
- Providing a second round of Nutrient Support Funding with another £100k for 2023/24 the lead local authority for substantive catchments (those over 10,000 hectares in size, Annex B), and;
- Committing to opening the second round of the Local Nutrient Mitigation Fund in early 2024.

Departmental officials are writing to the lead local planning authorities (LPAs) on behalf of nutrient neutrality catchments who submitted bids for the first round of the LNMF informing them of the decisions. To support the capital funding, the department will also explore proportionate resource funding to support the delivery of the capital programmes, this will be additional to the Nutrient Support Funding. Additionally, officials will be writing to the relevant LPAs who previously received Nutrient Support Funding on providing another $\pounds100,000$ of revenue funding for 2023/24 in the coming days.

As ever, the department will work closely with affected local authorities to ensure we continue to make progress to unblock development that is stalled as a result of nutrient neutrality. We will also consider further measures as necessary. Finally, I would like to thank you for all the work and the leadership that LPAs are showing on this challenging issue at a local level.

The House of Lords were absolutely wrong to make this decision, but we will continue to take all efforts ensure we unlock development, to allow people to have access to the homes that they need.

Yours ever,

[signed] **Lee Rowley MP** Minister of State for Housing, Planning and Building Safety

Annex A: Table of successful Local Nutrient Mitigation Fund

| Nutrient catchment | Lead local authority | Local Nutrient Mitigation Fund round one maximum |
|---|---------------------------------|--|
| River Camel | Cornwall County Council | £2 m |
| Poole Harbour | Dorset Council | £4.63m |
| Solent and River Itchen | Fareham Council | £9.6 m |
| River Lugg (sub-catchment of the River Wye) | Herefordshire County Council | £1.76 m |
| Stodmarsh | Kent County Council | £9.8 m |
| Norfolk Broads | Broadland District Council | £9.6 m |

| Nutrient catchment | Lead local authority | Local Nutrient Mitigation Fund round one maximum |
|--------------------|----------------------------|--|
| Somerset levels | Somerset County Council | £9.6 m |
| River Avon | Wiltshire Council | £9.8 m |

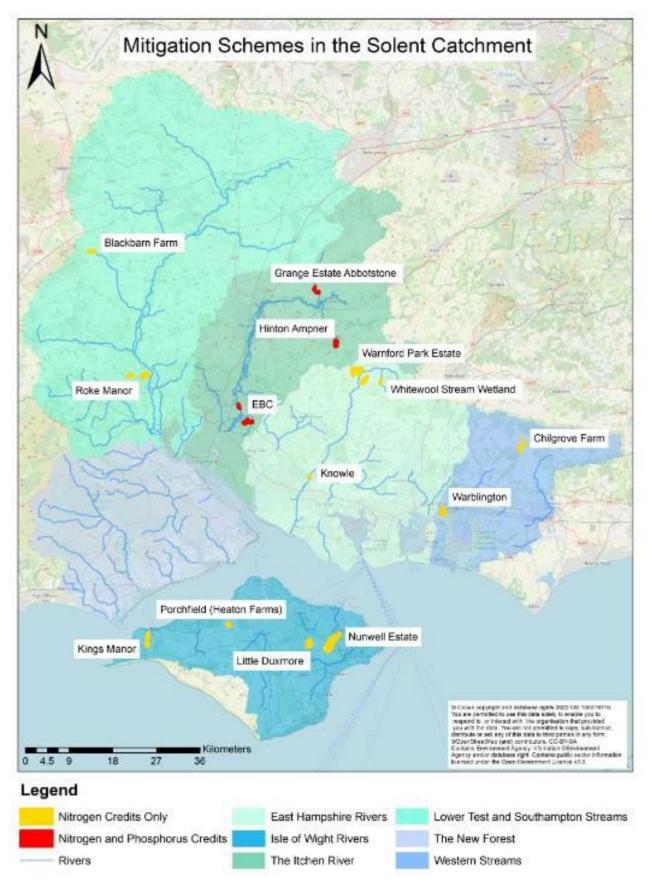
Annex B: Table showing Nutrient Support Fund round 2 eligible catchments

| Nutrient catchment | Nutrient catchment area (thousand hectares) | Nutrient Support Fund |
|-------------------------|---|-----------------------|
| Solent | 329 | £100,000 |
| River Eden | 230 | £100,000 |
| Somerset Levels & Moors | 209 | £100,000 |
| | | 0 |

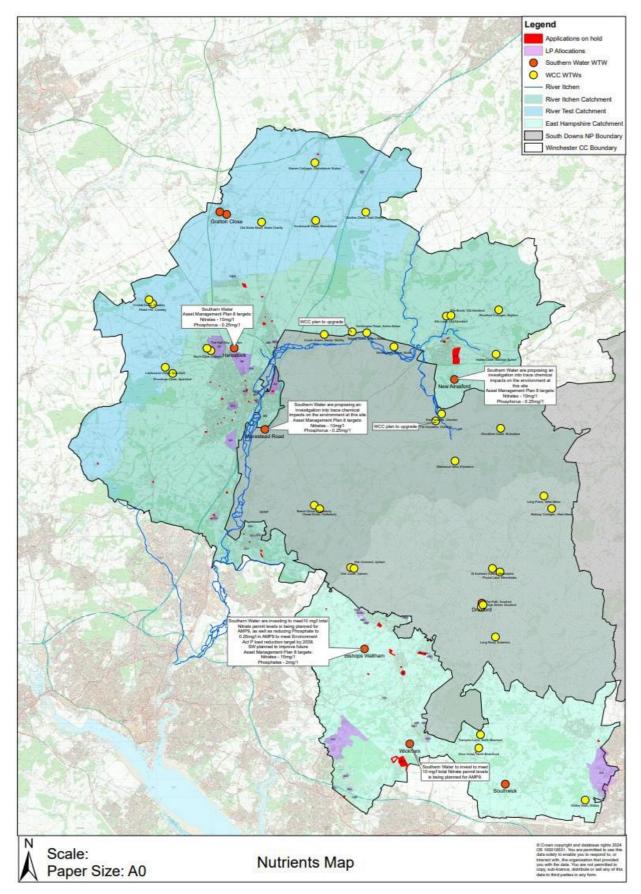
| Nutrient catchment | Nutrient catchment area (thousand hectares) | Nutrient Support Fund |
|---------------------------------------|---|-----------------------|
| Teesmouth and Cleveland Coast | 196 | £100,000 |
| The Broads | 195 | £100,000 |
| River Avon | 172 | £100,000 |
| Poole Harbour | 82 | £100,000 |
| River Lugg | 82 | £100,000 |
| River Wensum | 57 | £100,000 |
| River Derwent & Bassenthwaite Lake | 43 | £100,000 |

| Nutrient catchment | Nutrient catchment area (thousand hectares) | Nutrient Support Fund |
|--------------------|---|-----------------------|
| River Itchen | 42 | £100,000 |
| Stodmarsh | 42 | £100,000 |
| River Axe | 30 | £100,000 |
| River Camel | 29 | £100,000 |
| River Clun | 27 | £100,000 |
| River Lambourn | 26 | £100,000 |
| Lindisfarne | 25 | £100,000 |
| River Kent | 22 | £100,000 |
| | | 2 |

| Nutrient catchment | Nutrient catchment area (thousand hectares) | Nutrient Support Fund |
|---------------------|---|-----------------------|
| River Mease | 18 | £100,000 |
| Peak District Dales | 13 | £100,000 |



Appendix 2 – Location of Nutrient Mitigation Schemes in the Solent



Appendix 3 - Location of Southern Water owned WWTW's and WCC owned WWTW's

Appendix 4 – WCC Cabinet Report: Housing Revenue Account Nutrient Mitigation Proposal

CAB3470 CABINET

REPORT TITLE: HOUSING REVENUE ACCOUNT NUTRIENT MITIGATION PROPOSAL

16 JULY 2024

REPORT OF CABINET MEMBER:

Cllr Chris Westwood, Cabinet Member for Housing

Contact Officer: Simon Maggs Tel No: 01962 848 368 Email smaggs@winchester.gov.uk

WARD(S): ALL

PURPOSE

In 2019, Natural England issued advice to Winchester City Council that requires all new overnight development (e.g. houses, hotels, care homes) to mitigate for any increase in nutrient pollution arising from development that may harm internationally protected sites (such as the Solent Special Protect Area). Further advice was issued in March 2022 requiring the further mitigation of Phosphorus for new overnight accommodation within the catchment of the River Itchen.

The impact of this has been several new housing schemes are held in abeyance, including council house development schemes.

The council's strategy to enable nutrient mitigation solutions includes generating nutrient credits by upgrading some of its own waste-water treatment works (WwTW)) using Housing Revenue Account (HRA) funding which is the subject of this report.

The strategy also involves working alongside the Partnership for South Hampshire (PfSH) to access the Local Nutrient Mitigation Fund. In addition, the council is supporting third-party mitigation schemes and water efficiency measures in its own stock. These initiatives complement and build upon those outlined in this paper to address the demand for nutrient credits in the district. Further details on the PfSH initiative and other initiatives will be presented to a future Cabinet meeting.

In 2023 the council upgraded two of its own WwTWs (Phase I) one of which has already generated both phosphate and nitrate credits, which have been earmarked to facilitate its own development of council housing under construction and the future pipeline. The approach proposed in this report builds on this success.

The purpose of this report is to seek approval, subject to individual business cases, to upgrade a further 4 of WCC's own WwTWs) (Phase II) in order to generate nutrient credits, approval of a budget envelope and approval of a strategy for use of those credits, including disposal of credits to the external market. Specific Phase II WwTWs will be selected once detailed scientific analysis has been carried out and detailed discussions have been held with Natural England. It is anticipated that some of the WwTWs will be in the area of South Downs National Park which has implications for how the mitigation scheme is set up. Decisions to proceed with each scheme will be subject to the approval of individual business cases.

The upgrades will be funded through the HRA and disposal proceeds will be reinvested into the HRA.

RECOMMENDATIONS:

That Cabinet agrees

- A capital budget of £400,000 to upgrade 4 waste-water treatment works (WwTW) to be funded from HRA reserves.
- Works to individual WwTW works to be delivered subject to the Council's Chief Finance Officer and Strategic Director agreeing the business case and granting authority to spend the budget under Financial Procedure Rule 7.4; and, if credits are to be sold in the market, suitable agreements being secured.
- Delegate to the Strategic Director, S151 Officer and Director Legal the authority to utilise and/or dispose of (in accordance with market conditions at the time of sale) credits generated from historic and new upgrades in accordance with the following strategy:
 - a) To support the delivery of council housing commissioned by the council.
 - b) To support the delivery of housing where an element of that housing is to be council housing and the approach helps to unlock delivery via credit disposal.
 - c) To dispose of credits to support other council led and enabled activities.
 - d) Disposal of credits to the open market.
- Delegate to the Strategic Director and Director Legal authority to agree required monitoring and enforcement mechanisms for such arrangements and to enter into legal agreements to facilitate delivery.
- Delegate the procurement of any works or services to the Strategic Director and that the Strategic Director be authorised to award contracts and enter into all necessary legal agreements with the preferred bidder(s).

IMPLICATIONS:

1 COUNCIL PLAN OUTCOME

1.1 Tackling the Climate Emergency and Creating a Greener District

The upgrade of WwTWs ensures that water quality discharged from the facilities is improved and operates more efficiently. Associated water efficiency measures may result in reduced water usage.

1.2 Homes for All

Proposals will ensure that council can continue to implement its own new council homes programme to deliver new affordable housing.

The creation of additional nutrient credits will support the delivery of other affordable and market housing across the district.

1.1 Vibrant Local Economy

Proposals allow for development to be achieved, resulting in construction employment and supporting the local economy.

Providing affordable homes for local people helps provide a source of locally based workers and supports local spend.

1.2 Living Well

A council motion was passed on 6 July 2022 to protect our local rivers and waterways by taking account of the cumulative impact of pollution including sewage discharge. Investment for the upgrade of WwTWs with improved and more efficient equipment results in water quality improvements, including in rivers, reducing the amount of pollution from sewage discharge.

There are strong links between high quality housing and health and wellbeing outcomes. Proposals support the provision of high-quality affordable housing.

1.3 Your Services, Your Voice

Proposals will support the delivery of affordable housing, which has been identified as an important community priority.

2 FINANCIAL IMPLICATIONS

2.1 In addition to providing the necessary credits for the council's own schemes, initial high-level estimates indicate that there is potential for a significant surplus to be generated from the sale of surplus credits subject to the risks detailed in section 10 of this report.

- 2.2 The income generated from surplus credits will defray the cost of the capital investment and any income in excess of that will be recycled into the HRA.
- 2.3 Individual decisions to upgrade WwTWs will be subject to a satisfactory business case agreed by Strategic Director Services and Chief Financial Officer. Business cases will include consideration of the quantity of credits that can be generated, the benefits of those credits (e.g. utility to the council or income from disposal) and of any monitoring or maintenance cost implications.

3 LEGAL AND PROCUREMENT IMPLICATIONS

- 3.1 The procurement of feasibility works and of each upgrade will comply with the council's and legal procurement requirements.
- 3.2 The proposals are principally intended to upgrade the WwTWs and to generate credits to support the delivery of council led initiatives. Disposal of surplus credits will be incidental to that primary purpose with powers to do so granted by the General Power of Competence under section 1 of the Localism Act 2011. Commissioning of any external supplier to manage credit disposals and any monitoring or other requirements will comply with the council's and legal procurement requirements.
- 3.3 In order to set up a scheme to generate credits, whether for use for new council housing schemes or for sale to third party developers, a legal mechanism is required to ensure that mitigation sites are monitored and maintained in perpetuity (125 years) and, where applicable, to ensure that enforcement action can be taken if they are not being maintained correctly. This usually involves the owner of the mitigation scheme, entering into an agreement under s106 of the Town and Country Planning Act 1990 with the relevant local planning authority (LPA) to secure the mitigation scheme. The s106 option is unlikely to be appropriate for schemes where the council is both the site owner and the LPA.
- 3.4 There are a number of other solutions to be considered, the suitability of which will depend on whether the sites are located in the area for which the council is the LPA or whether the sites are in the area for which the South Downs National Park Authority is the LPA.
- 3.5 It is suggested that all options to secure the mitigation schemes to the satisfaction of the relevant LPA and Natural England, are explored with Strategic Director and Director-Legal, given delegated authority to agree on the most suitable available option and enter into necessary arrangements, including any legal agreements required.
- 4 WORKFORCE IMPLICATIONS
- 4.1 The initial two WwTWs upgrades are completed. The monitoring regime is established as a delegated duty of the Service Lead – Engineering and this would not change as a result of selling surplus credits to third parties.

