Overton Neighbourhood Development Plan

Habitats Regulation Assessment

Overton Neighbourhood Development Plan

Project reference: DR-12955
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Quality information

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Overton Neighbourhood Development Plan

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1. Introduction

Background to the Project

1.1 AECOM was appointed by Locality to assist Overton Parish Council in undertaking a Habitats Regulations Assessment (HRA) for the Overton Neighbourhood Development Plan (NDP). This is to inform the planning group and Basingstoke and Dean Borough Council of the potential effects of the NP development on European sites and how they are being or should be addressed in the draft NDP. Basingstoke and Deane Borough Council will then be able to utilise this report to inform their formal Habitats Regulations Assessment decision making regarding the Neighbourhood Development Plan.

Legislative Framework

1.2 The UK left the EU on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). This established a transition period, which ended on 31 December 2020. The Withdrawal Act retains the body of existing EU-derived law within our domestic law. The most recent amendments to the Habitats Regulations – the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – make it clear that the need for HRA has continued after the end of the Transition Period.

1.3 Under the Conservation of Habitats and Species Regulations 2017 (as amended) (the "Habitats Regulations"), an appropriate assessment is required, where a plan or project is likely to have a significant effect upon an international site, either individually or in combination with other projects.

The legislative basis for Appropriate Assessment

Conservation of Habitats and Species Regulations 2017 (as amended)

With specific reference to Neighbourhood Plans, Regulation 106(1) states that:
'A qualifying body which submits a proposal for a neighbourhood development plan must provide such information as the competent authority [the Local Planning Authority] *may reasonably require for the purposes of the assessment under regulation 105* [which sets out the formal process for determination of 'likely significant effects' and the 'appropriate assessment']…'.

1.4 It is therefore important to note that this report has two purposes:

a. To assist the Qualifying Body (Overton Parish Council) in preparing their plan by recommending (where necessary) any adjustments required to protect international sites, thus making it more likely their plan will be deemed compliant with the Conservation of Habitats and Species Regulations 2017 (as amended); and

b. On behalf of the Qualifying Body, to assist the Local Planning Authority (Basingstoke and Deane Borough Council in Hampshire) to discharge their duty under Regulation 105 (in their role as 'plan-making authority' within the meaning of that regulation) and Regulation 106 (in their role as 'competent authority').

1.5 As ‘competent authority’, the legal responsibility for ensuring that a decision of ‘likely significant effects’ is made, for ensuring an ‘appropriate assessment’ (where required) is undertaken, and for ensuring Natural England are consulted, falls on the local planning authority and the Neighbourhood Plan examiner. However, they are entitled to request from the Qualifying Body the necessary information on which to base their judgment and that is a key purpose of this report.

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

1.7 Note that at the request of the group this assessment (specifically Appendix C) not only considers allocated sites but also some sites that were ultimately not allocated. These have been assessed in the event that allocations in the final plan change between the date of this analysis and the submission of the plan.

2. Methodology

Introduction

2.1 The HRA has been carried out with reference to the general EC guidance on HRA (European Commission, 2001), general guidance on HRA published by the UK government in 2021 (Department for Environment, Food & Rural Affairs, 2021)

