

Horsham District Council
Habitats Regulations Assessment (HRA) Screening Matrix and Appropriate Assessment

PLEASE NOTE: This screening relates only for potential impacts from water resources on the Arun Valley SAC/ SPA/Ramsar sites and does not consider impacts on any other designated habitat sites. A separate HRA screening will be required for development affecting other SPAs, SACs, or Ramsar sites.

It is the responsibility of the Competent Authority (in this case Horsham District Council) to prepare a HRA report and it is the responsibility of the applicant to provide information to support this process.

This HRA Appropriate Assessment template is for use where a planning application will result in additional demand for mains water being created in the Sussex North Water Supply Zone that is predicted to adversely impact the Arun Valley SAC/ SPA/Ramsar sites.

The purpose of this HRA screening record is to assess the need for appropriate assessment in relation to the project detailed below.

The Conservation of Habitats and Species Regulations 2017 (as amended) requires that a Habitats Regulations Assessment screening is carried out in relation to any plan or project which is likely to have a significant effect on Habitats (European) sites, either alone or in combination with other plans or projects. Habitats sites are Special Protection Areas and Special Areas of Conservation. Ramsar sites should also be given the same level of protection, as stated within the National Planning Policy Framework.

In line with the Court judgement (CJEU *People Over Wind v Coillte Teoranta* C-323/17), mitigation measures cannot be taken into account when carrying out a screening assessment to decide whether a development is likely to result in significant effects on a Habitats site.

Where an Appropriate Assessment is carried out a project may only be authorised after having ascertained that it will not adversely affect the integrity of the site(s) concerned.

Table 1: HRA Screening matrix for water neutrality

Stage 1 HRA screening	
Brief description of the development project	<p>Planning Application: DC/25/0523</p> <p>Development Description: Erection of 18no. 2, 3 and 4 bedroom dwellings, (including 6no. affordable housing units), together with access from East Street, vehicle and cycle parking, landscaping and open space, and sustainable drainage.</p> <p>Location: Land North of East Street, Ruster</p> <p>Type of application: Full (Major)</p>
Details of the development project	<p>Proximity to Arun Valley SAC / SPA / Ramsar: Is the application site:</p> <p>A) Within the Sussex North Water Supply Zone (WSZ) Yes</p> <p>B) Arun Valley SAC / SPA / Ramsar potentially impacted by the planning application:</p>

	<p>Yes there is credible evidence of a real risk that the proposal will, without measures to minimise water use and water offsetting, result in an increase in water demand.</p> <p>C) Is the planning application directly connected with or necessary to the management of the Arun Valley SAC/SPA/Ramsar site? No</p>
<p>Brief description of the Habitats sites within scope of this assessment</p>	<p>Arun Valley SAC, SPA and Ramsar site supports rare and diverse plant, invertebrate and bird assemblages as qualifying features. It consists of low-lying grazing marsh, largely on alluvial soils, but with an area of peat derived from a relict raised bog. Variation in soils and water supply lead to a wide range of ecological conditions and hence a rich flora and fauna.</p> <p>Further details are provided in Appendix 1.</p>
<p>Key vulnerabilities / factors affecting site integrity</p>	<p>For applications where increased demand for water resources is the only pathway for impacts, Natural England's substantive advice (Position Statement Interim Approach, September 2021) is that such applications - without mitigation - will result in a likely significant effect on the Arun Valley SAC/SPA/Ramsar site either alone or in combination with other developments in the Sussex North WSZ. As it cannot be concluded that the existing abstraction within Sussex North Water Supply Zone is not having an impact on the Arun Valley sites, developments within this zone must not add to this impact. Therefore, such applications, even where mitigation is proposed, must progress to Appropriate Assessment (AA).</p> <p>Natural England's Position Statement (September 2021) is that the Sussex North Water Supply Zone includes supplies from a groundwater abstraction which cannot, with certainty, conclude no adverse effect on the integrity of;</p> <ul style="list-style-type: none"> • Arun Valley Special Area Conservation (SAC) • Arun Valley Special Protection Area (SPA) • Arun Valley Ramsar Site