- 4.2 The administration of credit sales (processing customer enquiries, recording available capacity, receiving credit payments and preparation of monitoring reports) is to be absorbed into Service Lead New Homes duties as a continuation of the HRA investment in the project.
- 4.3 A form of legal agreement will also be required to which each purchaser who buys credits will be party. These will be processed by Director-Legal.
- 4.4 The initial investigations and commissioning of reports for Phase II works has been absorbed by the Corporate Head of Planning and Regulatory and Service Lead – New Homes. The on-going procurement and commissioning of works will continue to be absorbed within existing resource.
- 4.5 The procurement and commissioning of works will be absorbed within existing resource, as this was already in the HRA maintenance workplan.
- 5 PROPERTY AND ASSET IMPLICATIONS
- 5.1 All sites are owned and operated by the council. The works result in improved efficiency of the facilities and replaces infrastructure to improve water efficiency.
- 6 CONSULTATION AND COMMUNICATION
- 6.1 Careful evaluation is being made of the scale of work necessary for the WwTWs that will be upgraded, which serve both HRA and private properties.
- 6.2 Ward members will be briefed on the works to be undertaken and a clear communication plan for local residents will be put in place before works commence.

7 ENVIRONMENTAL CONSIDERATIONS

- 7.1 A council motion was passed on 6 July 2022 to protect our local rivers and waterways by taking account of the cumulative impact of pollution including sewage discharge. Investment in the upgrade of WwTWs with improved and more efficient equipment results in water quality improvements, including in rivers, reducing the amount of pollution from sewage discharge.
- 8 PUBLIC SECTOR EQUALITY DUTY
- 8.1 None directly associated with the proposals.
- 9 DATA PROTECTION IMPACT ASSESSMENT
- 9.1 None required.

10 RISK MANAGEMENT

| Risk | Mitigation | Opportunity |
|---|---|--|
| Financial Exposure Up-front investment prior to the sale of credits. | Phase I works already paid for from HRA and capital budget – sale of credits is an additional revenue. | Opportunity to generate additional income for the HRA to support its capital programme. |
| Demand for credits may be removed or reduced, costs may increase or values may fall, thus removing or reducing financial benefits. | Phase II works funded by HRA budget subject to individual business case for each project. Projects to proceed based on agreements to purchase. | |
| Increase in competition by other providers/upgrades to other facilities that may reduce demand. | Horizon scan and stress test business cases. | |
| Regulatory changes. | | |
| Exposure to challenge Challenge from competitor mitigation schemes. | Fair credit price set based on other Local Authority schemes. | |
| Innovation WwTW are complex systems and project may not deliver as many credits as expected. | Hydrogeological reports used to identify the exact amount of credits – to be confirmed by Natural England prior to sale. Experience from Phase I means the council is aware of how to develop the projects on time and within budgets. | |

| Reputation Perceived un-fair distribution of available credits may damage relationships. | Selling strategy outlined in recommendation above to ensure transparency. | Environmental improvements and delivery of new housing, including new council housing. |
|--|---|--|
| Achievement of outcome Non - delivery of new council homes, initiatives and generation of income to HRA. | Business case for each individual scheme to be in place. Feasibility studies will identify the most appropriate schemes to upgrade. | |
| Property Council housing continues to require nutrient mitigation. | Projected council housing demand will be subtracted from the credits available for the market. | Development of council housing, providing affordable units for those in need. |
| Community Support | N | /A |
| Timescales Upgrades lag behind need. | Feasibility works have been commissioned and implementation will take account of council home delivery | |
| Project capacity Insufficient resourcing | Experience of Phase I works means the council understands the resource required and allocate accordingly. | |
| Other Natural England may not agree with using sites as mitigation. | Natural England's Discretionary Advice Service will be used proactively throughout the project to understand any potential concerns in the planning stages of the project. Natural England have provided positive | |

| Not being able to agree a legally robust framework to set up and secure the mitigation schemes. | responses to Phase I works. The Council will explore all suitable legal mechanisms to secure satisfactory monitoring and enforcement arrangements for the | |
|--|---|--|
| | arrangements for the mitigation schemes in cooperation with third party organisations and will enter into necessary arrangements, including any legal agreements. | |

11 SUPPORTING INFORMATION

11.1 Background

- 11.2 Nitrate Neutrality impacts all parts of the district. In 2019, Natural England issued advice to Winchester City Council that requires all new overnight development (e.g. houses, hotels, care homes) to mitigate for any increase in nutrient pollution arising from development that may harm internationally protected sites (such as the Solent Special Protect Area). Further advice was issued in March 2022 requiring the further mitigation of Phosphorus for new overnight accommodation with the catchment of the River Itchen.
- 11.3 Applicants have not been able to provide nutrient mitigation and therefore the LPA have been unable to undertake an Appropriate Assessment (required by the Habitat Regulations) to make a positive recommendation, these applications have therefore been held in abeyance. Currently, 37 applications are held in abeyance, amounting to 183 units.
- 11.4 The emerging Winchester District Local Plan 2020 2040 is scheduled for examination in 2025. The Local Plan has a demand for 6,247 Nitrogen credits and 355 Phosphorus Credits.
- 11.5 It should be noted that 2 sites have significant phosphorus mitigation demands. Alternative mitigation measures are available and Local Planning Authority Officers are working with site promoters to reduce or remove phosphorus mitigation requirements, this will reduce the overall demand figure.
- 11.6 Separate to the project proposed in this paper, the Council is working alongside the Partnership for South Hampshire (PfSH) to upgrade treatment

plants to generate further credits available for the wider market, to mitigate existing applications and those allocated within the Local Plan.

- 11.7 The Council operates 28 WwTWs across the district, all of which are capable of generating nitrate credits, 17 of the works are within the Itchen catchment and have the potential to generate nitrate and phosphorus credits.
- 11.8 Funding for these further works is provided by PfSH from the Local Nutrient Mitigation Fund. PfSH have highlighted upgrades to council owned facilities as a project supported by the fund.
- 11.9 Subject to a July 2024 PfSH Joint Committee decision, £200k will be released to undertake preliminary works, including the replacement of a small number of plants, with a further budget of £700k to be released later in the year to roll out a full scheme of mitigation across the facilities. The credits are likely to be sold and managed by PfSH, which is being considered in a future PfSH governance decision.
- 11.10 In addition, further funding is available to retrofit water efficiency measures in council housing to generate further credits. The HRA has already made provision to undertake works to sewage treatment plants where running costs are high so as to mitigate service charge recharges. Any works to WwTW will aim to reduce running costs of plants where possible. The Council is also supporting third-party mitigation providers by establishing standard legal agreements and monitoring fees, to enable the credits generated to also be available in the market.
- 11.11 The works described above are separate to those proposed in this paper, however when combined with the HRA projects they form a nutrient mitigation strategy to address the demand of existing applications and future Local Plan allocations.
- 11.12 HRA Implemented Projects
- 11.13 CAB3387 (9 February 2023) outlined a nutrient mitigation project undertaken by the council's New Homes Delivery team of HRA WwTWs. The project upgraded 2 WwTWs (Phase I) which are owned and operated by the Council. The upgraded WwTWs resulted in a higher amount of nitrates and phosphorus being removed compared to the existing equipment. This excess amount (or 'credit') can then be used to mitigate development and for phosphorous this credit needs to be upstream of the development.
- 11.14 The New Homes Delivery team have used some of the credits to mitigate the council's own developments, delivering affordable council homes. There remain a number of surplus credits which could be used to mitigate other developments, including new council housing.
- 11.15 The costs of the works to upgrade the 2 WwTWs have already been funded using the HRA. This covered the cost of site investigations and replacement of the WwTWs.

11.16 Details of HRA Proposal

- 11.17 As explained above, by upgrading council owned WwTWs there is the potential to create additional nutrient credits to mitigate the impact of development. An initial desktop study has been undertaken and further feasibility work, including hydrogeological studies, is underway. This will identify which WwTWs are best able to generate nutrient credits and the quantity of those credits that can be used as mitigation.
- 11.18 The purpose of this report is to seek approval, subject to individual business cases, to upgrade 4 of WCC's own HRA WwTWs (Phase II) and to set up nutrient mitigation schemes in order to generate nutrient credits, approval of a budget envelope and approval of a strategy for use of those credits, including disposal of credits to the external market.
- 11.19 Specific Phase II WwTWs will be selected once detailed scientific analysis has been carried out and detailed discussions have been held with Natural England.
- 11.20 This HRA led project would complement the strategic approach explained above.
- 11.21 It is proposed that credits generated from historic and new upgrades are used in accordance with the following strategy:
 - a) To support the delivery of council housing commissioned by the council.
 - b) To support the delivery of housing where an element of that housing is to be council housing and the approach helps to unlock delivery via credit disposal.
 - c) To dispose of credits to support other council led and enabled activities.
 - d) Disposal of credits to the open market.
- 11.22 The upgrades will be funded through the HRA and disposal proceeds will be reinvested into the HRA. This will supplement the receipts targets already set in the HRA business plan.
- 11.23 Successful implementation of these projects will help to deliver council led activities (including new council homes), generate income for the HRA and improve water quality.

12. OTHER OPTIONS CONSIDERED AND REJECTED

12.1 Do Nothing. Not carrying out upgrades would reduce the opportunity for the council to develop new build housing due to the requirement to mitigate nutrients. In addition, the potential would be lost for the council to generate income to support the HRA, to facilitate new council and other affordable and market housing and to improve water quality. Each scheme will need to be supported by a specific business case. For this reason, the option is rejected.

BACKGROUND DOCUMENTS:-

Previous Committee Reports:-

CAB3301 Nitrate Neutrality Update (21 July 2021)

CAB3387 Housing Revenue Account (HRA) Budget 2023/24 (9 February 2023)

Other Background Documents:-

None

APPENDICES:-

None

Appendix 5 – WCC Cabinet Report: Partnership for South Hampshire Nutrient Mitigation Proposal

CAB3459

CABINET

REPORT Title: PARTNERSHIP FOR SOUTH HAMPSHIRE NUTRIENT MITIGATION PROPOSAL

11 SEPTEMBER 2024

REPORT OF CABINET MEMBER:

Cllr Jackie Porter, Cabinet Member for Place and Local Plan and;

Cllr Chris Westwood, Cabinet Member for Housing

<u>Contact Officer: Robert Green Tel No: 01962 848 583 Email</u> <u>rgreen@winchester.gov.uk</u>

WARD(S): ALL WARDS

<u>PURPOSE</u>

In 2019, Natural England issued advice to Winchester City Council that requires all new overnight development (e.g. houses, hotels, care homes) to mitigate for any increase in nutrient pollution arising from development that may harm internationally protected sites (such as the Solent Special Protection Area).

Developments which require Nitrate mitigation only can be approved as there is sufficient Nitrate mitigation available in the market.

Further advice was issued in March 2022 requiring the further mitigation of Phosphorus for new overnight accommodation within the catchment of the River Itchen.

The Council has a statutory duty under the Conservation of Habitats and Species Regulations 2017, as amended, to ensure that development within the district does not worsen the situation.

The impact of this has been a number of planning applications cannot be determined whilst a Phosphorus mitigation solution is awaited, and mitigation needs to be demonstrated in the upcoming examination of the Council's Local Plan.

The council's strategy to enable nutrient mitigation solutions is threefold.

Firstly, the council is generating nutrient credits by upgrading its own waste-water treatment works (WwTW). Works on 2 plants have been completed and the credits have been used to mitigate the council's own housing schemes. In July, (CAB3470 refers) Cabinet approved a further 4 upgrades using the Housing Revenue Account and the sale of surplus credits to private developers.

The council is also supporting third-party mitigation schemes and water efficiency measures in its own housing stock to generate further credits.

The Partnership for South Hampshire (PfSH) will provide WCC with grant funds to upgrade further WCC owned WwTW, with the credits generated being managed by PfSH. The release of this funding has been approved by the PfSH Joint Committee on 23 July 2024.

These initiatives complement each other to address the demand for nutrient credits in the district.

The purpose of this report is to seek permission to accept the PfSH funding and delegate authority to enter into agreements to implement the PfSH WwTW upgrade project.

RECOMMENDATIONS:

That Cabinet recommends Council:

1. Approves an HRA capital budget of £900,000 to implement works on plant upgrades funded by and on behalf of Partnership for South Hampshire (PfSH).

That Cabinet:

- 2. Subject to Council approval of the budget:
 - a) Approves capital expenditure of up to £200,000, funded by the Ministry of Housing, Communities and Local Government (MHCLG) via Partnership for South Hampshire (PfSH), for feasibility and initial works.
 - b) Approves capital expenditure of up to £700,000, funded by MHCLG via PfSH, for the implementation of works on further plant upgrades following agreed business cases with PfSH.
- 3. Delegates to Strategic Director and Director Legal, in consultation with Cabinet Member for Place and the Local Plan, the authority to enter into

necessary agreements with Fareham Borough Council on behalf of PfSH in order to receive the grant funds and establish working arrangements to implement the project and sell credits generated.

4. Delegates the procurement of any works or services to the Strategic Director and that the Strategic Director be authorised to award contracts and enter into all necessary legal agreements with the preferred bidder(s).

IMPLICATIONS:

1 <u>COUNCIL PLAN OUTCOME</u>

1.1 Tackling the Climate Emergency and Creating a Greener District

The upgrade of PTPs ensures that water quality discharged from the plants is improved and operates using more efficient plant. The associated water efficiency measures result in reduced water usage.

1.2 Homes for all

The mitigation and selling of nutrient credits would enable the assessment and determination of planning applications which at time of writing equates to 134 units of housing.

The project also ensures that the Regulation 19 Local Plan demonstrates nutrient mitigation options to meet the housing requirements up to 2040 and that the City Council can mitigate its own New Homes programme in the delivery of affordable housing.