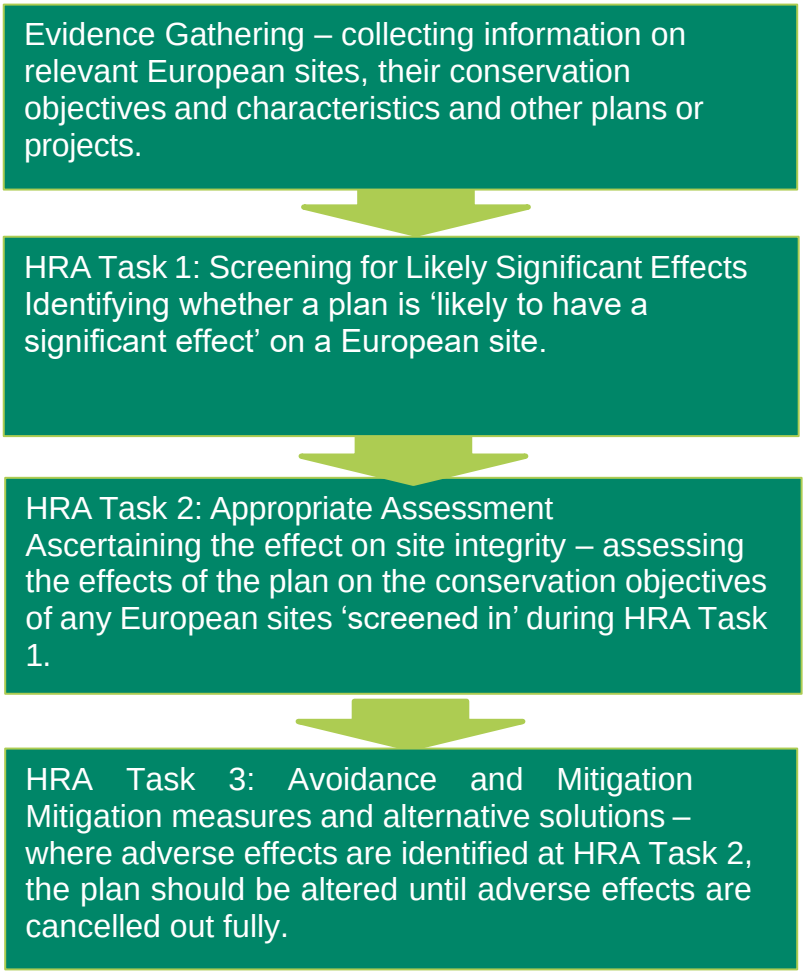

Plate 1. Four Stage Approach to Habitats Regulations Assessment (Department for Environment, Food & Rural Affairs, 2021)

2.2 Plate 1 above outlines the stages of HRA according to current Department for Levelling Up, Housing & Communities guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations, and any relevant changes to the Plan until no significant adverse effects remain.

HRA Task 1 – Likely Significant Effects (LSE)

2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk

assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"*Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?*"

2.4 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapter 4 of this report.

HRA Task 2 - Appropriate Assessment (AA)

2.5 Where it is determined that a conclusion of 'no likely significant effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'Appropriate Assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment rather than determination of likely significant effects. It literally means '*whatever level of further assessment is appropriate to form a conclusion regarding effects on the integrity of relevant European sites'.*

2.6 During July 2019 the Department for Levelling Up, Housing and Communities (DLHC) published guidance for Appropriate Assessment (Department for Levelling Up, Housing and Communities, 2019). Paragraph: 001 Reference ID: 65-001-20190722 explains: '*Where the potential for likely significant effects cannot be excluded, a competent authority must make an appropriate assessment of the implications of the plan or project for that site, in view of the site's conservation objectives. The competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured*'.

2.7 One of the key considerations during Appropriate Assessment is whether there is available mitigation that would address the potential effect.

HRA Task 3 – Avoidance and Mitigation

2.8 Where necessary, measures are recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a Neighbourhood Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.

2.9 In evaluating significance, AECOM has relied on professional judgement and the LP HRA regarding development impacts on the European sites considered within this assessment.

2.10 When discussing ‘mitigation’ for a Neighbourhood Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Development Plan document is a high-level policy document. A Neighbourhood Plan is a lower-level constituent of a Local Development Plan.

3. Physical Scope of the HRA

Introduction

3.1 There is no guidance that dictates the general physical scope of an HRA of a Plan document. Therefore, in considering the physical scope of the assessment, we were guided primarily by the identified impact pathways (called the source-pathway-receptor model).

3.2 Briefly defined, impact pathways are routes by which the implementation of a project can lead to an effect upon a European designated site. An example of this would be visual and noise disturbance arising from the construction/decommissioning work or operational phase associated with a project. If there are sensitive ecological receptors within a nearby European site (e.g. non-breeding overwintering birds), this could alter their foraging and roosting behaviour and potentially affect the site's integrity. For some impact pathways (notably air pollution) there is guidance that sets out distance-based zones required for assessment. For others, a professional judgment must be made based on the best available evidence.

European Sites Relevant to the Neighbourhood Plan

3.3 In the case of the Overton NDP, it has been determined that the European sites identified in Table 1 require consideration. The background to these European sites are discussed in **Appendix A**. In general sites have been selected because they lie within 10km of the Neighbourhood Area and experience indicates that few impact pathways apply at greater distances. However, for the Solent European sites it is known that the catchment for nutrient neutrality issues encompasses a very large area including the south-east part of Basingstoke and Deane Borough. A requirement for nutrient-neutral development applies to the River Itchen SAC (both phosphorus and nitrogen; the latter due to its hydrological connection with the Solent European Sites) and the River Test (nitrogen only).

3.4 The locations of the below European sites in relation to the NDP boundary and allocated sites are illustrated in **Appendix B, Figure 1.**

Table 1. European site descriptions and distance from Overton NDP area

Site Name/Designation	Site Description	Distance from Overton NDP area
River Itchen SAC	The River Itchen SAC is designated for Annex I habitats of water courses of plain to montane levels with the Crowfoot (*Ranunculion fluitantis*) and pond water-starwort (Callitricho-Batrachion) vegetation. Annex II species for primary designation are Southern damselfly (*Coenagrion mercuriale*) and Bullhead (*Cottus gobio*), with other qualifying	9.5km south of the NDP area