HRA Screening Assessment Criteria

<p>The individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Arun Valley SAC, SPA and Ramsar site</p>	<p>Based on the threat from water demand identified by Natural England's Position Statement, the development proposals need assessment for hydrological changes to the Arun Valley SAC/ SPA/ Ramsar site.</p> <p>For applications, does the evidence show any likely significant effect on Arun Valley SAC/SPA/Ramsar site, without mitigation measures (either alone or in-combination with other plans or projects)? Yes</p> <p>Test 1 the significance test below has been completed as the evidence shows a likely significant effect on Arun Valley SAC/SPA/Ramsar site, without mitigation measures (in-combination with other plans or projects).</p>
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<p>Test 1 the significance test:</p> <ul style="list-style-type: none"> – Can a judgement be made as to whether there could be any potential significant impacts of the development on the integrity of the Arun Valley SPA/SAC/Ramsar. 	<p>Following the CJEU ruling People over Wind, it is no longer lawful to take into account any avoidance and mitigation measures as part of the application at this stage of HRA.</p> <p>For applications where increased demand for water resources is the only mechanism of impact, Natural England's advice is that such applications - without mitigation - will have a likely significant effect on the Arun Valley SAC/SPA/Ramsar site in combination with other developments in the Sussex North WSZ.</p> <p>Therefore, such applications, even where mitigation measures (minimise water use and water offsetting) are proposed, will progress directly to Stage 2 Appropriate Assessment to consider, with mitigation, the impacts of the development on mains water usage on the above designated sites, either alone or in combination with other plans and projects.</p> <p>Explanation:</p> <p><u>Anticipated Demand:</u></p> <p>Planning permission is sought for the provision of 18x dwellings together with associated infrastructure. The applicant site currently comprises of undeveloped land in agricultural use and maintained as grassed paddock. The submitted Water Neutrality Statement (WNS) models existing mains-water consumption associated with the existing use of the site for agricultural purposes as nil. In the absence of any evidence as to historic mains-water consumption, a representation of existing demand as nil is agreed as an appropriately precautionary approach.</p> <p>The accommodation schedule submitted in support of the proposals details the following housing mix:-</p> <table border="1"> <thead> <tr> <th>Dwelling Size</th><th>Number</th><th>Assumed Occupancy Rate (Census data)</th><th>Assumed Population (Number x Assumed Occupancy Rate)</th></tr> </thead> <tbody> <tr> <td>1 Bedroom</td><td>0</td><td>1.32</td><td>0</td></tr> <tr> <td>2 Bedroom</td><td>8</td><td>1.88</td><td>15.04</td></tr> <tr> <td>3 Bedroom</td><td>8</td><td>2.47</td><td>19.76</td></tr> <tr> <td>4 Bedroom</td><td>2</td><td>2.86</td><td>5.72</td></tr> <tr> <td>5 Bedroom</td><td>0</td><td>3.09</td><td>0</td></tr> <tr> <td>Totals</td><td>18</td><td></td><td>40.52</td></tr> </tbody> </table> <p>In the absence of any mitigation measures, and assuming that dwellings are constructed to a standard compliant with the optional requirement of 110 litres/person/day prescribed at Part G of the Building Regulations, the proposed development is predicted to result in a total anticipated mains-water demand of 4,457.2 litres/day.</p> <p>In relation to a nil baseline (pre-development) position, in the absence of any mitigation measures, the proposed development would result in a material increase in demand for mains-water within the Water Supply Zone. The proposed development, therefore, would contribute to the possible adverse</p>	Dwelling Size	Number	Assumed Occupancy Rate (Census data)	Assumed Population (Number x Assumed Occupancy Rate)	1 Bedroom	0	1.32	0	2 Bedroom	8	1.88	15.04	3 Bedroom	8	2.47	19.76	4 Bedroom	2	2.86	5.72	5 Bedroom	0	3.09	0	Totals	18		40.52
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	<p>effect upon the integrity of the Arun Valley SAC, SPA and Ramsar designations associated with public groundwater abstraction. It is, subsequently, necessary to consider the efficacy of proposed mitigations advanced in support of the proposed development by way of appropriate assessment, and as to whether those measures are sufficient to prevent a resultant adverse effect upon the integrity of the Arun Valley SAC, SPA and Ramsar designations.</p>
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Stage 2 Appropriate Assessment

The above Stage 1 HRA screening has determined that a Likely Significant Effect is predicted at Arun Valley SAC/SPA/Ramsar site as a result of impacts on water quantity. This pathway has been screened in, and the potential for adverse effects on site integrity, either alone or in-combination will be assessed.