The creation of a Nutrient Mitigation scheme allows developments to provide homes across the District, including Affordable Housing provision.

1.3 Vibrant Local Economy

A number of developments held in abeyance are to be completed by local small to medium sized enterprises, including local developers and construction companies and the creation of a Nutrient Mitigation scheme allows for development to be achieved, resulting in construction employment and supporting the local economy.

1.4 Living Well

A council motion was passed on 6 July 2022 to protect our local rivers and waterways by taking account of the cumulative impact of pollution including sewage discharge. The investment for the replacement of PTPs with improved and more efficient equipment results in water quality improvements, reducing the amount of pollution from sewage discharge in these areas.

1.5 Your Services, Your Voice

Ensuring a supply of housing is important to make sure the Council is able to show that it is delivering new homes in line with the requirements of the Local Plan, to meet housing delivery tests and to establish it has a 5-year housing land supply.

2 <u>FINANCIAL IMPLICATIONS</u>

- 2.1 The structure of the proposed partnership working is that WCC will procure on behalf of PfSH works to upgrade our WwTW's on their behalf, creating credits that can be used as mitigation for development.
- 2.2 PfSH agreed a fund of £900,000 at the Joint Committee on 23 July 2024. This will be provided to WCC, subject to a Memorandum of Understanding (MoU) and/or Inter Authority Agreement (IAA) which outlines how the funds can be spent, to undertake WwTW upgrades only.
- 2.3 An initial £200,000 will be provided to fund feasibility works and to undertake works on a small number of plants.
- 2.4 A further £700,000 will be provided once all technical work has been completed and assessed. The plant upgrades will be subject to business cases completed by WCC alongside PfSH Officers and agreed with PfSH Chief Executives prior to the release of further grant funding.
- 2.5 PfSH will market the 'credits' generated by the upgrades. Any revenue will be managed by PfSH and recirculated back into further nutrient mitigation schemes across the region.
- 2.6 WCC will retain the ownership of the WwTWs and will directly financially benefit as the upgrades to these plants will be funded by grant. The existing plants are already maintained by the council and additional budget is not required for their maintenance as a consequence of these works.
- 2.7 Where WCC carries out procurement, contract management, any other administration and monitoring of the sites being upgraded for the creation of PfSH credits, WCC will be reimbursed by PfSH for these costs. These arrangements will be secured by the MoU/IAA.
- 2.8 At each stage, the amount to be transferred to WCC from PfSH/FBC will be agreed before any spend is committed.

3 LEGAL AND PROCUREMENT IMPLICATIONS

- 3.1 The £900,000 provided by PfSH/FBC will be subject to a Memorandum of Understanding and/or Inter-Authority Agreement. These will ensure that WCC spend the funds on nutrient mitigation projects to enable the procurement and administration of the projects.
- 3.2 The selected projects will be agreed alongside PfSH prior to commencement of works.

- 3.3 The Inter-Authority agreement will establish the principles of the collaborative relationship between members of PfSH. It sets out the working and funding arrangements in a co-operative way to meet shared obligations and objectives, to deliver the projects to be funded by PfSH across the region, including the WCC PTP upgrades.
- 3.4 Monitoring of the nutrient credit scheme arising from the plant upgrade may fall to WCC or another PfSH authority, however any WCC resources used will be reimbursed by PfSH under the terms of the IAA. The monitoring arrangements will be secured under appropriate legal arrangements. The ownership of the PTPs or any other council owned assets will remain with the council.
- 3.5 Any works or services procured by WCC on behalf of PfSH/FBC will be in accordance with the council's Contract Procedure Rules and where applicable external legislation.

4 WORKFORCE IMPLICATIONS

- 4.1 Under the agreements, PfSH/FBC may commission WCC to procure construction works and client manage this procurement. WCC will recharge PfSH/FBC for these costs at a rate agreed in advance.
- 4.2 Following completion of the works, the PfSH team will provide the administrative resource for the sale of generated credits with no further demand on the WCC existing workforce in this respect.
- 4.3 The monitoring of the works is to be established by the PfSH agreements but may rely on the Service Lead Engineering. Remuneration will form part of the agreement to ensure this work is resourced.
- 4.4 Legal and finance resources will be required to provide safe entrance to the agreements and ensure the proposal does not disadvantage WCC. These resources will be absorbed into business-as-usual project resources. These resources cannot be paid for by PfSH as they will be advising WCC in its position in the arrangement.

5 PROPERTY AND ASSET IMPLICATIONS

- 5.1 All sites are owned and operated by the City Council. The works result in improved efficiency of the plants and replaces infrastructure to improve water efficiency.
- 5.2 As council owned infrastructure, the council will be required to upgrade and invest in the PTPs over their lifetime. The use of the grant to upgrade a number of the PTPs means a future HRA capital budget is not required for these upgrades, providing a benefit to the HRA.

6 CONSULTATION AND COMMUNICATION

6.1 The City Council sent Expression of Interest requests to planning applications currently held in abeyance to seek interest in buying credits. Out of 29 letters sent, 14 replied with a confirmed interest.

- 6.2 Careful evaluation is being made of the scale of the work necessary for the WwTWs that will be upgraded, which serve both HRA and private properties.
- 6.3 Ward members will be briefed on the works to be undertaken and a clear communication plan for local residents will be put in place before works commence.
- 6.4 Consultation is also being undertaken on the wider administration of the council's WwTWs, separate to this project.

7 ENVIRONMENTAL CONSIDERATIONS

- 7.1 The projects by their nature mitigate nutrient inputs into protected water systems, allowing development to take place without causing wider harm to the protected features.
- 7.2 In addition, the replacement of the PTP improves the water quality outputs of the council's WwTWs. Whilst also providing credits for mitigation, this results in local improvements to water quality as a result of the project.
- 7.3 A council motion was passed on 6 July 2022 to protect our local rivers and waterways by taking account of the cumulative impact of pollution including sewage discharge. Investment in the upgrade of WwTWs with improved and more efficient equipment results in water quality improvements, including in rivers, reducing the amount of pollution from sewage discharge.

8 PUBLIC SECTOR EQUALITY DUTY

- 8.1 The equalities impact assessment concluded that these works would benefit the health of the water, which will indirectly benefit the health of the Winchester communities.
- 8.2 There are no people disadvantaged by this project when measured against all protected characteristics.

9 DATA PROTECTION IMPACT ASSESSMENT

9.1 None Required

10 RISK MANAGEMENT

| Risk | Mitigation | Opportunities |
|--|--|---------------|
| Financial Exposure | | |
| Demand for credits may be removed or reduced by legislative changes. | WCC legal and finance teams will ensure we have the correct legal construct in place to | |

| | prevent spend outside of correct authorities. | |
|--|---|--|
| | The upgrades will be funded by grant. If insufficient income is generated from credits, it will not impact WCC directly. | |
| Exposure to challenge | | |
| Challenge from competitor mitigation schemes. | Fair credit price set by PfSH. | |
| Innovation | | |
| <i>WwTW are complex systems and project may not deliver as many credits as expected</i> | Hydrogeological reports used to identify the exact number of credits – to be confirmed by Natural England prior to works bring instructed. | |
| | Experience from previous works means the council is aware of how to develop the projects on time and within budgets. | |
| Reputation | | |
| Un-fair distribution of available credits may damage relationship between developers and LPA | Developers will have choice in the Winchester market for credits, this is an advantage to them. | |
| Achievement of outcome | | |
| Delays with Local Plan examination | Local Plan demand being calculated to be ensured it can be met by this and wider mitigation schemes. | |
| | If paper is approved and a mitigation option is therefore available, the | |

| Management of existing applications held in abeyance | LPA will be required to refuse applications who have not chosen to join the mitigation scheme or provide alternative mitigation. | |
|--|--|--|
| Property | | |
| Council housing continues to require nutrient mitigation | Projected council housing demand has been subtracted from the credits available for the market – forms part of separate HRA project. | Development of council housing, providing affordable units for those in need. |
| Community Support | N | /A |
| Timescales | | |
| Local Plan examinations | These works will be commissioned with timeframes taking account of the proposed Local Plan examination timetable to ensure nutrient neutrality can be demonstrated. | |
| Planning permissions continue to be held in abeyance | The creation of a nutrient scheme will allow the LPA to grant consent to applications, if the nutrient scheme is joined. | |
| Project capacity | | |
| Insufficient resourcing | Experience of previous works means the council understands the resource required. | |
| Other | | |
| Housing Land Supply/Delivery test – delays to residential schemes may start to impact on the council's | This project, alongside future projects enabled by the re-investment of revenue generated, ensures that the Local | |

| land supply and Housing Delivery Test results, possibly leading to pressure for un-planned development, Government intervention, and fewer new homes available. | Plan can be adopted, and delivery tests upheld. This is subject to the local plan examination. | |
|--|--|--|
| NPPF is being updated and may result in increased housing requirements which increases demand. | This project will complement other mitigation schemes such as working collaboratively with private companies to provide further mitigation in the market. | |
| Natural England may not agree with using sites as mitigation. | Natural England's Discretionary Advice Service will be used proactively throughout the project to understand any potential concerns in the planning stages of the project. Natural England have provided positive responses to the previous project. | |

11 SUPPORTING INFORMATION

11.1 Background

- 11.2 Nitrate Neutrality impacts all parts of the district. CAB3219 outlines and approves a Position Statement which sets out a strategy that enables planning applications which require nitrogen mitigation to be approved subject to a planning condition, providing developers the opportunity to source credits from a number of third-party suppliers prior to the occupation of development.
- 11.3 Since June 2022, proposals within the catchment of the River Itchen are also required to mitigate Phosphorus. The Itchen catchment covers a central section of the district, including larger settlements such as Winchester, New Alresford and Colden Common. Third-party mitigation options are limited in number and whilst some on-site mitigation options have been used, the Local Planning Authority has been unable to

process many planning applications which require phosphorus mitigation in this area. Currently, 37 applications are held in abeyance, amounting to 183 units.

11.4 The emerging Winchester District Local Plan 2020 – 2040 is scheduled for examination in 2025. The Local Plan has a demand for 6,247 Nitrogen credits and 355 Phosphorus credits in the Itchen catchment. Proposed changes to the method of calculating housing requirements within the revised National Planning Policy Framework (NPPF) may increase this demand further.

It should be noted that 2 sites have significant Phosphorus demands. Alternative mitigation measures are available, and Local Planning Authority Officers are working with site promoters to reduce or remove Phosphorus requirements, this will reduce the overall demand figure.

11.5 Details of Proposal

- 11.6 Winchester City Council owns 28 Wastewater treatment works (WwTW), many of which use Package Treatment Plants (PTPs) to treat wastewater. If a PTP is upgraded to remove more nutrients than the existing equipment, the difference can be used as a 'credit' to mitigate other development.
- 11.7 All of the 28 plants have potential to generate nitrate credits.

17 of the plants are within the Itchen catchment and have the potential to generate nitrate and phosphorus credits. 2 of these plants have already been upgraded by the HRA, and CAB3470 outlines a project to upgrade further plants. These HRA upgrades will generate credits which can be sold to the wider market and therefore form part of the council's overall strategy for nutrient mitigation. The HRA will select plants which best meet their needs once technical work is completed. This proposal outlines how the council's assets can be used to generate credits for the market using PfSH funding, working alongside the HRA projects.

- 11.8 PfSH have a dedicated team focussed on nutrient neutrality. PfSH have successfully applied for £9.6million funding as part of the Local Nutrient Mitigation Fund. This is to be invested in mitigation schemes across the region.
- 11.9 The PfSH Joint Committee approved a fund of £900,000 to be provided to WCC to undertake WwTW upgrade works on their behalf. An initial allocation of £200,000 will be provided for feasibility works and to undertake the works on the first plants. The remaining £700,000 will follow once initial technical work has been completed, assessed and business cases have been collectively agreed by PfSH Chief Executives.
- 11.10 To test the solution, we have desktop assessed ten sites to see what mitigation might be produced. These figures are still considered estimates whilst we await hydrogeological reports.

| Site | Nitrogen Credits | Phosphorus Credits |
|----------------------------|------------------|--------------------|
| Beech Grove, Owslebury | 597 | 74 |
| The Pastures, Cheriton | 162 | 20 |
| Couch Green, Martyr Worthy | 187 | 23 |
| Baring Close, Itchen Abbas | 102 | 12 |

| Itchen View, Itchen Stoke | 76 | 9 |
|-----------------------------|-------|-----|
| North Drive, Littleton | 82 | 10 |
| Hobbs Close, Bishops Sutton | 239 | 29 |
| Kiln Lane, Old Alresford | 119 | 14 |
| The Brook, Old Alresford | 170 | 21 |
| Woodlark Cottages, Bighton | 34 | 4 |
| TOTAL | 1,768 | 216 |

- 11.11 The initial works on the 10 plants show that the plants have capacity for credit generation which can be used as mitigation.
- 11.12 The investigation and investment into further plants (both within this PfSH project and the HRA project) will provide additional credits available for the market. The following demand and supply could be achieved based on the 10 assessed plants alone:

| | Nitrogen | Phosphorus |
|--|----------|------------|
| Total Itchen catchment demand <i>(applications in abeyance and local plan requirements)</i> | 6,483 | 364 |
| Indicative supply from the next 10 sites assessed so far | 1,768 | 216 |

11.13 It should be noted that two large schemes held in our local plan pipeline result in a demand for 201 phosphate credits, a significant proportion of the overall demand.

There are on-site mitigation options available to these developments which are being considered and the city council will continue to work with developers to achieve this. The sites have been included at this stage as a worst-case scenario, however following further work it is expected there would be a significant reduction of the overall demand figure.

11.14 The recommendations request permission to agree an initial £200k from PfSH for initial feasibility studies and authorise use of the funds.

The following £700k will fund works on the remaining plants so there is certainty they can be completed.

Whilst studies have been completed on the initial 10 sites which show significant credit generation, there is potential for any remaining funds to be used to upgrade further sites, subject to business cases agreed with PfSH, in order to generate further credits available for the market and Local Plan allocations.

11.15 As a PfSH project, the management, pricing and risk sits with PfSH and as a result any revenues will also be retained by the Partnership. A condition of the funding is that any revenue is recirculated back into regional nutrient mitigation schemes, providing further opportunities for mitigation options.