Site Name/Designation	Site Description	Distance from Overton NDP area
	species being white clawed (or Atlantic stream) crayfish (*Austropotamobius pallipes*), brook lamprey (*Lampetra planeri*), atlantic salmon (*Salmo salar*) and otter (*Lutra lutra*).	
Solent and Southampton Water SPA	Solent and Southampton Water SPA is designated for: • Mediterranean gull (Larus melanocephalus) – 15.4% of the GB breeding population • Little tern (*Sternula albifrons*) – 2% of the GB breeding population • Roseate tern (*Sterna dougallii*) – 3.1% of the GB breeding population • Common tern (*Sterna hirundo*) – 2.2% of the GB breeding population • Sandwich tern (*Sterna sandvicensis*) – 1.7% of the GB breeding population • Eurasian teal (*Anas crecca*) – 1.1% of the population (wintering) • Dark-bellied brent goose (*Branta bernicla bernicla*) – 2.5% of the population (wintering) • Common ringed plover (*Charadrius hiaticula*) – 1.2% of the population (wintering) • Black-tailed godwit (*Limosa limosa islandica*) – 1.7% of the population (wintering) • Internationally important bird assemblage – regularly supports 51,361 waterfowl in the winter.	32.6km south of the NDP area
Solent and Dorset Coast SPA	Solent and Dorset Coast SPA is designated for: • Sandwich tern (*Sterna sandvicensis*) – 4.01 of the GB breeding population • Common tern (*Sterna hirundo*) – 4.77% of the GB breeding population	132.6km south of the NDP area

Site Name/Designation	Site Description	Distance from Overton NDP area
	• Little tern (*Sternula albifrons*) – 3.31% of the GB breeding population	
Solent Maritime SAC	Solent Maritime SAC is designated for Annex I habitats of estuaries, spartina swards, Atlantic salt meadows, sandbanks which are slightly covered by sea water all the time, mudflats and sandflats not covered by seawater at low tide, coastal lagoons, annual vegetation of stoney banks, annual vegetation of drift lines, Salicornia and other annual colonising mud and sand, and shifting dunes along the shoreline with *Ammophilia arenaria* "white dunes". The site is also designated for the Annex II species Desmoulins whorl snail (*Vertigo moulinsiana*)	31.5 km south of the NDP area

3.5 In addition to sites that are currently designated, parts of the River Test and River Meon are also to be treated as if they were SACs because these are being used by Southern Water to deliver compensatory habitat for adverse effects on the River Itchen SAC from their Drought Plan (and specifically, the Lower Itchen Drought Order and Candover Augmentation Scheme Drought Order). Under the Conservation of Habitats and Species Regulations 2017 (as amended) compensation areas for adverse effects on the integrity of SACs must themselves be treated as if they were SACs and thus fall within the scope of HRA.

3.6 The compensation constitutes restoration of chalk stream and Southern Damselfly habitat on specific stretches of the River Test and its catchment (including River Dever, Bourne Rivulet, River Dun) and Cheriton Stream, and tackling barriers to salmon migration on the River Meon through the removal of weirs, creation of fish channels and river restoration projects for fish spawning. The River Test flows through Overton Parish but the relevant sections where compensation is being delivered are approximately 13km downstream of Overton parish. Therefore the only scope for impacts would be water quality from treated sewage effluent.

3.7 Nitrogen inputs to the River Test are considered in this HRA report because of their relevance to the Solent European Sites downstream, and its nutrient neutrality requirement. However, it is also noted that growth in the River Test catchment would have the potential to impact prevailing habitat condition through phosphorus discharges in treated sewage effluent. A review of data on the Environment Agency Catchment Data Explorer indicates that all waterbodies in the Test Upper and Middle Operational Catchment were classified as having good ecological status and low phosphorus levels. Notwithstanding this, the projected in-combination growth in the River Test catchment may have the potential to alter this. At this stage Natural England has not identified a nutrient neutrality requirement specific to the River Test or a requirement to consider phosphorus inputs from treated sewage effluent. It is noted that Natural England

have undertaken an updated conditions assessment of this catchment, with results due to be published in March 2025. Until the time that these data are available and there is further advice from Natural England, there is no requirement for phosphorus neutrality or mitigation. Therefore, the River Test compensatory SAC habitat is therefore not discussed further in this report.

Relevant Impact Pathways

3.8 Based upon Natural England Site Improvement Plans and Supplementary Advice on Conservation Objectives, there are several pathways that require consideration regarding increased development within the Overton NDP area and said European sites. These are:

- Water pollution and hydrological changes (including nutrient neutrality)
- Air pollution impacts of atmospheric nitrogen deposition

'In Combination' Scope

3.9 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.

3.10 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation, i.e., to ensure that those projects or plans (which in themselves may have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in-combination assessment is therefore of greatest relevance when the plan or policy would otherwise be screened out because its individual contribution is inconsequential.

3.11 It is a requirement of the Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the internationally designated site(s) in question.

3.12 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e., to ensure that those projects or plans which in themselves have minor impacts are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. The overall approach is to exclude the risk of there being unassessed likely significant effects in accordance with the precautionary principle. This was first established in the seminal Waddenzee (CJEU, 2004) case.