Therefore, this section of the report to inform HRA Stage 2 only discusses the potential for impacts on water quantity as a result of the proposed development.

<p>Potential for Adverse Effects On the Integrity (AEOI) of a Habitats site from the development alone or in combination.</p>	<p>Supplementary advice on conserving and restoring site features for Arun Valley SAC/SPA sets a number of targets for the site under the supporting the Conservation Objectives in order that the integrity of the sites is maintained or restored as appropriate, and ensure that the sites contribute to achieving the Favourable Conservation Status of the Qualifying Features.</p> <p>The targets cover hydrology and flow, water quantity, area depth and water quality. The hydrology of the river Arun is the major factor affecting these targets and this is turn is affected by the abstraction at Hardham for the supply of drinking water. Continued or increased levels of groundwater abstraction at Hardham reduces water quantity in the Arun Valley sites and adversely affects water levels and flow within the sites (in combination with other plans and projects in the Sussex North WRZ).</p> <p>Without an alternative sustainable water supply or mitigation measures, the hydrology of the sites will be unable to maintain the types and extents of habitats required to maintain the Qualifying Features.</p>
<p>Detailed Consideration – Anticipated Consumption</p>	<p><u>Anticipated Mains Consumption (No Mitigations):</u></p> <p>As reasoned within the preceding Stage of this Assessment it is considered that the proposed development would give rise to a demand of 4,457.2 litres/day in the absence of any mitigation measures.</p>
<p>Detailed Consideration – On Site Mitigations</p>	<p><u>On-Site Mitigations:</u></p> <p>The WNS submitted in support of the proposed development details various mitigations intended to reduce and/or offset increased mains-water demand resulting from the proposals. This assessment will consider 'on-site' mitigations first before considering 'off-site' mitigations.</p> <p><u>Efficiency Measures:</u></p>

	<p>The WNS specifies the use of individual installations to be utilised within proposed dwellings at Appendix F, the performance of which is subsequently reflected within a calculation undertaken pursuant to Part G of the Building Regulations at Table 4.1. The WNS advances that these efficiency measures (in isolation) would reduce water demand to 84.45 litres/person/day.</p> <p>The calculation included at Table 4.1 of the WNS is considered to be correctly performed and incorporates appropriate 'placeholder' values for unspecified washing machine and dishwasher installations. The specified installations at Appendix F to the WNS are freely available on the open-market and provide confidence that individual capacity/flow-rate values recorded at Table 4.1 to the WNS are realistically achievable. Without regard to any other mitigations, therefore, it is considered that a standard of 84.45 litres/person/day is achievable, with this value noted to be broadly consistent with efficiency standards advanced in association with development elsewhere within the District. Efficiency measures, therefore, would be expected to result total demand associated with the proposed development to 3,421.9 litres/day. In the absence of additional 'on-site' measures this represents residual usage associated with the proposed development and which must be offset elsewhere within the Sussex North WRZ.</p>
Detailed Consideration – Off Site Mitigations	<p><u>Off-Site Mitigations:</u></p> <p>The submitted WNS proposes two avenues by which residual usage associated with the development could be offset. First, by reliance on mains-water savings delivered through the introduction of a private borehole to service existing consumption at Slade Farm, Rogate, and, second, alternatively, by reliance on the acquisition of credits made available through the Sussex North Water Certification Scheme (SNWCS) (formerly SNOWS).</p> <p><u>Slade Farm:</u></p> <p>Slade Farm is a mixed arable and livestock farm found at the western extent of the Sussex North WRZ a short distance east of Petersfield within the administrative area of Chichester District Council. As detailed within the submitted WNS, farming activity at Slade Farm is currently serviced solely by mains water and does not currently rely on rainwater collection and/or private borehole.</p> <p>Meter readings provided in respect of the existing farm operation detail a mains-water consumption of 5,562m² (5,562,000 litres) for the 730-day period of August 2022 to August 2024. This is verified through the provision of relevant bills at Appendix G to the WNS (which contain meter data) and demonstrates an average daily consumption of 7,619 litres/day for the 730-day period. Given the significant length of time over which meter readings are available, which include periods of summer and winter activity, it is considered that the 7,619 litre/day average purported within the WNS can be considered an accurate representation of existing usage.</p> <p>As detailed within the WNS, the proposals involve servicing existing agricultural consumption at Slade Farm (comprising machinery washing, crop-spraying and livestock drinking) by way of a water-supply borehole installed in January 2025.</p> <p>The applicant intends to rely on a proportion of savings (3,421.9 litres/day) delivered through reliance on the water-supply borehole, broadly equivalent to</p>