11.16 Water Efficiency Measures

11.17 Winchester City Council is also to receive £90,000 from PfSH to run water efficiency projects. These projects will create further nitrate and phosphate credits. It is a condition of the arrangements that credits created by water efficiency projects can only be recycled into credits offset against new council-owned homes. This is agreed as WCC intends to build 1000 homes in the next 10 years.

30 units are available for upgrades immediately, and this will form part of a future HRA project with the potential for further credit generation.

11.18 Third-party mitigation providers

- 11.19 The City Council has been approached by a number of private companies who upgrade PTPs and then seek to sell the credits generated to the wider market. This is an identical process to the council's own project; however, it does not involve any council assets or funding.
- 11.20 The council as Local Planning Authority (and competent authority under the Habitat Regulations) need to ensure they have sufficient information submitted to assess the suitability of this mitigation.
- 11.21 The City Council has produced a standard requirements list for section 106 legal agreements and a fair monitoring fee which allows the council to monitor these schemes. This allows further credits to be available for the market.

11.22 Summary

The council strategy to provide nutrient mitigation and release housing applications is in three schemes.

The first is to sell excess credits derived by the completed upgrades undertaken by the HRA. The HRA will also undertake further upgrades, generating additional credits. This has been considered and approved by CAB3470 (July 2024).

The second is to work with PfSH, using grant funding, to upgrade further PTPs out of the council's stock of 28. The sites all generate nitrate credits, and 17 provide phosphorus mitigation. Initial investigations from 10 sites show a significant number of credits will be generated, and the government grant requires all projects to achieve cost recovery in order to invest any income into further mitigation projects and to provide further benefits, providing on-going security that further projects can be funded and secured. PfSH are also providing grants for water efficiency measures, which will form part of a separate project which also generates further credits.

The third is to work alongside third-party companies as they upgrade their own PTPs. The LPA will assess this on a case-by-case basis to ensure the mitigation is acceptable, and secure finances and resources for future monitoring. When combined, a significant number of credits are generated to ensure there is provision for applications held in abeyance and future Local Plan requirements.

12 OTHER OPTIONS CONSIDERED AND REJECTED

12.1 Do Nothing – The Council could decline to work with the PfSH Partnership. This would result in not having an adequate pipeline for the local plan and WCC would lose the benefit of plants being upgraded via grant funding.

For the reasons above, this option is rejected.

12.2 Business as Usual – The City Council could continue to signpost developers to thirdparty mitigation schemes. However, due to the geographical mitigation requirements for Phosphorus, these third-party options are limited and are nearing capacity.

For the reasons above, this option is rejected.

BACKGROUND DOCUMENTS:-

Previous Committee Reports:-

CAB3219 – Nitrate Neutrality – Wednesday 22 January 2020

CAB3301 - Nutrient (Nitrate) Neutrality Update - Wednesday 21 July 2021

CAB3470 – Housing Revenue Account Nutrient Mitigation Proposal – Monday 16 July 2024

Other Background Documents:-

None

Appendix 6 – letter from Minister for Housing and Planning on Nutrient Neutrality, October 2024

Ministry of Housing, Communities & Local Government

Matthew Pennycook MP Minister of State for Housing and Planning 2 Marsham Street London SW1P 4DF

To: Council leaders of local planning authorities affected by nutrient neutrality

30 October 2024

Dear Council Leader,

Nutrient neutrality and Local Nutrient Mitigation Fund update

The Government is committed to implementing solutions to unlock the building of homes affected by nutrient neutrality without weakening environmental protections.

I am keenly aware of the difficult situation nutrient neutrality has created for housebuilding in affected catchments. Addressing nutrient neutrality is therefore a key priority for this government. We are committed to building 1.5 million new homes across the country over the next five years to tackle our housing crisis and boost economic growth.

The Planning and Infrastructure Bill, which was announced in the King's Speech on 17 July, provides an opportunity to accelerate housebuilding and infrastructure by using development to fund nature recovery where currently both are stalled, creating a win-win outcome for both the economy and for nature.

We are working with nature delivery organisations and the wider sector to determine the best way forward and will only act in legislation where we can confirm to Parliament that the steps we are taking will deliver positive environmental outcomes. We will share further updates in due course.

While this policy is developed, we are clear that we need to continue to take action so that development can continue in areas affected by nutrient pollution, while delivering positive environmental outcomes. This complements other work that is happening, such as Natural England's £30 million Nutrient Mitigation Scheme.

Today, as part of the Local Nutrient Mitigation Fund (LNMF), I am pleased to announce that:

 the department is making available up to £45 million capital and revenue funding to seven catchments to allow local authorities to bring forward mitigation schemes and provide mitigation credits (Annex A) under Round 2 of the LNMF, as well as capacity support funding for successful bidders, and; catchments over 10,000 hectares in size will each benefit from £100k of Nutrient Support Funding, which will be distributed to lead local planning authorities for each catchment.

The Local Nutrient Mitigation Fund will be recycled locally until nutrient mitigation is no longer needed, at which point it will be used for measures to help restore the relevant Habitat sites. This will enable sustainable development, unlocking stalled housing delivery whilst delivering benefits like enhanced public access to nature and supporting our commitment to leave our environment in a better state than we found it.

I wish those you every success with delivering nutrient mitigation schemes and look forward to working together with you to unlock growth.



Yours sincerely,

Matthew Pennycook MP Minister of State for Housing and Planning

Annex A: table of successful LNMF Round 2 funding recipients

| Lead Local Planning Authority (LPA) | Nutrient catchment(s) | LNMF Round 2 funding allocated |
|---|---|-----------------------------------|
| Broadland District Council | Norfolk Broads River Wensum | £8.85m |
| East Devon District Council | River Axe | £4.09m |
| Fareham Borough Council | Solent | £6.93m |
| High Peak Borough Council and Staffordshire Moorlands District Council | River Wye | £2.75m |
| North West Leicestershire District Council | River Mease | £2.56m |
| West Berkshire Council | River Lambourn | £2.43m |
| Westmorland and Furness Council | River Eden River Derwent and Bassenthwaite Lake River Kent Esthwaite Water Catchment | £15.28m |

Annex B: Nutrient Support Fund and capacity support funding allocations

LNMF Round 2 capacity support funding

| Lead Local Planning Authority (LPA) | Nutrient catchment(s) | LNMF R2 capacity support funding allocation |
|--|--|---|
| Broadland District Council | Norfolk Broads River Wensum | £287,382 |
| East Devon District Council | River Axe | £192,494 |
| Fareham Borough Council | Solent | £224,498 |
| High Peak Borough Council and Staffordshire Moorlands District Council | River Wye | £129,428 |
| North West Leicestershire District Council | River Mease | £120,485 |
| West Berkshire Council | River Lambourn | £114,367 |
| Westmorland and Furness Council | River Eden River Derwent and Bassenthwaite Lake River Kent Esthwaite Water Catchment | £931,346 |

Nutrient Support Fund award (awarded to the 20 largest nutrient neutrality catchments)

| Nutrient catchment(s) | Nutrient Support Fund allocation |
|---|-------------------------------------|
| Solent | £100,000 |
| River Eden | £100,000 |
| Somerset Levels & Moors | £100,000 |
| Teesmouth and Cleveland Coast | £100,000 |
| The Broads | £100,000 |
| River Avon | £100,000 |
| Poole Harbour | £100,000 |
| River Lugg | £100,000 |
| River Wensum | £100,000 |
| River Derwent and Bassenthwaite Lake | £100,000 |
| River Itchen | £100,000 |
| Stodmarsh | £100,000 |
| River Axe | £100,000 |
| River Camel | £100,000 |
| River Clun | £100,000 |
| River Lambourn | £100,000 |
| Lindisfarne | £100,000 |
| River Kent | £100,000 |
| River Mease | £100,000 |
| Peak District Dales | £100,000 |

Appendix 7 - Sir John Moore Barracks Position Statement in relation to Nutrient

Neutrality



Our Ref: 01C300964 Your Ref:

30th October 2024

Emma Betteridge Principal Planning Officer Winchester City Council By email: 3 Brindleyplace Birmingham B1 2JB

T: +44 (0)8449 02 03 04 F: +44 (0)121 609 8314

avisonyoung.co.uk



Dear Emma,

<u>Sir John Moore Barracks, Winchester – Nutrient Neutrality Position Statement</u> (October 2024)

Further to our recent nutrient neutrality discussions we write on behalf of our client, Defence Infrastructure Organisation (DIO). Avison Young is instructed by DIO to provide town planning and development consultancy advice in respect of the Sir John Moore Barracks (SJMB) in Winchester.

We can confirm that as an operational barracks, the SJMB site can currently accommodate up to 951 personnel. A previous assessment [undertaken for DIO] (TN002) used four years of water meter readings from 2017 to 2020. Further data, up to March 2024, has been provided to support an updated nutrient mitigation calculation, dated June 2024, indicating an average annual occupancy of 601 personnel during the analysis data set.

Using the SJMB water meter data from 2017 to 2024, this showed an average annual water usage of 76,149.43m3/yr, which equates to 208,628.571/day.

Based on an average annual occupancy of 601 personnel, the baseline current average water usage is 3471/p person/p day. This calculated water usage has been compared to those presented in British Water Flows and Loads, and it aligns with the residential training (including meals) sizing value of 3501/p person/p day.

For a residential dwelling, the standard water usage based on 2.4 persons per dwelling is 1201/p/day equating to 501/p person/p day, therefore the current baseline water usage is considerably higher than that of a standard residential dwelling under the future development scenario.

Based on this current nutrient budget assessment our client's technical consultants calculate that the 'break-even/zero point' is 669 dwelling units – this being the threshold of residential development beyond which there would be a deficit nutrient budget falling to be mitigated by the proposed development scheme.

Delivery and Mitigation Plan

The mitigation would be to phase on-site development works so to

Avison Young (UK) Limited registered in England and Wales number 6382509. Registered office, 3 Brindleyplace, Birmingham B1 2JB. Regulated by RICS not exceed occupation of in excess of 669 dwelling units before 2030.

- This is the date at which, pursuant to the Levelling Up and Regeneration Act (LURA), the water
 and sewage provider of the receiving Harestock waste-water treatment works has a legal
 obligation to upgrade the plant. We are aware that the Harestock waste-water treatment
 works has a planned and programmed upgrade for phosphorus in 2025 (reduction from 1mg/l
 to 0.25mg/l), and this is reflected in the nutrient budget calculations.
- Based on projected SJMB building delivery start date of 2027 the limit on new dwellings that could be occupied before 2030 does not restrict delivery of new housing as it is not expected that occupations will exceed 669 by 2030.

Next Steps

Given the June 2024 budget calculation was based on a previous indicative SJMB masterplan of 919 units there are a series of next steps for DIO as follows:

- A SJMB Concept Masterplan has been prepared and will need to be considered by WCC's Cabinet as soon as possible – that emerging concept masterplan is based on c. 850 units;
- Ongoing work to prepare an outline planning application (OPA) to propose the redevelopment of SJMB is progressing and will involve the refinement of the current concept masterplan through the development of a series of OPA parameter plans;
- A DAS has been drafted but has not yet been submitted to Natural England we envisage this will be submitted in early 2025 to be based on the next iteration of the masterplan;
- DIO is supportive of further engagement with Natural England, which will also need to happen in conjunction with the Environment Agency/Local Lead Flood Authority (HCC) so that a unified position can be reached with these statutory consultees on nutrients and flood risk matters; and
- DIO is intending to submit the SJMB redevelopment OPA in spring/summer 2025.

We trust this provides the updated information you require, but please let us know if you require anything further.

Yours sincerely

Roger Shipton BSc (Hons) Dip TP MRTPI

Associate Director

For and on behalf Avison Young (UK) Ltd

| E | |
|----|--|
| M: | |

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Appendix E

Statement of Common Ground with Southern Water

Statement of Common Ground

Between

Winchester City Council and Southern Water

November 2024



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- 1. Introduction
- 2. Legislation
- 3. Statement of Common Ground

Appendix 1 – Letter from Southern Water regarding the new pipeline between Sutton Scotney, South and Harestock Wastewater Treatment Works and an update on Brambridge (Colden Common) dated July 2024

Appendix 2 - Letter from Southern Water providing an update regarding the new pipeline between Sutton Scotney, South and Harestock Wastewater Treatment Works and an update on Brambridge (Colden Common) dated November 2024

Appendix 3 – Southern Water Regulation 19 Supplementary Response

1. Introduction

A Statement of Common Ground (to be referred to throughout as SoCG), of which concerns strategic cross-boundary matters, is a written record of the progress made by strategic plan-making authorities (and other prescribed bodies¹) during the process of (non-exhaustive) producing or reviewing a local plan. It documents the effective co-operation between the parties and outlines matters that are common ground (agreed) and areas of disagreement. Introduced by the 2018 National Planning Policy Framework, strategic policy making authorities are required to produce, maintain, and keep up to date a SoCG to highlight the agreements on cross-boundary strategic issues.

The updated SoCG (and associated Duty to Cooperate Statement of Compliance to be published to support the Winchester City Council Regulation 22 Local Plan) is used to demonstrate at examination that respective authorities (and relevant bodies) have cooperated on cross-boundary matters; and that the plan has been prepared in a positive and effective manner, therefore meeting the soundness test². The document assists in presenting evidence that plans are deliverable over the plan period and based on effective joint working across local authority boundaries. Furthermore, it is also part of the evidence required for local planning authorities to demonstrate that they have complied with the legal compliance of the Duty to Cooperate.

This SoCG documents the outcomes of co-operation to date in preparing the local plan in order to inform and shape a positively prepared and justified strategy. In doing so it addresses, has been produced in accordance with, and takes account of the requirements set out in the National Planning Policy Framework³ (NPPF), Planning Practice Guidance⁴ (PPG), relevant planning acts, and any other applicable information.

The document sets out the following:

- Outlines the strategic geography of the district including a brief description of the area with regards to biodiversity and the natural environment.
- Sets out the Regulation 18 representations received from Southern Water which forms the background to the SoCG.
- Sets out the Regulation 19 representations received from Southern Water which forms an update on the strategic matters in the SoCG.
- Sets out Supplementary representations received from Southern Water following the close of the Regulation 19 consultation and a further Duty to Cooperate discussion.
- The cross-boundary matters which needs to be considered by this SoCG and where agreements have been reached on issues.