3.13 For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects with potential for in combination likely significant effects are those schemes that have the following impact pathways: Public access and recreation pressure, air quality impacts, water pollution, hydrological changes and invasive species The following plans have been assessed for their in-combination impact to interact with the Overton Neighbourhood Development Plan:

- Basingstoke and Deane Borough Council (BDBC) Local Plan (adopted 2016) and the emerging Local Plan (2024-2039): These plans set out the strategic planning framework for the borough, including housing allocations that may have cumulative impacts on the Solent European sites through increased nutrient load in the River Test catchment, which drains into the Solent ((Basingstoke and Dean Borough Council, 2011).
- Local Plans for other authorities within the River Test catchment: These include the plans for Test Valley Borough Council and Winchester City Council, which, like Basingstoke & Deane, contribute to the cumulative nutrient load in the River Test catchment affecting the Solent European sites. Water Resource Management Plans (WRMPs) by relevant water companies: These plans assess the water abstraction and supply needs across the region and their potential impact on European sites, particularly concerning water levels and flows in the River Test and downstream into the Solent.
- Hampshire Local Transport Plan 2011 – 2031 (Hampshire County Council , 2011): This plan could have implications for air quality and traffic-related impacts, particularly in areas where key roads may run within 200m of sensitive European sites. Natural England's Nutrient Neutrality Guidelines for the Solent: This includes the guidance and the nutrient calculator, which are essential for assessing the potential impacts of wastewater discharge from new developments within the Overton Parish on the Solent European sites.

4. Test of Likely Significant Effects

Summary of Policy Screening

4.1 The Overton Neighbourhood Development Plan (ONDP) has a total of 15 policies. Of these, two policies and/or associated allocations had the potential to cause a likely significant effect and were discussed with regards to their impacts upon European sites. These policies are.

- Policy H1-Overton Settlement Boundary and Building in the Countryside: This policy supports development within the modified settlement boundary, including the allocation in Policy H3. The potential impact is tied to the increase in treated wastewater discharge affecting nutrient levels in the River Test and subsequently the Solent.
- Policy H2-Land at Portals Mill: Allocates approximately 340 dwellings on the Portals Mill site, which could significantly impact the nutrient levels in the River Test, affecting the Solent European sites.

4.2 Due to Overton's distance from the European sites and the specific context provided, public access, recreational pressure, air pollution impacts, and the loss of functionally linked habitats are not considered likely significant effects in this instance.

4.3 The test of likely significant effects will focus on these policies with regards to the vulnerabilities of the European sites within Table 1. The impact pathways relating to the European sites vulnerabilities are listed below and will each be discussed:

- Water pollution and Hydrological changes (including nutrient neutrality);

Water Quality

4.4 Increased amounts of housing or business development can lead to reduced water quality of rivers and estuarine environments. Sewage and industrial effluent discharges can contribute to increased nutrients on European sites leading to unfavourable conditions. In addition, diffuse pollution, partly from urban run-off has been identified during an Environment Agency Review of Consents process and a joint Environment Agency and Natural England evidence review (Environment Agency, 2007), as being a major factor in causing unfavourable condition of European sites.

4.5 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:

- At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour. Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity, and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the

marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen.

- Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.

4.6 At sewage treatment works, additional residential development increases the risk of effluent escape into aquatic environments in addition to consented discharges to the catchment. In many urban areas, sewage treatment and surface water drainage systems are combined, and therefore a predicted increase in flood and storm events could increase pollution risk.

4.7 The following sites are vulnerable to water resource and water quality impacts:

- Solent Maritime SAC
- River Itchen SAC
- Solent and Southampton SPA

4.8 The surface water catchment made available by Natural England indicates that Overton lies outside the River Itchen SAC catchment. However, it does lie within the catchment of the River Test and thus of the Solent European sites (Solent and Southampton Water SPA and Solent Maritime SAC). The River Test, which flows through Overton, ultimately drains into the Solent, meaning that any increase in nutrient levels or pollution from Overton developments could potentially affect these downstream European sites.

4.9 The Solent Maritime, and Solent and Southampton Water European sites are particularly vulnerable to water quality impact with specific regard to nutrient neutrality. This is discussed below.

Nutrient Neutrality

4.10 With the increase of new developments within the Overton NDP area, there is a potential for an increase strain on sewage and water treatment works. Achieving nutrient neutrality is one way to address the existing uncertainty surrounding the impact of new development on designated sites. Southern Water's Drainage and Wastewater Management Plan (DWMP) identifies that the discharge of nitrogen represents a threat to the condition of some European sites in the Solent (see Table 2 from Southern Water's DWMP). As highlighted previously, development in Overton Parish and its associated wastewater treatment system is in hydrological continuity with the Solent European sites (Southern Water, 2021; Overton WSW, 2013).