	<p>45% of the total mains-water savings delivered through the installation of the borehole. This would prove sufficient to offset residual usage associated with the proposed development.</p> <p>The borehole driven at Slade Farm targets the aquifer contained within the Hythe Formation, a designated principal aquifer. The designated status of the aquifer suggests that significant yields should be achievable, as further supported by pumping tests undertaken in relation to the borehole which was able to sustain abstraction at a rate of 3,000 litres/hour (significantly greater than the 7,619 litres/day required) without drawdown for the duration of the pumping test. (included as Appendix I to the submitted WNS).</p> <p>Various Theis approximations, further, have been submitted in support of the Slade Farm borehole and which collectively indicate a sustainable abstraction range of 187.74 - 556.739m³/day, substantially in excess of the need of Slade Farm. This is considered unsurprising given the principal aquifer status of the Hythe Formation and its utilisation for public mains-water supplies within the Sussex North WRZ.</p> <p>It is, therefore, considered that sufficient and sustainable yield could be obtained from the Slade Farm borehole to sustain the needs of relevant agricultural activity.</p> <p>While it is acknowledged that the Slade Farm borehole targets the same aquifer as Southern Water's own abstractions, it is not considered that the use of the private borehole would directly contribute to the drying of the Arun Valley sites. Even assuming a high degree of transmissivity within the aquifer, the borehole remains in excess of 25km of the Arun Valley designations. Source Protection Zone (SPZ) catchments plotted in associated with two nearby (disused) Southern Water extend to the north. This is suggestive that this part of the Hythe aquifer is principally sustained by the collection of surface water leading from the north of Slade Farm as opposed to east/west collection or transmission from other parts of the Hythe aquifer. The introduction of an additional source of abstraction, and of the non-strategic scale detailed within the WNS, therefore, is not considered to contribute to the existing possible adverse effect upon the integrity of the Arun Valley SAC, SPA and Ramsar.</p> <p>The borehole prognosis report provided in conjunction with the proposals suggests that tested water was of good quality with no parameters exceeding drinking water standards. Chichester District Council's Environmental Health team have not commented on the proposals, though, given the intended use of abstracted water for non-human consumption it is not considered that absolute certainty is required in relation to drinking water standards at this stage of consideration. Details of further testing and treatment measures can be secured by way of appropriately worded planning condition if required.</p> <p>Overall, it is considered that the proposals at Slade Farm would prove sufficient to offset the anticipated 'residual' needs of the development without contributing to adverse habitat effects and that groundwater supplies would prove appropriately resilient relative to their intended function.</p> <p><u>SNWCS:</u></p> <p>The WNS identifies that the proposals meet the access criteria for the purchase of credits made available through the Sussex North Water Certification Scheme (SNWCS). This is agreed, with the prospect of the purchase of sufficient credits within SNWCS deemed to constitute a viable alternative to offsetting the residual</p>
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	<p>consumption of the development proposals without reliance on measures at Slade Farm.</p>
Overall Conclusion	<p><u>Overall Conclusion:</u></p> <p>Subject to the release of relevant credits to the proposed development (either via the Slade Farm scheme or pursuant to SNWCS) in advance of the commencement of development it is considered that the proposals would achieve net-neutrality in respect of the use of mains water resources. An appropriately worded 'grampian' style planning condition can be incorporated to the development proposals to ensure that no development takes place unless and until the release of relevant credits is secured.</p> <p>The proposed development, therefore, is not considered to adversely effect the integrity of the Arun Valley SPA, SAC and Ramsar designations, alone or in combination with other plans and projects, such as to demand a refusal of planning permission pursuant to Regulation 63(5) of the Conservation of Habitats and Species Regulations 2017 (as amended).</p>