¹ The Town and Country Planning (Local Planning) (England) Regulations 2012 (legislation.gov.uk)

² National Planning Policy Framework (publishing.service.gov.uk) para 35

³ National Planning Policy Framework (publishing.service.gov.uk)

⁴ <u>Plan-making - GOV.UK (www.gov.uk)</u> Maintaining Effective Cooperation

• A formal response from Southern Water on the work at Sutton Scotney and Brambridge

2. Legislation

The "Duty to Cooperate" was introduced by Section 33A of the Planning and Compulsory Purchase Act (2004)⁵ from Section 110 of the Localism Act (2011)⁶ as a strategic planning mechanism to replace regional spatial strategies. It places a legal duty on Local Planning Authorities, County Councils and prescribed public bodies to engage constructively, actively, and on an ongoing basis to maximise the effectiveness of local plan and marine plan preparation in the context of strategic cross boundary matters.

Strategic matters regarding plan-making refers to: "sustainable development or use of land that has or would have a significant impact on at least two planning areas, including (in particular) sustainable development or use of land for or in connection with infrastructure that is strategic and has or would have a significant impact on at least two planning areas." (Section 33A, (4)(a))

Additionally, paragraph 20 of the NPPF outlines the strategic policies that a local plan should address, resolve, and where necessary, make provision for, these being:

- a) "Housing (including affordable housing), employment, retail, leisure and other commercial development;
- b) The provision of infrastructure for transport, telecommunications, security, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
- c) Community facilities (such as health, education and cultural infrastructure); and
- d) Conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation."

Paragraphs 24 - 27 of the National Planning Policy Framework (NPPF) recognises this duty and considers effective, joint working between relevant bodies as integral to a positive and well-prepared strategy. Paragraph 26 also identifies joint working as helping to determine additional infrastructure, and whether development needs that cannot be wholly met within a particular plan area could be met elsewhere. PPG paragraphs 029 - 033, and 075 provide further information on meeting the Duty to Cooperate, explains the differences between the Duty to Cooperate and a SoCG, illustrates how the Duty to Cooperate is considered during examination, and how the Duty to Cooperate should be addressed during plan review.

Further to this, two of the four "tests of soundness" of Local Plans (NPPF Paragraph 35) directly relate to the Duty to Cooperate, specifically:

a) "Positively prepared – providing a strategy which, as a minimum, seeks to meet the area's objectively assessed needs; and is informed by agreements with other authorities, so that unmet need from neighbouring

⁵ Planning and Compulsory Purchase Act 2004 (legislation.gov.uk)

⁶ Localism Act 2011 (legislation.gov.uk)

areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;

c) Effective – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground"

In regard to the production of a SoCG, paragraph 27 of the NPPF specifically states:

"In order to demonstrate effective and on-going joint working, strategic policy making authorities should prepare and maintain one or more statements of common ground, documenting the cross-boundary matters being addressed and progress in cooperating to address these. These should be produced using the approach set out in national planning guidance and be made publicly available throughout the plan-making process to provide transparency."

The Plan Making chapter of the PPG and in particular the *Maintaining Effective Cooperation* section (paragraphs 009 – 028) provides additional information and guidance on how authorities should (non-exhaustive): produce a SoCG, what cross-boundary matters should be included, carrying out effective cooperation, activities documented, functional geographical area, and preparation and publication.

The Government consulted upon reforms to national planning policy during December 2022 as part of the Levelling Up and Regeneration Bill (LURB), stating that the Levelling Up and Regeneration Act (LURA) will remove the Duty to Cooperate, but that the duty will remain in place until those provisions come into effect. To secure appropriate engagement between authorities where strategic planning considerations concern cross-boundary matters, the Government intends to introduce an alignment policy as part of a future revised Framework. Further consultation on what should constitute the alignment policy is anticipated to be undertaken.

The LURA was enacted during November 2023, and now includes provisions to remove the legislative that imposes the Duty to Co-operate. However, these provisions have not yet been enacted and will 'come into force on such day as the Secretary of State may by regulations appoint'. Transitional arrangements mean that the Duty to Cooperate will remain for plans submitted for examination before June 2025 and adopted by December 2026.

3. Statements of Common Ground

This section comprises Statement of Common Ground that Winchester City Council and Southern Water have entered into in support of the authorities' respective Local Plan review. This statement demonstrates the current understanding of points of common and uncommon ground for relevant strategic cross-boundary matters.

1. List of Parties involved:

Winchester City Council and Southern Water

2. Strategic Geography & Background

This Statement of Common Ground focuses on the Winchester Plan Area, which covers parts of the Winchester District outside of the South Downs National Park.

Paragraph 20 of the NPPF states that 'Strategic policies should set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for:

b) Infrastructure for 'water supply' and 'waste water'...

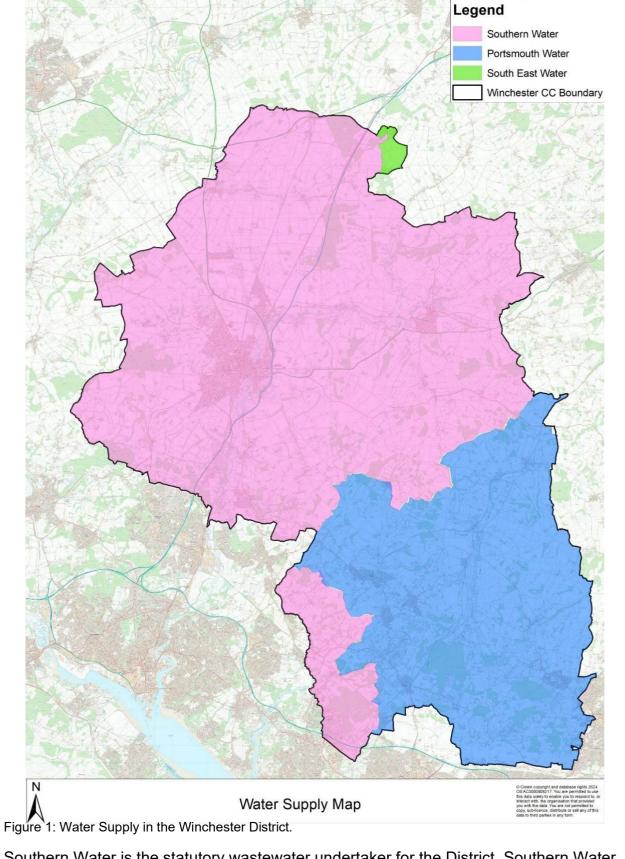
Paragraph 180 of the NPPF states that 'Planning Policies and decisions should contribute to and enhance the natural and local environment by:

d) Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of...water pollution. Development should, wherever possible, help to improve local environmental conditions such as...water quality, taking into account relevant information such as river basin management plans'.

The National Planning Practice Guidance (PPG) states that the planning system can plan positively for water supply and quality by using good design and mitigation measures secured through:

"site specific policies for allocated sites and through non-site specific policies on water infrastructure and protecting the water environment. For example, they can be used to ensure that new development and mains water and wastewater infrastructure provision is aligned and to ensure new development is phased and not occupied until the necessary works relating to water and wastewater have been carried out." (Paragraph:019, Reference ID: 34-019-20140306).

Winchester City Council is the Local Planning Authority, responsible for planning to meet the housing and other needs of the Plan Area. In relation to wastewater the authority needs to have confidence that there is sufficient wastewater treatment capacity to serve development before it is occupied.



Southern Water is the statutory wastewater undertaker for the District. Southern Water also provides water supply for the North and South-Western part of the District as shown in Figure 1. There are several Wastewater Treatment Works which serve the whole of the Winchester district and neighbouring authorities. Water companies have a

statutory duty to serve new development and to meet environmental criteria set by the Environment Agency. Investment is planned in 5 year periods and is informed by the Local Plan.

Southern Water published a Water Resources Management Plan (WRMP) in 2019 which proposes measures to manage water supply during drought periods particularly in relation to the River Itchen. The WRMP identified compensatory work to permit proposals and this is addressed in the Plan Habitats Regulation Assessment^[1]. The Southern Water draft WRMP 2024 focuses on measures to balance supply and demand to ensure there is not an adverse effect on the River Itchen. The draft WRMP 2024 is currently subject to consultation and once the contents are finalised, the HRA to the local plan and the statement of common ground will be updated to reflect any changes as required.

3. Regulation 18 Representations

Southern Water responded to the Regulation 18 consultation conducted in November -December 2022. Southern Water's response included recommendations and comments, including support for a number of policies, on the environmental issues that will need to be considered for the development of the Winchester Local Plan. The key issues and recommendations are set out in section 4 below.

4. Regulation 19 Representations

Southern Water responded to the Regulation 19 consultation on the Local Plan conducted in August – October 2024. Southern Water's response included amendments to policies and supporting text following Duty to Cooperate discussions. An update to the previous Statement of Common Ground is necessary to ensure Southern Waters' comments on strategic matters are addressed.

5. Strategic Matters

This section sets out where agreement has been reached on cross-border strategic matters, or where further work to reach common ground is required. Duty to Cooperate meetings have taken place over the course of the Local Plan review to discuss and resolve matters presented as part of the plan preparation, details of which and minutes documenting the outcome of the meeting(s) are included in the Duty to Cooperate Statement of Compliance.

The housing need for the Winchester Local Plan area, based on the standard methodology, is 676 dwellings per annum. This equates to a total of 13,565 dwellings over the plan period 2020 - 2040.

This Statement of Common Ground relates to the provision of wastewater and water supply infrastructure to serve planned development in the Local Plan.

^[1] Winchester Local Plan HRA - Reg19 July 2024.pdf

Southern Water Infrastructure

Southern Water set out in their Regulation 19 consultation response that as currently drafted Policy SP3 could create a barrier to statutory utility providers, from delivering essential water and wastewater infrastructure to serve existing and planned development in the countryside.

Winchester City Council have agreed that a reference to essential infrastructure to be recognised in the Local Plan to ensure that their delivery for sites located in the countryside is not precluded as follows:

ii. Development which has an operational need for a countryside location, such as for agriculture, horticulture, forestry, **essential infrastructure**, or outdoor recreation;

Southern Water's Regulation 19 response advises that developers would not be permitted to undertake work on infrastructure owned by water companies. Southern Water will undertake a capacity assessment in relation to the proposed development during the planning process and any capacity constraints identified will be managed through the funding mechanism for the reinforcement of the existing network. Currently this funding mechanism is the New Infrastructure Charge, as set out in the Council's Infrastructure Delivery Plan.

In consultation with Southern Water, Winchester City Council have agreed therefore that the text in paragraph 7.55 of the Plan is amended as follows:

"It is important that there is adequate capacity both on and off the site to serve a development and that it would not lead to problems for existing users. Where there is a capacity constraint on the main public water or wastewater network, we encourage a developer to work closely with the service provider on the delivery of the required network reinforcement, this is to ensure that there is no detriment to the operation of the network caused by the wastewater flows or water consumption from the dwellings. The work should be completed prior to the occupation of the development and phasing the occupation may be required in tandem with the delivery of the work."

Wastewater Infrastructure Capacity

Southern Water, as part of their consultation response to the Regulation 18 Local Plan and Regulation 19 Local Plan, assessed the capacity of the public sewer networks that would serve each site allocation. This was done using predicted flows from the number of dwellings proposed for each site. The assessments highlighted that a connection to the sewer network at the following site allocations could lead to an increased risk of sewer flooding, unless network reinforcement work is delivered in alignment with the rate of occupancy:

• W2, SH1, SH2, BW1, NA1, NA2, WK1, SW1, WC1, W5, OT01

Winchester City Council have agreed for this potential capacity constraint on the sewer network to be recognised in the plan and has included a specific policy criterion in each of the above site allocations in the Local Plan. This additional criterion is as follows: "Occupation of development will be phased to align with the delivery of sewerage infrastructure, in consultation with the service provider."

Southern Water set out in their Regulation 18 and Regulation 19 Consultation responses that their infrastructure crosses over a number of sites allocated in the Plan, which should be taken into account when designing the layout of the proposed development. This is applicable to the following site allocations:

• W3, W5, W7, W8, W10, W11, SH2, SH6, BW1, NA1, CC2, KW2, SW1, WK6,W6 and W1

In consultation with Southern Water, Winchester City Council have agreed for this potential constraint to development to be recognised in the Plan and have included a specific policy criterion in each of the above site allocations in the Local Plan, the criterion is as follows:

"Layout of the development must be planned to ensure future access to existing sewerage infrastructure for maintenance and upsizing purposes."

Furthermore, in their Regulation 19 consultation response Southern Water highlighted that in relation to Policy SH6 (Botley Bypass) that the developer will need to consult with Southern Water when designing the bypass. This will ensure future protection of and access to the existing infrastructure.

Winchester City Council have agreed to include an additional criterion to Policy SH6 to the table of Proposed Modifications to the Local Plan as follows,

"Measures are included to protect and ensure future access for maintenance and upsizing purposes to Southern Water's water supply infrastructure

Water Supply

Southern Water responded positively to the inclusion of Policy CN4 in the Regulation 18 Local Plan. Policy CN4 aligns with the Southern Water Target 100 programme which aims to reduce water consumption to 100 litres per person per day and secures a resilient water supply in the District.

Southern Water's Regulation 18 Consultation response advised that there are allocated sites that reside within groundwater Source Protection Zone's (SPZ's). Therefore, an additional criterion has been added to the relevant site allocation policies, to ensure that the SPZ's are protected through the right mitigation measures. These measures will ensure that there are no adverse effects on the River Itchen SAC, which is an abstraction source.

The following allocated sites lie within a groundwater SPZ:

• CC1, CC2, CC3, CC4, KW1, KW2 and OT01

Winchester City Council have agreed that the following additional specific policy criterion is included in each of the site allocations that lie within the groundwater SPZ:

"Ensure that the groundwater Source Protection Zone is protected'."