Table 2. European sites with site condition at risk from water quality impacts and which are hydrologically linked to Overton Parish

European site	
Solent Maritime SAC	Nitrate permit review required. Overflow Spills
Solent & Southampton Water SPA	No Threat/Remedy Identified or Anticipated

4.11 These European sites lie outside the 10km buffer used to identify potential impacts within the HRA. However, some impacts are further reaching and as the Parish is within the drainage catchment of the Solent European sites, there is a potential linking impact pathway. The River Test which lies within the Overton NDP, feeds into the above Solent European sites water systems and as such any new housing within the catchment of the Solent European sites may, without mitigation create a likely significant effect upon these sites. **Therefore, the ONDP cannot be screened out and nutrient neutrality will be discussed further within the Appropriate Assessment.**

Air Pollution Impacts

4.12 The only qualifying feature in the River Itchen SAC that would be using the River Test compensation sites and which is sensitive to atmospheric pollution are southern damselfly. APIS identifies that the species is associated with a nitrogen Critical Load of 5-15 kg N/ha/yr. However, as highlighted before, the habitat features on which southern damselfly rely in the atypical river margin are primarily phosphorus- rather than nitrogen-limited. Any increase in traffic volumes due to the Overton NDP would not lead to an increase in phosphorus concentrations.

4.13 It should also be noted that Overton Parish lies relatively far from the closest compensation site in the River Test catchment (Bourne Rivulet, approximately 6.8km distant) and only a small quantum of development is specified in the NDP. Together with a lack of major roads within 200m of this watercourse, this is taken to conclude that there will be no LSEs of the Overton NDP on the River Itchen SAC regarding atmospheric pollution (via impacts on the River Test compensatory sites. This impact pathway is screened out from Appropriate Assessment.

5. Appropriate Assessment In-combination

Water Quality

5.1 The high levels of nitrogen input to the water environment in the Solent catchment is generally currently caused by wastewater from existing housing and agricultural sources. There are a number of mechanisms already in place to reduce the amount of nutrient inputs within the river and lake catchments and coastal waterbodies. Within the Solent catchment both the Department for Environment, Food and Rural Affairs (DEFRA) and partnership funded Catchment Sensitive Farming (CSF) programmes work with agriculture to reduce diffuse agricultural sources of pollution such as fertiliser and slurry run-off. One of the aims of this work is to deliver environmental benefits from reducing diffuse water pollution. To achieve these goals the CSF partnership delivers practical solutions and targeted support which should enable farmers and land managers to take voluntary action to reduce diffuse water pollution from agriculture to protect water bodies and the environment.

5.2 Any new residential or employment development in Overton as a result of the Neighbourhood Plan has potential to result in increased levels of nutrients entering the Solent catchment zone. While the level of development in the NDP is moderate (340 net new dwellings), this could operate 'in combination' with all other existing and future development connected to Overton WwTW.

5.3 Natural England advises that a nutrient budget (TN) can be calculated for new developments and has provided a guidance document to enable this to be calculated (Natural England, 2024). Such a calculation has been undertaken for this NDP and is included in Appendix C. This can be used to show that development either avoids harm to protected sites from water quality issues or will need to provide mitigation required to ensure that there is no adverse effect with respect to nutrients. It will then be for the applicant to ensure that such mitigation is identified before their planning application is submitted.

5.4 Currently, Overton WwTW operates under a nitrogen Environmental Permit of 25 mg TN/litre. Using this information, nutrient calculations for the allocation of 340 net new residential dwellings within the proposed development sites indicate that the Total Nitrogen Budget for the proposed development is 390.84 kg TN/year when compared to the 'no change' in existing land use scenario. Therefore, the development will generate additional nitrogen, and appropriate mitigation will be required.

Table 3. Proposed Development Sites Nutrient Calculation Further Information

Proposed Development Reference and Name	Number of New Dwellings	Further Information
Portals Mills Site	340	Calculations indicate that the development of the site will, without mitigation, lead to a Total Nitrogen Budget for the proposed development of 390.84 kg/yr when compared to the 'no change' in existing land

use scenario. Therefore, the development will generate additional nitrogen and mitigation is required.

5.5 The results of the above site nutrient calculations show that the allocated site at Portals Mill will result in an increase in nitrogen levels with the current development plans. This suggests that the development will require appropriate mitigation to achieve nutrient neutrality.

5.6 Note that the calculations make a series of broad assumptions about a) the existing habitats on site (and thus the amount of phosphorus they currently release into the catchment) and b) how each site is to be developed (the areas to be altered) and thus the future balance between areas of housing and areas of retained greenspace. Therefore, the calculations undertaken for this report would need to be re-run by the applicants for each housing scheme and planning application as each scheme is developed and a detailed masterplan becomes available.