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Approving Planner: Giles Holbrook

Date: 06.08.2025

DISCLAIMER: This information has been produced by Place Services's Ecology Team on behalf of Horsham District Council, at their request.

Appendix 1 – details of Arun Valley SAC/SPA/Ramsar site

Qualifying Features for SPA/SAC	<p>Arun Valley SPA</p> <p>A037 Bewick's swan, <i>Cygnus columbianus bewickii</i> (non-breeding). During the time of site notification, the SPA supported 115 individuals representing at least 1.6% of the wintering population in Great Britain (5 year peak mean 1992/93 - 1996/97).</p> <p>During the non-breeding season, the SPA regularly supports an assemblage of waterfowl with the area regularly supporting 27,241 individual waterfowl (5 year peak mean for 1992/93 to 1996/97) including: Shoveler <i>Anas clypeata</i>, Teal <i>Anas crecca</i>, Wigeon <i>Anas penelope</i>, Bewick's Swan <i>Cygnus columbianus bewickii</i>.</p> <p>Arun Valley SAC</p> <p>4056 Little Whirlpool Ramshorn snail <i>Anisus vorticulus</i> <i>Anisus vorticulus</i> occurs across a range of sites in southern and eastern England. The Arun valley is one of the three main population centres for this species in the UK. This proposed site includes two of its core sites in the wash lands of the Arun floodplain (Pulborough Brooks and Amberley Wild Brooks SSSIs).</p>
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Qualifying Features for Ramsar	<p>Arun Valley Ramsar</p> <p>Ramsar criterion 2</p> <p>The site holds seven wetland invertebrate species listed in the British Red Data Book as threatened. One of these, <i>Pseudamnicola confusa</i>, is considered to be endangered. The site also supports four nationally rare and four nationally scarce plant species</p> <p>Ramsar criterion 3</p> <p>In addition to the Red Data Book invertebrate and plant species, the ditches intersecting the site have a particularly diverse and rich flora. All five British duckweed (<i>Lemna</i> species), all five water-cress (<i>Rorippa</i> species), and all three British water milfoils (<i>Myriophyllum</i> species), all but one of the seven British water dropworts (<i>Oenanthe</i> species), and two-thirds of the British pondweeds (<i>Potamogeton</i> species) can be found on site.</p> <p>Ramsar criterion 5</p> <p>Assemblages of international importance: Species with peak counts in winter: 13774 waterfowl (5 year peak mean 1998/99-2002/2003)</p>
Conservation Status of the relevant Qualifying Features	<p>Arun Valley SAC, SPA and Ramsar</p> <p>In line with the national trend, the number of Bewick's swans wintering in the Arun Valley has declined since the time of designation and is now typically fewer than 50 birds. This may reflect an overall decline in the population of the species and/or be due to the effects of a milder climate in which more are able to winter in continental Europe (The Birds of Sussex, 2014). The waterfowl assemblage numbers fluctuate depending upon conditions in the valley but over the past five years have averaged 40,311, an increase from the five year mean of 27,241 at the time of designation.</p> <p>The Arun Valley is one of the remaining strongholds for the Little Whirlpool Ramshorn Snail.</p>
Conservation Objectives (Only Relevant for SPA/SAC)	<p>Arun Valley SAC & SPA</p> <p>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;</p> <ul style="list-style-type: none"> • 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.