Water Quality

Southern Water is responsible for a number of wastewater treatment works within the Winchester Plan area. The wastewater treatment works currently have an assigned permit limit in relation to nitrogen and phosphorus (nutrients). The Levelling-up and Regeneration Act 2023 creates a new duty on water companies to upgrade wastewater treatment works (WwTW) by 1 April 2030, in catchments of Habitats Sites identified by the Secretary of State as being in an unfavourable condition due to nutrient pollution. The upgrades include the tightening of permit levels to 0.25mg/l for phosphorus and 1mg/l for nitrogen.

Winchester City Council have drafted a Nutrient Neutrality Topic Paper that outlines the proposed changes to permit levels for the wastewater treatment works in the plan area. (see page 11, Table 1⁷). The Topic paper sets out the demand for nutrient mitigation that drains to each respective wastewater treatment work in the relevant riverine catchment and confirms the use of strategic nutrient mitigation to meet the demand. The Council agreed to continue engaging with Southern Water in respect of the demand on wastewater treatment works.

Southern Water's Hampshire Water Transfer & Water Recycling Project

Southern Water is progressing a major infrastructure project to secure a resilient water supply for its Hampshire supply area. This project, which includes a substantial water supply pipeline between Havant and Otterbourne, will interact with a number of the site allocations in the Local Plan.

Three of the new site allocations were identified as being located within the preferred corridor as part of Southern Water's Summer 2022 consultation on the project. However, Southern Water have confirmed in writing that they have now refined the route for the draft Order Limits and that the route entirely avoids sites BW1, BW3 and OT01 and does not encroach on any other site allocations within the Local Plan.

Winchester City Council have therefore agreed that criterion viii in Policy CC4, paragraphs 14.80 and 14.141 can be removed from the Plan as these are no longer applicable.

Sutton Scotney Pipeline

Southern Water are currently delivering a project to convert the wastewater treatment works located in Gratton Close and Saddlers Close into wastewater pumping stations.

⁷ See heading Topic Papers - <u>Local Plan 2040 – Evidence Base - Winchester City Council</u>

Wastewater from the two new pumping stations will be transported via new sewer pipes to the treatment works in Harestock. This will allow the wastewater to be treated to an even higher standard before it is released back into the environment.

Whilst analysing the flow data procured during the scoping of this work, Southern Water identified that a second scheme is required to upgrade the 'receiving' sewer network in the Harestock catchment. It is the receiving sewer network as it will receive flows from the two new pumping stations.

This new scheme in Harestock, along with the work Southern Water are completing at Saddlers Close & Gratton Close, will be sufficient to allow those sewer catchments to meet the growth needs projected in the local plan, as well as any new drainage connections from existing properties that are not currently served by 'mains drainage'.

The work to upgrade the 'receiving' sewer network in Harestock is currently in the design phase and will be delivered as a business priority early in the next Financial Plan period of 2025 – 2030.

Appendix 1 includes a letter from Southern Water that outlines the latest position, the timetable for further works and the plans for the new pipeline between Sutton Scotney, South Wonston and Harestock Wastewater Treatment Works. The letter also outlines Southern Water's commitment to the ongoing works to ensure the future accommodation of the upgrades.

The Proposed Submission Local Plan includes a new site at Brightlands in Sutton Scotney (SU01). Southern Water provided comments on SU01 in their representations to the Regulation 19 Local Plan. An initial assessment of the site ascertained that Southern Water's infrastructure crosses the site and an easement width of 6 metres of more would be required which may affect the site layout. Therefore, Southern Water proposed the following amendments to the policy text:

"Occupation of development will be phased to align with delivery of the new sewerage pipeline between <u>delivery of Wastewater Infrastructure upgrades at</u> Sutton Scotney, and South Wonston<u>and at Harestock</u>, the delivery of sewerage infrastructure, in consultation with the service provider. Layout of the development must be planned to ensure future access to existing sewerage infrastructure for maintenance and upsizing purposes."

Southern Water have also highlighted in their response that there is limited existing infrastructure in Sutton Scotney. New sewers may need to be laid off site to drain wastewater from the new development to a practical point of connection and to serve new drainage connections from existing properties.

In consultation with Southern Water, Winchester City Council have therefore agreed to include an additional policy criterion in Policy SU01:

New and improved sewerage infrastructure will be encouraged and supported in order to meet the identified needs of the community, subject to other policies in the plan.

Furthermore, Southern Water have confirmed that additional supporting text is required in paragraph 14.178. The additional text provides further explanation in relation to the foul drainage issues at Sutton Scotney and the anticipated housing capacity to be met from the upgrades.

In consultation with Southern Water, Winchester City Council have agreed that the requirement to include further information on the wastewater infrastructure position at Sutton Scotney and the information on the growth capacity is included at paragraph 14.178:

"Sutton Scotney is within the group of 'intermediate' settlements, with an aim to identify new sites for 50-60 dwellings. Southern Water are currently delivering a project to upgrade their wastewater treatment sites located at Saddlers Close & Gratton Close. These sites require upgrades to ensure that they are compliant with new environmental standards and to prevent pollution spills. The project is due for completion in March 2025. A second project is required to upgrade the 'receiving' sewer network in the Harestock sewer catchment, which will be delivered as a business priority early in the next water industry Financial Plan period of 2025 – 2030. These schemes, once completed, will be sufficient to allow the sewer catchments serving Sutton Scotney to meet the growth needs projected in the local plan and any new drainage connections from existing properties."

Southern Water confirm in Appendix 1 and 2 that work in progress at Saddlers Close and Gratton Close, as well as the delivery of the scheme to upgrade the 'receiving' sewer network in Harestock, will be sufficient to meet the needs arising from sites allocated in the Local Plan and new drainage connections from existing properties. Southern Water have also suggested at Duty to Cooperate meetings following the Regulation 18 consultation on the Local Plan that an additional criterion is added to Policies SU01 and H2 to ensure that the timescales for the delivery of the development match that of the upgrades to the wastewater network.

Winchester City Council have agreed that this potential constraint is highlighted, and the following additional policy criterion is included under Policy SU01:

"The development is phased for the latter part of the Local Plan period and permission for housing development will not be granted before 2030."

Brambridge (Colden Common)

During periods of heavy rainfall the foul sewer network at this location becomes overwhelmed by surface water entering the system. This is a foul only system and is not designed to also drain surface water. Southern Water are looking to pinpoint where the surface water is entering the system, to allow for targeted investment into solutions that solve these root cause issues.

Southern Water have also been undertaking work on the sewer rising main for Kiln Lane Pump Station to the Chickenhall Treatment Works, to ensure that this sealed pressurised pipe is free from any obstructions and 'pushing forward' all the flow that it is designed to. This is to ensure that there is no foul water 'backing up' into the network. Appendix 2 of this SoCG provides an update on the work and sewer investigations being undertaken by Southern Water.

The work set out above is intended to reduce the risk of sewer flooding on this network and ensure that the foul only sewer system does not also drain a significant amount of surface water, as this creates a flooding risk during rainfall periods.

Winchester City Council will continue to engage with Southern Water in regard to their investigations and solution delivery and will ensure that any new development does not allow surface water 'run off' to enter the public sewer systems.

6. Supplementary consultation response

In response to the Regulation 19 consultation Winchester City Council arranged a further Duty to Cooperate meeting on the 29th October 2024 with Southern Water to discuss their comments made on the Local Plan.

Southern Water provided a Supplementary Response (Appendix 3) in response to the meeting to request further modifications to the Local Plan. The Council have accepted these modifications and added them to Schedule of Proposed Modifications for the Inspector to consider.

7. Areas of Agreement

Southern Water and Winchester City Council as Local Planning Authority have reached common ground on aspects of the Winchester Local Plan relating to waste water infrastructure and water supply.

- The Council's Development Management team will be made aware of Southern Water's comments on the site allocations in the plan that do not yet have planning permission so that consultation on future planning applications will be sought.
- The revisions to policies made in light of Southern Water's comments on the Regulation 18 Local Plan and the Regulation 19 Local Plan ensures that developers engage and collaborate with Southern Water to ensure there is adequate wastewater infrastructure and water supply capacity to serve development or that adequate future provision can be made. Planning conditions can be used to secure the necessary mitigation required.
- The Council will continue to engage with Southern Water in respect of the progress on the Sutton Scotney pipeline and the works at Brambridge, and the future scheme at Harestock. Southern Water have provided two letters to the Council (July and November 2024) which sets out updates to the works at that time. The Council will ensure that policy provisions are in place to protect existing and future wastewater and water infrastructure from the impacts of development.
- The Council and Southern Water will continue to liaise in regard to the Southern Water WRMP 2024.

8. Timetable for Review and ongoing cooperation

Winchester City Council will continue to work collaboratively with Southern Water to address strategic matters that, in addition to the above, arise through the plan-making process or require a resolution where there is yet to be an agreed matter. This will occur on an ongoing basis and relate to the timings of the relevant regulatory stages that the respective authorities are at during the plan-making process. The aim is to resolve any outstanding matters through regular meetings where cross-boundary strategic matters will be addressed.

9. Signatories

Both parties agree that this statement is an accurate representation of matters discussed and issues agreed upon, or where there are areas of disagreement, this statement documents the issue, and that both parties confirm their respective position.

It is agreed that these discussions will inform the Winchester City Council Local Plan 2020 – 2040. Both parties will continue to work collaboratively to meet the Duty to Cooperate obligations and will both continue to work proactively on the key strategic cross boundary issues identified in this document.

For Winchester City Council the Statement of Common Ground is signed by Julie Pinnock, Corporate Head of Planning and Regulatory Services.

For Southern Water this Statement of Common Ground is signed by Ryan Lownds, Strategic Planning Lead.

Hincelle Signed:

Name: Julie Pinnock

Position: Corporate Head of Planning and Regulatory Services

Winchester City Council

Signed: Byon Lourdy

Name: Ryan Lownds

Position: Strategic Planning Lead

Southern Water

Appendix 1 – Letter from Southern Water regarding the new pipeline between Sutton Scotney, South and the Harestock Waste Water Pumping Treatment Works and an update on Brambridge (Colden Common).





Ref: PRN770008 Date: 18 July Tel: 0330 303 0368

Dear Adrian Fox,

I write further to our meeting held 4 July 2024 regarding the Winchester District Local Plan.

For ease of reference, I have set out below each of the points that you have raised and our response.

Please can you confirm the details of the scheme Southern Water is delivering at Saddlers Close & Gratton Close in Sutton Scotney.

The Southern Water sites located at Saddlers Close & Gratton Close are currently wastewater treatment sites, which receive raw sewage for treatment and discharge.

These sites require upgrades to ensure that they are compliant with new environmental standards and to prevent pollution spills, however there is currently not enough space at either site to install the necessary equipment.

As such, we are changing the Gratton Close and Saddlers Close wastewater treatment sites into wastewater pumping stations, which will pump wastewater through two newly installed sewer rising mains. This work is projected to cost in the order of 5.2 million pounds.

These new pumping stations will transfer wastewater from Sutton Scotney to discharge into the Harestock sewer catchment, where it will then be treated at our Harestock treatment site. This is a much bigger treatment site and has the equipment to treat wastewater to a higher environmental standard.

As part of the scheme, we'll also be removing the above ground storage tank at Saddlers Close.

The delivery of this work will result in a substantial reduction in the use of Southern Water tankers and see them only being used during major storm events or as part of the operational routine for the sites.

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Please can you provide an update on progress with this work.

To date, we have built 4.5 Kilometres of new sewer rising main pipe ready to take the wastewater to the Harestock catchment, this pipe will serve the new pumping stations.

We had hoped the new stations would be operational from December 2024 but due to periods of extremely wet weather over the winter, this is likely to be March 2025. This work will include taking the treatment works out of service and making them redundant.

After all the work has been completed, there will be occasional visits by our operational teams to the pumping stations to carry out regular maintenance, with the possibility of some tanker visits as part of the normal operational routine for the sites.

Please can you confirm that the new pumping stations and sewer rising mains will be able to accommodate the wastewater flow from the proposed development sites at Brightlands & West Hill Road North.

Whilst analysing the flow data procured during the scoping of this work, we identified that a second scheme is required to upgrade the 'receiving' sewer network in the Harestock catchment.

I have been advised by the project team that this new scheme, along with the work we are completing at Saddlers Close & Gratton Close, will be sufficient to allow those catchment sewers to meet the growth needs projected in the local plan and any new drainage connections from existing properties.

The work to upgrade the 'receiving' sewer network in Harestock is currently in the design phase and will be delivered as a business priority early in the next Financial Plan period of 2025 – 2030. To expedite delivery, we have already started to liaise with local landowners regarding land access requirements.

Please note that the Brightlands site in the local plan would drain to the new Saddlers Close Pumping Station, and West Hill Road North would drain directly to the Harestock sewer catchment.

With the scheme to upgrade the 'receiving' sewer network in Harestock projected to start as a priority in the next Financial Plan period of 2025 – 2030, the timescales for delivery of the work should align with the policies for housing development, as set out within the local plan. I have included these polices below as a point of reference.

Criterion ii in Policy SUO1 (Brightlands) states: The development is phased for the latter part of the Local Plan period and permission for housing development will not be granted before 2030;

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Paragraph 9.24 in the Reg 19 states: Permission will not be granted for the development of sites in advance of this phasing unless the Council is having difficulty in demonstrating an adequate 5-year housing land supply, which is not expected to be the situation, or the site would meet a particular local priority for housing. Brownfield sites, which often have a long lead in time in terms of delivery have been specifically phased towards the earlier parts of the Plan period, as are sites meeting specialist needs such as older persons' or student housing.

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Policy H2 in the Reg 19 LP also states: Strategic Policy H2

Housing Phasing and Supply

Phasing will be applied to new greenfield housing sites allocated by this Plan, so as to prioritise the development of previously developed land and achieve a suitable housing trajectory, by holding back most allocated greenfield sites until the later parts of the Plan period. The following sites will not be permitted in advance of April 2030 unless they are needed to overcome a district level housing land supply shortfall or would deliver housing which is demonstrated to be in priority need in the locality at the time: SU01 – Brightlands, Sutton Scotney (60 dwellings)

As you will be aware, we also undertake sewer capacity assessments during the planning application process, using the proposed point of connection provided by the developer. Where any capacity constraints are identified, we work directly with developers to ensure that the occupation of the development is phased to align with the delivery of the necessary infrastructure, as required.