5.7 To address nutrient neutrality, developers in Overton will be required to demonstrate that new developments will not increase nitrogen levels, or they must implement mitigation measures to achieve nutrient neutrality. This is particularly pertinent given that Overton WwTW does not discharge directly into the River Test but into the groundwater, which has a lower risk of nutrient pollution due to natural attenuation processes in the soil.

5.8 The Basingstoke & Dean Local Plan makes the following observations or policies relevant to Overton: “The provision of wastewater treatment capacity in the Itchen and Test catchments is a statutory obligation on Southern Water, and it is required to comply with all relevant discharge consents. The Basingstoke & Dean Local Plan Update contributes to the wastewater treatment planning process by providing certainty for Southern Water (through the allocations process) but does not (and cannot) directly influence or control Southern Water’s plans for service delivery. The Local Plan Update therefore adopts a policy-led mitigation approach to this aspect, to ensure that this potential issue is appropriately considered at the site level when developments are bought forward.

5.9 The draft Local Plan Update therefore includes policies that are designed to prevent or moderate impacts on receptors due to changes in water quality, and which reflect Natural England guidance; these include the following:

- ENV4 (Nutrient Neutrality): This requires that new dwellings and development resulting in a net increase in population (including student accommodation, and tourist attractions and accommodation) served by a wastewater system that will discharge into the River Test and Itchen catchment will be required to demonstrate nutrient neutrality through the submission of a nutrient budget(s) in order to ensure that there is no adverse impact on the integrity of the [River Itchen SAC or the Southampton Water sites].
- ENV9 (Water Quality): This requires that “potentially contaminating development proposals on principal aquifers or within Source Protection Zones will need to demonstrate that groundwater and surface water is adequately protected to prevent a deterioration of water quality and

pollution of the water source". In addition, the policy requires that "Where new water supply or wastewater infrastructure is required or proposed in support of new development, the development will be phased alongside the provision of the infrastructure to ensure… Compliance with the Habitats Regulations.

- Policy SPS5.10 (Overton Mill): This requires that this allocation "Demonstrate, via a nutrient neutrality mitigation strategy, that nutrient neutrality can be achieved in perpetuity in order to protect the Solent nature conservation sites. This should be via on-site mitigation measures unless it can be robustly demonstrated that this is not achievable, in which case off-site mitigation would be required.**"** Although the increase in net new dwellings within the ONDP area could act in combination with plans outside of the NDP area, the in combination effect is captured by the nutrient neutrality methodology. If the developer adheres to the recommended mitigation strategies, the Overton NDP will not cause an adverse effect upon the integrity of any European site either alone or in combination with other plans and projects in relation to water quality and nutrient neutrality. It is therefore recommended that the wording above regarding Overton Mill is also included in the Neighbourhood Plan. Note that this suggested wording would be subject to Examination and amendment along with all other elements of the plan.

6. Conclusion

6.1 The ONDP has a total of 15 policies. Of these policies, 2 had the potential to cause a likely significant effect and were discussed with regards to their impacts upon European sites. These sites were;

- Policy H1-Overton Settlement Boundary and Building in the Countryside: This policy supports development within the modified settlement boundary, including the allocation in Policy H3. The potential impact is tied to the increase in treated wastewater discharge affecting nutrient levels in the River Test and subsequently the Solent. ;
- Policy H2-Land at Portals Mill: Allocates approximately 340 dwellings on the Portals Mill site, which could significantly impact the nutrient levels in the River Test, affecting the Solent European sites.

6.2 The test of likely significant effects focused on the above policies with regards to the vulnerabilities of the European sites within Table 1. The impact pathways relating to the European site's vulnerabilities are listed below:

- Water quality (including nutrient neutrality)

6.3 The policies were found to have a potential likely significant effect upon the European sites within Table 1 with regards to the following impact pathways, air quality impacts of atmospheric nitrogen deposition and water quality and hydrological changes (including nutrient neutrality) in-combination with other plans and project. These pathways and the policies were discussed within the Appropriate Assessment.

6.4 The overarching Local Plan – Basingstoke and Deane Borough Council Local Plan 2011-2029 (adopted in 2016) includes protective policies for European sites, particularly with respect to Overton, which is situated within an environmentally sensitive area where the River Test SSSI, flows through. The HRA of this Plan concluded that the proposed growth in Overton would not cause likely significant effects upon any European sites, either alone or in combination with other plans and projects. Since the Overton Neighbourhood Development Plan (NDP) adheres to the housing allocations and policies within the Local Plan, it can be concluded that the NDP will not adversely impact European sites, either alone or in combination with other plans and projects.

6.5 This HRA does however make a recommendation to strengthen the protection of the NP itself by adding a policy with regards to European site protection and nutrient neutrality. Those recommendations (in bold throughout this document) would need including in the Neighbourhood Plan for it to contain a sufficient policy framework to ensure no adverse effect on integrity of European sites arises from the allocations in the plan. Note that this suggested wording would be subject to Examination and amendment along with all other elements of the plan.