This phasing is done to ensure that the wastewater flow from the development does not cause a detriment to the operation of the sewer system. This process is often supported by planning policies and conditions that stipulate that phasing is coordinated with the delivery of the reinforcement work.

I hope the above provides some reassurance that we are committed to ensuring that the necessary infrastructure is in place to serve future development. We will work closely with you to ensure that any new development does not cause detriment to the operation of the public sewer system.

Will existing properties in Sutton Scotney be able to connect new drainage to the new pipeline once it is fully operational.

It is my understanding that this point relates to existing properties that are currently not served by a public sewer but served by either a private system or a septic tank/cess pit.

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For clarification, residents wishing to explore moving from a septic tank/cess pit to the option of connecting new drainage to a public sewer, would firstly need to explore options with a private drainage contractor.

1100

This is because there is an obligation on the homeowner to lay the new drainage serving the property and have it run to a point of connection to the public sewer, and we would recommend that a private contractor firstly assesses the options and provides the associated costing to the resident(s) that they are liable for.

Guidance on connecting to our public sewer can be found here on our website - <u>Sewer</u> <u>Connection - Southern Water</u>

The above guidance would also be appropriate for an existing private drainage system that wished to connect to our public sewer system. The first step would be for the owner of the private system to make a sewer connection application to us for our consideration.

Please note that any proposed connection would not be made directly into the new pipeline, as it is a pressurised sewer rising main. The new connection would need to be made either to gravity sewers draining to the pumping stations, or directly to the pumping stations, dependent on the technical requirements.

For residents who are currently served by a cess pit or septic tank, they may be eligible to apply for our first-time drainage scheme, if the asset is causing an environmental or amenity problem.

Further guidance on the scheme can be found here on our website - First Time Sewerage Scheme - Southern Water

Guidance on septic tanks can be found here on the government website - <u>Septic tanks</u> and sewage treatment plants: what you need to do: Overview - GOV.UK (www.gov.uk)

Wonston Parish Council have received advice that the new pipeline is pressurised and any new drainage connections from existing properties would impact on groundwater in the area, which may cause flooding. Please can you confirm that this will not be the case.

As advised further above, the new pipelines are pressurised sewer rising mains used to transfer wastewater from the new pumping station sites to the Harestock sewer catchment.

Sewer rising mains convey sewage under pressure and are sealed pipes, so it is not possible to connect new drainage from existing properties to these assets.

Any new connections would need to be made via newly laid private drainage connected to a gravity sewer system upstream of the new pumping stations.

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Each connection would be assessed through the sewer connection application process, which is a regulatory process governed by Section 106 of the <u>Water Industry Act 1991</u> (legislation.gov.uk)

Please can you also provide an update on the works you are undertaking in response to flooding issues in Brambridge?

As you are aware, during periods of heavy rainfall the foul sewer network becomes overwhelmed by surface water entering the system. This is a 'foul only' system and is not designed to also drain surface water.

Our investigations are looking to pinpoint where the surface water is entering the system, to allow us to target investment in solutions that solve these root cause issues.

We have also been undertaking work on the sewer rising main for Kiln Lane pumping station to the Chickenhall treatment site, to ensure that this sealed pressurised pipe is free from any obstructions and 'pushing forward' all the flow that it is designed to.

To date, the work on this sewer rising main has cost circa 1.8 million pounds, this does not include any additional work that may be identified from the Sahara and Sonar surveys mentioned further below.

I have split the update on this work in two, to reflect these two workstreams, and I have also attached a slide pack which was shared at a Banbridge Community Meeting held Tuesday 30 May 2024.

Work on the Sewer Rising Main

We disconnected the end of the Kiln Lane sewer rising main from a common manifold where two other rising mains connect, to create its own free discharge into the Chickenhall treatment site.

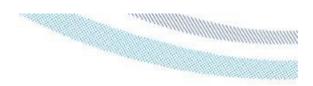
We have also completed a clean of the sewer rising main using a non-invasive cleaning technique called 'Ice Pigging', this technique is designed for sewer rising mains and uses slush ice to remove debris from inside the pipe.

Further to the Ice Pigging work, Sahara and Sonar surveys are now being programmed for delivery. These surveys are a highly accurate inspection system, used to understand the condition of the pipeline and detect any blockages or restrictions within the pipe.

Work on the Sewer Catchments

We have conducted a 1.25 Kilometre CCTV survey from Church Lane to Brambridge looking for additional flow entering the sewer network, this has included heavy jetting to clean the sewers to supplement the work.

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An impermeable area survey is being carried out in the Fishers Pond area. This survey seeks to determine what surface water run-off in the area is entering the public foul sewer system.

We will also be looking at the operation of surface water and highways drains in the Fishers Pond area as part of this work, along with any possible misconnections of surface water drainage to the foul system.

I hope the work set out above provides some reassurance to you that we continue to investigate the root cause of the public foul sewer being overwhelmed during wet weather periods, and we are undertaking the necessary remedial work where required.

How to contact us

For more information in relation to the work, residents can contact the Capital Projects Customer Team directly via capitalcomms@southernwater.co.uk, Monday to Friday, 9am to 5pm.

Alternatively, they can call us on 0330 3030 368, advising us that they are calling about Capital Projects and providing the Project Reference Number (PRN) 770008 for our work at Saddlers Close & Gratton Close and 775033 for our work in Brambridge.

Yours faithfully,

Ryan Lownds

Strategic Planning Lead

Southern Water

Using your information: We use the information you give us to resolve your queries and provide you with water and wastewater services. We also collect feedback to help us improve our services To find out more please visit southernwater.co.uk/privacy

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Brambridge Wastewater Flooding: Community Event

Thursday 30 May 2024



Situational background wastewater flooding causes











Quieter Loading

Agenda

2

- Introductions
- Situational background cause of wastewater flooding
- · Wet weather management (immediate mitigation)
- Recent works in aim of resolving flooding issues Next steps (short and long term)
- Your questions





Situational background (causes and impact)

- During times of rainfall the foul network becomes overwhelmed by surface water flows from rainfall that shouldn't be in the sewer system.
- Our investigations are looking to pinpoint where surface water is entering the foul only system so we can target investment in solutions that solve these root cause issues.
- Wastewater flooding impacts the environment, customers, business and road users we continue to collaborate closely with your community representatives and our regulators, which has facilitated continued post incident learning, improved community communication and targeted investigatory works.

Site Management

An ongoing tankering operation continues during wet weather, to protect the environment and property flooding.

Continued improvements in wet weather management

- Improved supervision on site
- Improved tanker loading operations:
- Faster loading
- · Reduced light pollution from tanker turning
- Site information board for tanker drivers & supervisors
- Site resilience further improved with additional pumps &
- control system Road repairs being scoped



Diversion of the Rising main at the Treatment Works

These photos of the scheme show the separation of the end of the rising main to give it its own free discharge at the Works. The two dark blue valves in the photo were procured from Australia as they are special!



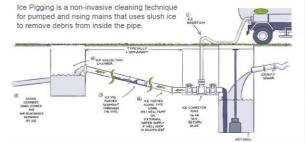






Ice Pigging

Recent works



Next steps (short and long term)



Sahara and Sonar survey A highly accurate inspection system used for pipeline condition assessment. Catchment Investigations Acoustic Inspection: Detects trapped pockets of gas that may cause a restriction to flow. Pressure survey: Has the ability to flag up any large reductions in the cross section of the pipeline. · Line and profile trace: This will provide the x, y and z co-ordinates for the pipeline Sonar survey: Separate to the Sahara survey, looking for any ovality of the pipe, any heavy blockages or restrictions. The Catchment Colden Common WATER for LIFE So **Fishers Pond** Otterbourne WATER 15 Fishers Pond Impermeable Area Survey Kiln Lane Sewer Cleaning and Investigation Work will be carrying out the IAS starting the 7th May Oneline will be conducting the 1.25km CCTV survey from Church Lane to They will be working through the fishers pond area up to Brambridge. Marwell Zoo Will be using Main Line CCTV rig and A project manager employed from Surveyors to carry out Investigation works which includes Lifting mh recording flow. Heavy jetters and tankers whilst onsite managing the schedule of works. They will be looking at Surface Water a drains and possible mis connections within this area. All staff will be in uniform with correct PPE Myself and Luke will be visiting Marwell Zoo Work will start on 28th April for of May to have discuss age system

Action Taken and Next Steps

We're committed to improving our communications with the Brambridge community whilst we investigate the options to reduce wastewater flooding in the area.

- Monthly meetings with community representatives and regulators.
- Customer letters updating on progress.
 SMS text messages providing awareness of
- SMS text messages providing awareness of emergency works (traffic management).
 Community drop in event.





Appendix 2 - Letter from Southern Water providing an update regarding the new pipeline between Sutton Scotney, South and the Harestock Waste Water Pumping Treatment Works and an update on Brambridge (Colden Common) dated November 2024.





Ref: PRN770008 Date: 13 November 2024 Tel: 0330 303 0368 Copy to: Councillor

Porter

Dear Emma,

I write further to my letter addressed to your colleague Adrian Fox (dated 18 July 2024), to provide you with an update on our schemes in Sutton Scotney and Brambridge.

For ease of reference, I have set out below the updates under subheadings.

Saddlers Close & Gratton Close in Sutton Scotney

As advised in my previous correspondence, the Southern Water sites located at Saddlers Close & Gratton Close are currently wastewater treatment sites, which receive raw sewage for treatment and discharge.

These sites require upgrades to ensure that they are compliant with new environmental standards and to prevent pollution spills, however there is currently not enough space at either site to install the necessary equipment.

As such, we are changing the Gratton Close and Saddlers Close Wastewater Treatment Sites into wastewater pumping stations, which will pump wastewater through two newly installed sewer rising mains. This work is projected to cost in the order of £5.2 million.

These new pumping stations will transfer wastewater from Sutton Scotney to ultimately discharge into the Harestock sewer catchment, where it will then be treated at our Harestock Wastewater Treatment Site. This is a much bigger treatment site and has the equipment to treat wastewater to a higher environmental standard.

As part of the scheme, we'll also be removing the above ground storage tank at Saddlers Close.

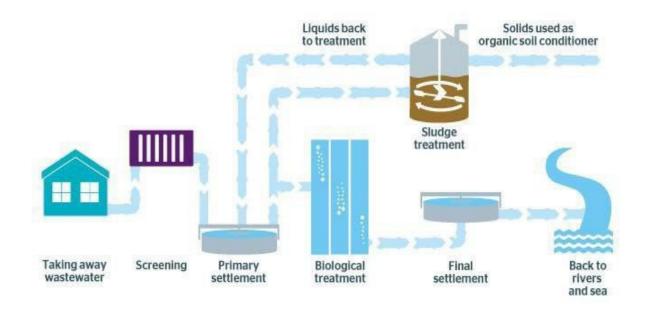
The delivery of this work will result in a substantial reduction in the use of Southern Water tankers and see them only being used during major storm events or as part of the operational routine for the sites.

I have set out diagrams below to help explain how wastewater treatment sites and pumping stations operate:

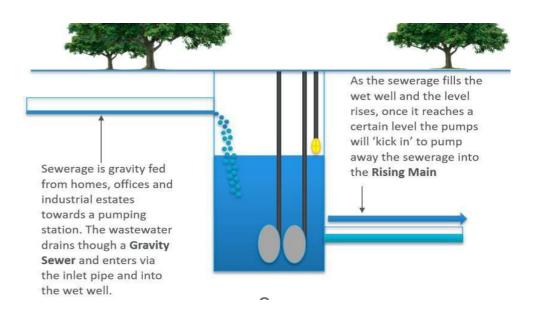
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The Operation of a Wastewater Treatment Site



The Operation of a Wastewater Pumping Station



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Update on progress with the work in Sutton Scotney

I am pleased to advise that the newly constructed sewer rising main pipe has now been installed, after being separated into two sections.

The first section of pipe will serve Saddlers Close Wastewater Pumping Station. When the site is in operation, wastewater will be pumped through the pipe to Gratton Close Wastewater Pumping Station.

The second section of sewer rising main will serve Gratton Close Wastewater Pumping Station, and when that site is in operation wastewater will be pumped through it to discharge into the South Wonston sewer catchment, and then drained onwards to be treated at Harestock Wastewater Treatment Site.

These new sewer rising mains have passed their pressure check for quality control, so they are ready to be used when the two new pumping stations are constructed and in operation. The easements (strips of land) that the pipes have been installed within, have been reinstated and returned to their respective landowners.

The conversion of Gratton Close Wastewater Treatment Site into a pumping station is due to start imminently, with the programme schedule showing the site passing flows in March 2025.

The conversion of Saddlers Close Wastewater Treatment Site into a pumping station is due to start this November, with the site also scheduled to be passing flows in March 2025.

Therefore, in summary, this scheme is due for completion by the end of March 2025.

The Scheme in Harestock 2025 – 2030

As advised in my previous correspondence, having analysed the flow data procured during the scoping of the work in Sutton Scotney, we identified that a second scheme is required to upgrade the 'receiving' sewer network in the Harestock sewer catchment.

Please note that foul sewer networks can be vulnerable to blockages or to being overwhelmed during heavy storm periods, and so it is not possible to state that all drainage issues can be resolved through the delivery of capital schemes.

However, I have been advised by the project team that this new scheme, along with the work we are completing at Saddlers Close and Gratton Close, will be sufficient to allow those catchment sewers to meet the growth needs projected in the local plan and any new drainage connections from existing properties. The work to upgrade the 'receiving' sewer network in Harestock is currently in the design phase and will be delivered as a business priority early in the next Financial Plan period of 2025 – 2030. To expedite delivery, we have already started to liaise with local landowners regarding land access requirements.

Our response to the flooding issues in Brambridge

As you are aware, during periods of heavy rainfall the foul sewer network becomes overwhelmed by surface water entering the system. This is a 'foul only' system and is not designed to also drain surface water.

Our investigations are looking to pinpoint where the surface water is entering the system, to allow us to target investment in solutions that will tackle the root cause of the issues.



We have also been undertaking work on the sewer rising main for Kiln Lane Pumping Station to the Chickenhall Wastewater Treatment Site, to ensure that this sealed pressurised pipe is free from any obstructions and is 'pushing forward' all the flow that it is designed to.

To date, the work on this sewer rising main has cost circa £1.8 million - this does not include any additional work that may be identified from the Sahara and Sonar surveys mentioned further below.

Update on the work and sewer investigation

I have set out below some additional information in relation to the work we have completed on the sewer rising main and an update on our investigation into the sewer catchments.

Work on the Sewer Rising Main

We disconnected the end of the Kiln Lane sewer rising main from a common manifold where two other sewer rising mains connect, to create its own free discharge into the Chickenhall Wastewater Treatment Site. This work improves the rate of flow through the pipe, thereby reducing the need to discharge at an alternative location during heavy wet weather periods.

We have also completed a clean of the sewer rising main using a non-invasive cleaning technique called 'Ice Pigging.' This technique is designed for sewer rising mains and uses slush ice to remove debris from inside the pipe. This work was undertaken from three purpose-built sewer manhole chambers within Chickenhall Lane, Highbridge Road and Barton Farm, Eastleigh.

Further to the Ice Pigging work, Sahara surveys were undertaken to understand the condition of the pipeline and detect any blockages or restrictions within the pipe. These surveys can indicate blockages or partially closed valves through noting a drop in the sewer network pressure. The surveys have not identified any localised partial or complete blockage of the sewer rising main. However, they do suggest that the sewer rising main has suffered reduced capacity over the first 2.5km due to a buildup of material on the internal surface of the pipeline.

Investigation into the Sewer Catchments

We have now completed Impermeable Area Surveys on sewer catchments in Colden Common, Otterbourne and Fishers Pond. These surveys seek to determine what surface water run-off in the area is entering the public foul sewer system.

The results of the survey are currently being assessed and where surface water is identified as entering the sewer network, we will scope the delivery of work to remove this additional flow.

As advised in my previous correspondence, we continue to investigate the root cause of the public foul sewer being overwhelmed during wet weather periods and will undertake the necessary remedial work where required.

Our stakeholder engagement

Going forward, the project team will provide a quarterly Newsletter by e-mail to local stakeholders, including Councillors, Parish Councils and the Winchester City Council Planning Team.

These updates will continue until the delivery of the new wastewater pumping stations in Sutton Scotney in 2025 and the completion of any remedial work in Brambridge as required. They will then be reintroduced with the commencement of the scheme in Harestock.



We are aware of requests for maps and/or drawings providing a simplified visual representation of the work in Sutton Scotney, as opposed to the technical design drawings that have been shared previously. We will endeavour to provide this information within a future Newsletter.

The first Newsletter will be sent in January 2025.

How to contact us

For more information in relation to the work, residents can contact the Capital Projects Customer Team directly by email: capitalcomms@southernwater.co.uk.

Alternatively, they can call 0330 3030 368, stating that they are calling about Capital Projects and providing the Project Reference Number (PRN) 770008 for our work at Saddlers Close & Gratton Close and 775033 for our work in Brambridge. Lines are open Monday to Friday, 9am to 5pm.

I hope you find this update helpful and please do contact me if you would like to discuss anything in more detail.

Yours faithfully, Ryan

Lownds

Strategic Planning Lead Southern

Water

Using your information: We use the information you give us to resolve your queries and provide you with water and wastewater services. We also collect feedback to help us improve our services To find out more please visit southernwater.co.uk/privac



Appendix 3 - Southern Water Regulation 19 Supplementary Response

Southern Water Winchester City Council Local Plan Reg 19 Consultation – Supplementary Response

Further to our consultation response provided 11 October 2024 and the duty to co-operate meeting held 29 October 2024, I write to request some modifications to the criterion that we have proposed.

Development Allocations

For consistency and conformity across the local plan we are happy for the word **consultation** to be used in the policy criterion for Policy W5 Bushfield Camp rather than the word liaison.

<u>Occupation of the development will be phased to align with the delivery of sewerage infrastructure, in</u> <u>liaison</u> consultation with the service provider.

W1 Barton Farm

We are comfortable with retaining the wording in the local plan as set out below, as to ensure that development is adequate distance away from our Harestock Wastewater Treatment Works.

ix. [...] and ensure adequate separation from the Harestock Waste Water Treatment Works;

Whilst the below wording provided in our consultant response is more comprehensive and encourages the necessary engagement with Southern Water, we are agreeable to the above wording set out in criterion ix. providing the required safeguarding. Therefore, the wording below can be disregarded.

The development layout must provide sufficient distance between Harestock Wastewater Treatment Works and sensitive land uses, such as residential units, schools and recreational areas, to allow adequate odour dispersion, on the basis of an odour assessment to be undertaken in consultation with Southern Water.

Having revisited our assessment of this site undertaken during the Reg 18 consultation; I have noted that the following Southern Water infrastructure was identified.

BARTON FARM MAJOR DEVELOPMENT AREA

250mm Public Foul sewer; 315mm Public water distribution main; 90mm Public water distribution main; 250mm

Therefore, we propose the following criterion wording for W1 Barton Farm.

Layout of the development must be planned to ensure future access to existing underground infrastructure for maintenance and upsizing purposes.



Policy WK6 LAND AT SOUTHWICK ROAD/SCHOOL ROAD

We made an initial assessment of this site and ascertained that Southern Water's infrastructure crosses the site, which needs to be taken into account when designing the layout of any proposed development.

In our consultation response we requested that this is recognised as underground infrastructure, however for consistency and conformity across the local plan, we are happy for asset type to be specified where there is solely one asset type (i.e. sewer or water pipe).

Layout of the development must be planned to ensure future access to existing underground sewerage infrastructure for maintenance and upsizing purposes.

Where both asset types are present then **underground infrastructure** has been used.

Policy W6 Winnall

In the absence of an indicative number of homes, our assessment of sewer capacity in relation to this site allocation is undertaken in accordance with a modelling methodology aligned to location size.

However, we recognise that aspects of this site have already been developed and/or redeveloped. As such, we propose the below modification to the wording proposed in our consultation response.

Consultation Response

<u>Occupation of the development will be phased to align with the delivery of sewerage infrastructure, in liaison</u> with the service provider.

Modification

Further development on this site will be subject to a sewer network capacity assessment during the planning application process, should capacity be constrained, occupation of the development will be phased to align with the delivery of infrastructure, in consultation with the service provider.

Policy W10 RIVER PARK LEISURE CENTRE SITE

In the absence of an indicative number of homes, our assessment of sewer capacity in relation to this site allocation is undertaken in accordance with a modelling methodology aligned to location size.

However, we recognise that the site has been drained to the public foul sewer previously and any new connection may not be in exceedance of that flow rate.

As such, we propose the below modification to the wording proposed in our consultation response.



Consultation Response

<u>Occupation of the development will be phased to align with the delivery of sewerage infrastructure, in</u> <u>liaison with the service provider.</u>

Modification

Any re-development of this site will be subject to a sewer network capacity assessment during the planning application process, should capacity be constrained, occupation of the development will be phased to align with the delivery of infrastructure, in consultation with the service provider.



Policy SU01 LAND AT BRIGHTLANDS

Whilst we have referenced the work that we are delivering to provide a more resilient Wastewater Infrastructure as the 'Sutton Scotney scheme' and the Harestock scheme', the work does involve undertakings in South Wonston.

As discussed in our duty to co-operate meeting held 29 October 2024, we are happy to include that location for completeness.

Consultation Response

xvii. Occupation of development will be phased to align with delivery of Wastewater Infrastructure upgrades at Sutton Scotney and at Harestock in consultation with the service provider. Layout of the development must be planned to ensure future access to existing sewerage infrastructure for maintenance and upsizing purposes.

Modification

<u>xvii.</u> Occupation of development will be phased to align with delivery of Wastewater Infrastructure upgrades at Sutton Scotney, <u>South Wonston</u> and at Harestock in consultation with the service provider. Layout of the development must be planned to ensure future access to existing sewerage infrastructure for maintenance and upsizing purposes.

W2 John Moore Barracks

This site is in the locality of the SWS Harestock Treatment Works. As such it was felt prudent to include policy criterion for Policy W2 to supplement vi. of Policy NE6.

However, as discussed at in the duty to co-operate meeting held 29 October 2024, the distance between the site location and Harestock Wastewater Treatment Works should allow adequate odour dispersion.

As such, we are comfortable with the proposed policy criterion below not being included in Policy W2.

<u>The development layout must provide sufficient distance between Harestock Wastewater Treatment Works</u> <u>and sensitive land uses, such as residential units, schools and recreational areas, to allow adequate odour</u> <u>dispersion, on the basis of an odour assessment to be undertaken in consultation with Southern Water.</u>

Policy NA3 Neighbourhood Plan Designated Area - New Alresford Town Council Neighbourhood Plan

As agreed in our duty to co-operate meeting held 30 September 2024, we have not undertaken a capacity assessment of our water and wastewater network in relation to the 100 dwellings proposed for the New Alresford Town Council Neighbourhood Plan.

Therefore, it will be vitally important that Southern Water are consulted on the Neighbourhood Plan as to allow us to undertake the assessment. Further to the duty to co-operate meeting held 29 October 2024, we are comfortable with some modifications to our consultation response wording, as set out below.

Consultation Response



Southern Water must be consulted on the sites allocated within the New Alresford Town Council Neighbourhood Plan for capacity assessments to be completed on their water and wastewater networks and for policy to be applied as required.

Modification

As part of the Neighbourhood Planning process, early engagement with Southern Water is encouraged regarding the allocation of sites in the Neighbourhood Plan in order to assess the capacity of their water and wastewater networks.

Policy DEN1 Neighbourhood Plan Designated Area - Denmead Neighbourhood Plan

As agreed in our duty to co-operate meeting held 30 September 2024, we have not undertaken a capacity assessment of our wastewater network in relation to the 100 dwellings proposed for the Denmead Neighbourhood Plan.

Therefore, it will be vitally important that Southern Water are consulted on the Neighbourhood Plan as to allow us to undertake the assessment.

Further to the duty to co-operate meeting held 29 October 2024, we are comfortable with some modifications to our consultation response wording, as set out below.

Recommendation

Southern Water must be consulted on the sites allocated within the updated Denmead Neighbourhood Plan for capacity assessments to be completed on their wastewater networks and for policy to be applied as required.

Modification

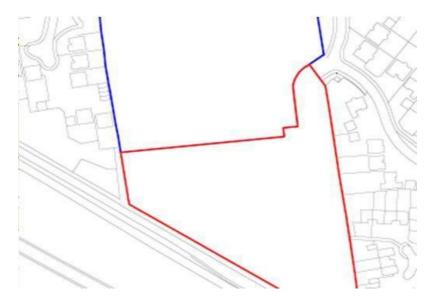
As part of the Neighbourhood Planning process, early engagement with Southern Water is encouraged regarding the allocation of sites in the Neighbourhood Plan in order to assess the capacity of their water and wastewater networks.

Policy SH3 - Whiteley Green - SWS Infrastructure

Thank you for sharing the e-mail confirmation provided by Hampshire County Council in relation to the site boundary and Southern Water infrastructure (excerpt of the e-mail below).

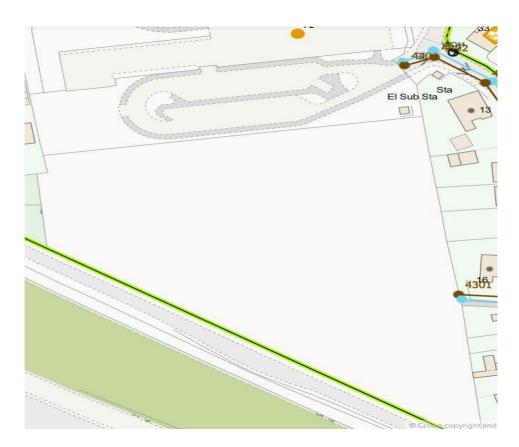
"I have attached a snip of our red/blue line plans for the site. As you can see the development proposals are outside the public highway, so Winchester can remove the easement requirement from the draft policy requirements."





Snip of site boundary provided by Hampshire County Council

Southern Water assets in Bader Way and Cobham Grove





On the basis of the above we recommend the following modifications to the wording for 13.31 of Policy SH3.

13.31

There are foul and surface water sewers running across the site which would require an easement of 6m to be kept clear of all buildings and tree planting located in Bader Way and Cobham Grove, with manholes in close proximity to the site boundary. It is important that the exact location of this infrastructure in relation to the site is established prior to the commencement of any construction, in liaison with Southern Water.

Response provided by:

Ryan Lownds

Strategic Planning Lead Southern Water



References

 Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations,

https://publications.naturalengland.org.uk/publication/4720542048845824

- 2 Winchester City Council (2024) Winchester Local Plan 2020-2040: Transport Assessment Strategic Transport Assessment, July 2024, <u>https://www.localplan.winchester.gov.uk/LibraryAssets/attach/177/Strategi</u> <u>c-Transport-Assessment-July-2024.pdf</u>
- **3** JNCC (2021) Guidance on decision-making thresholds for air pollution, https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447
- 4 Bird Aware Solent (2018) Solent Waders and Brent Goose Strategy, https://solentwbgs.wordpress.com/wp-content/uploads/2021/03/swbgsmitigation-guidance-oct-2018.pdf
- 5 Bird Aware Solent (2024) Bird Aware Solent Revised Strategy, September 2024, <u>https://birdaware.org/solent/wp-</u> <u>content/uploads/sites/2/2024/09/PFSH-30-September-Strategy-</u> <u>Review.pdf</u>
- 6 PfSH (2024) Minutes of the Partnership for South Hampshire Joint Committee, 30 September 2024, <u>https://www.push.gov.uk/wp-</u> <u>content/uploads/2024/10/Minutes-of-PfSH-Joint-Committee-30-</u> <u>September-2024.pdf</u>
- 7 Southern Water (2019) Water Resource Management Plan, <u>https://www.southernwater.co.uk/media/3656/5025_wrmp_-v11.pdf</u>
- 8 Southern Water (2019) Water Resources Management Plan, Annex 2: Demand Forecast, <u>https://www.southernwater.co.uk/media/3660/wrmp19-annex2-demand-forecast.pdf</u>
- 9 Highways England (2019) LA105 Air quality, <u>https://www.standardsforhighways.co.uk/tses/attachments/10191621-07df-44a3-892e-c1d5c7a28d90</u>

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