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Overton Neighbourhood Development Plan

Appendix A European Sites Background

River Itchen SAC

Conservation Objectives[1]

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

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

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

Qualifying Features[2]

The following features are reasons for designation as an SAC:

Annex I habitats that are primary reason for selection of this site:

- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

Annex II species that are a primary reason for selection of this site:

- Southern damselfly (*Coenagrion mercuriale*)
- Bullhead (*Cottus gobio)*

Annex II species present as a qualifying feature, but not a primary reason for site selection:

- White-clawed (or Atlantic stream) crayfish (*Austropotamobius pallipes*)
- Brook lamprey (*Lampetra planeri*)
- Atlantic salmon (*Salmo salar*)
- Otter (*Lutra lutra*)

[1] http://publications.naturalengland.org.uk/publication/5130124110331904 (Assessed 23/02/2022)
[2] River Itchen - Special Areas of Conservation (jncc.gov.uk) (Assessed 23/02/2022)

Environmental Vulnerabilities[3]

The threats and pressures likely to affect the SAC are listed below:

- Water pollution
- Physical modification
- Siltation
- Overgrazing
- Water abstraction
- Inappropriate weed control
- Hydrological changes
- Inappropriate water levels
- Change in land management
- Inappropriate cutting / mowing
- Invasive species
- Undergrazing
- Inappropriate ditch management
- Inappropriate scrub control
- Forestry and woodland management

Solent Maritime SAC

Conservation Objectives[4]

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

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

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

[3] publications.naturalengland.org.uk/file/5665158219169792 (Assessed 23/02/2022)
[4] http://publications.naturalengland.org.uk/file/5336347464433664 (Assessed 14/03/2022)

- The distribution of qualifying species within the site.

Qualifying Features[5]

The following features are reasons for designation as an SAC:

Annex I habitats that are a primary reason for selection of this site:

- Estuaries
- Spartina swards (Spartinion maritimae)
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:

- Sandbanks which are slightly covered by sea water all the time
- Mudflats and sandflats not covered by seawater at low tide
- Coastal lagoons * Priority feature
- Annual vegetation of drift lines
- Perennial vegetation of stony banks
- Salicornia and other annuals colonizing mud and sand
- "Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")"

Annex II species present as a qualifying feature, but not a primary reason for site selection:

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

Environmental Vulnerabilities[6]

The threats and pressures likely to affect the SAC are listed below:

- Public Access/Disturbance
- Coastal squeeze
- Fisheries: Commercial marine and estuarine
- Water Pollution
- Changes in species distributions
- Climate change
- Change to site conditions
- Invasive species
- Direct land take from development
- Biological Resource Use

[5] Solent Maritime - Special Areas of Conservation (jncc.gov.uk) (Assessed 14/03/2022)
[6] http://publications.naturalengland.org.uk/file/5319610920337408 (Assessed 14/03/2022)

- Change in land management
- Inappropriate pest Threat control
- Air Pollution: impact of atmospheric nitrogen deposition
- Hydrological changes
- Direct impact from 3rd Threat party
- Extraction: non-living resources

Solent & Southampton Water SPA

Conservation Objectives[7]

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

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

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

Qualifying Features[8]

The following features are reasons for designation as an SPA:

- Dark-bellied brent goose (Non-breeding) *Branta bernicla bernicla*;
- Eurasian teal (Non-breeding) *Anas crecca*;
- Ringed plover (Non-breeding) *Charadrius hiaticula;*
- Black-tailed godwit (Non-breeding) *Limosa limosa islandica*;
- Mediterranean gull (Breeding) *Larus melanocephalus;*
- Sandwich tern (Breeding) *Sterna sandvicensis*;
- Roseate tern (Breeding) *Sterna dougallii*;
- Common tern (Breeding) *Sterna hirundo*;
- Little tern (Breeding) *Sterna albifrons*;

[7] http://publications.naturalengland.org.uk/file/5932771361161216 (Assessed 14/03/2022)
[8] http://publications.naturalengland.org.uk/file/5932771361161216 (Assessed 14/03/2022)

Environmental Vulnerabilities[9]

The threats and pressures likely to affect the SPA are listed below:

- Public Access/Disturbance
- Coastal squeeze
- Fisheries: Commercial marine and estuarine
- Water Pollution
- Changes in species distributions
- Climate change
- Change to site conditions
- Invasive species
- Direct land take from development
- Biological Resource Use
- Change in land management
- Inappropriate pest Threat control
- Air Pollution: impact of atmospheric nitrogen deposition
- Hydrological changes
- Direct impact from 3rd Threat party
- Extraction: non-living resources

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[9] http://publications.naturalengland.org.uk/file/5319610920337408 (Assessed 14/03/2022)

Appendix B Policy Screening

Table 6. Overton Neighbourhood Plan Policy Screening

Policy Name	Brief Policy Description	Potential Likely Significant Effect?
H1 - Overton Settlement Boundary and Building in the Countryside	This policy supports development within the settlement boundary and seeks to maintain the rural character of Overton.	Potential likely significant effects. The policy involves a significant development that may affect nearby European sites due to its scale and proximity
H2 - Land at Portals Mill	This policy allocates land at Portals Mill for a mixed-use development including approximately 340 dwellings.	Potential likely significant effects. The policy involves a significant development that may affect nearby European sites due to its scale and proximity
H3 - Residential Garden Land Development	This policy regulates development on residential garden land within the settlement boundary to maintain local character.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathway.
H4 - Housing Mix and Provision of Smaller Homes	This policy encourages a mix of housing types to meet local needs, with a focus on smaller homes.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathway.
H5 - The Overton Design Code	This policy ensures that new development is consistent with the Overton Design Code, which emphasizes high-quality design and local distinctiveness.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathway.
H6 - Net Zero Carbon Buildings	This policy encourages developments to be ‘zero carbon ready’ and incorporate energy-efficient designs.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathway.
LEB1 - Local Landscape	This policy supports development that is sympathetic to the character and visual amenity of the local landscape.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
LEB2 - River Test SSSI and Wastewater	This policy requires new developments to demonstrate nutrient neutrality due to the proximity of the River Test SSSI.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways..
LEB3 - Important Views	This policy protects important views within and around Overton,	No likely significant effects.

Policy Name	Brief Policy Description	Potential Likely Significant Effect?
	ensuring new developments do not significantly impact these views.	The policy is a development management policy and does not have any linking impact pathways.
LEB4 - Biodiversity, Geodiversity and Nature Conservation	This policy encourages development to improve biodiversity and incorporates green infrastructure.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
LEB5 - Public Rights of Way (PRoW)	This policy protects existing public rights of way and encourages new ones in development proposals.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
ATP1 - Access Transport and Parking	This policy supports development that increases opportunities for active travel and addresses car parking needs.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
ATP2 - Car Parking Provision	This policy requires development proposals to provide sufficient car parking based on local needs.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
VB1 - Supporting Overton as a Thriving Business Centre	This policy supports the retention and creation of businesses and community facilities in the village centre.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
VB2 - Protecting the Historic Village Centre for Retail and Hospitality	This policy resists the change of use from commercial to residential in the village centre unless viability tests are met.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.

Appendix C Neutrality Calculations

Approved Sites

Policy H3

Stage 1 – Water Infrastructure Information

Water infrastructure information	
Description of required information	**Data entry column - user inputs required**
Date of first occupancy (dd/mm/yyyy):	
Average occupancy rate (people/dwelling or people/unit):	2.40
Water usage (litres/person/day):	120
Development proposal (dwellings/units):	340
Include deductible acceptable loading?	Yes
Wastewater treatment works:	Overton Wastewater Treatment Works
Current wastewater treatment works N permit (mg TN/litre):	**25.00**
Not applicable	**Not applicable**
Post 2030 WwTW N permit (mg TN/litre):	**8**
Final calculation of nutrient load from wastewater	
Description of values generated	**Values generated**
Post-2030 wastewater nutrient loading	
Additional population (people):	**816.00**
Wastewater by development (litres/day):	**97920.00**
Annual wastewater TN load (kg TN/yr):	**257.51**
Pre-2030 wastewater nutrient loading	
Annual wastewater TN load (kg TN/yr):	**894.13**
Not applicable	
Not applicable	**Not applicable**

Stage 2 – Current Land-use

Current land use information	
Description of required information	**Data entry column - user inputs required**
Operational catchment:	Upper and Middle Test
Soil drainage type:	Freely draining
Annual average rainfall (mm):	750.1 - 800
Within nitrate vulnerable zone (NVZ):	Yes

Current land uses			
Existing land use type(s) - user inputs required	**Area (ha) - user inputs required**	**Annual nitrogen nutrient export (kg TN/yr)**	**Notes on data**
Commercial/industrial urban land	22.00	**169.50**	Not applicable

Stage 3 – Future Land-use

Future land uses		
New land use type(s) - user inputs required	**Area (ha) - user inputs required**	**Annual nitrogen nutrient export (kg TN/yr)**
Residential urban land	15.00	**216.69**
Greenspace	7.00	**21.00**
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
Totals:	**22.00**	**237.69**

Stage – Final Nutrient Budgets

Total nutrient budget calculations	
Description of values generated	**Values generated**
Wastewater TN load (kg TN/year):	**257.51**
Net land use TN change (kg TN/year):	**68.19**
TN budget:	**325.70**
TN budget + 20% buffer:	**390.84**
Annual nutrient budget	
The total annual nitrogen load to mitigate is (kg TN/yr):	**390.84**
Pre-2030 nutrient budget	
The total annual nitrogen load to mitigate is (kg TN/yr):	**1154.78**
Not applicable	
Not applicable	**Not applicable**

Overton Neighbourhood Development Plan

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