

**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	Application: HRA/22/0024 Planning Application: Regulation 77 of the conservation of habitats and species Regulations 2017 in respect of Prior Approval DC/21/2795 Location: Oakwood Farm, East Street, West Chiltington RH20 2LU Type of application: HRA
Details of the development project If yes to C, then the applicant should have provided evidence and justification - no further HRA work is required	Proximity to Arun Valley SAC / SPA / Ramsar: Is the application site: A) Within the Sussex North Water Supply Zone (WSZ) YES B) Arun Valley SAC / SPA / Ramsar potentially impacted by the planning application: 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. C) Is the planning application directly connected with or necessary to the management of the Arun Valley SAC/SPA/Ramsar site? NO

Brief description of the Habitats sites within scope of this assessment	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. Further details are provided in Appendix 1.
Key vulnerabilities / factors affecting site integrity	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). 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; • Arun Valley Special Area Conservation (SAC) • Arun Valley Special Protection Area (SPA) • Arun Valley Ramsar Site
HRA Screening Assessment Criteria	
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	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. 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 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).

Test 1 the significance test: – 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.	Following the CJEU ruling People over Wind, it is no longer legal to take into account any avoidance and mitigation measures as part of the application at this stage of HRA. 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. YES 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. Explanation: All development likely to increase the demand for mains water usage, is predicted to result an identifiable impact on the Arun Valley SAC/SPA/Ramsar sites. After mitigation has been embedded into the project design, Test 2 – the integrity test then needs to be applied.
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.	
Potential for Adverse Effects On the Integrity (AEOI) of a Habitats site from the development alone or in combination.	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. 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). 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.

Details of Water usage for the development	The scheme is for the conversion of an agricultural barn to form a three bedroom dwelling. The Water Neutrality Statement (cgs civils Ref. C2202 Rev - P. dated: 27.06.2022) demonstrates water neutrality, summarised below: Proposed dwelling: Average occupancy $2.47 \times 110 \text{ l/p/d} = 271.7 \text{ l/day}$ By installing the water efficient devices listed in the statement, it is possible to reduce the water demand on site from 271.7 l/day down to 219.92 l/day Average Occupancy $2.47 \times 89.04 \text{ l/p/d}$ (Appendix A: Water Calculator for Proposed fittings) = 219.92 l/day Rainwater harvesting By also installing rainwater and greywater harvesting technologies listed, the total demand will be reduced to: 2.47×66.2 (Appendix B: Water calculator for proposed fittings with RWH) = <u>163.51 l/day</u> The Existing adjacent 4-bedroom dwelling (Oakwood Farm House) is owned by the client. The client is willing to retrofit the existing dwelling in order to offset the water demand from the proposed property. The existing 4-bed dwelling (average occupancy of 2.87). There is no water meter fitted within the property, and so it is not currently known how water efficient it is; therefore, in order to calculate existing usage, a value of 135 l/p/d is used. The total water demand for the existing dwelling is therefore $2.87 \times 135 \text{ l/p/d} = \mathbf{387.45 \text{ l/day}}$. In order to offset the water demand from the proposed property, the client is willing to retrofit all appliances within the existing dwelling and also fit a rainwater harvesting tank to provide water for the toilets and washing machine by following the 'reduce and re-use' sections listed above. By undergoing these changes, the water demand from the existing Oakwood Farm House will be reduced down from 387.45 l/day to <u>189.994 l/day</u> which is <u>a reduction of 197.5 l/day</u> which is more than enough to offset the water demand from the proposed dwelling, to achieve water neutrality.
Proposed mitigation for the project to secure the mitigation as a condition of any consent e.g. alternative sustainable water supply, minimising water use in new development, Water offsetting for residual demand in existing buildings in the Sussex North WRZ. See Position Statement issued by Natural England (September 2021)	Summary of mitigation package The following measures to minimise water use have been embedded within the development (see Waterwise Water Neutrality Practical Guidance January 2021) to be secured as part of any planning consent: • Efficient appliances, fittings, rainwater harvesting in 1 new 3 bed barn conversion The following water offsetting measures for demand in existing buildings have also been embedded within the development to be secured as part of any planning consent: • Efficient appliances, fittings, rainwater harvesting in 1 existing 4 bedroom property (Oakwood Farm House) These measures have been embedded within the development to be secured as part of any planning consent and are considered sufficient to avoid adverse effects on the integrity of the interest features of the Arun Valley SPA, SAC & Ramsar site from the development either alone or in combination with other plans and projects.

Test 2 – the integrity test	Conclusion: Having considered the proposed avoidance and mitigation measures above to be provided in-perpetuity through: • The on-site water efficiency measures, • The off-site water demand reduction measures secured through a condition of consent. Horsham District Council concludes that, with mitigation, the project will not have an Adverse Effect on the Integrity of the Arun Valley SAC/ SPA /Ramsar site, either alone or in combination with other plan and projects. This development would therefore not be in conflict with the conservation objectives for the Arun Valley SPA, SAC and Ramsar site which include ‘maintaining or restoring the population of Qualifying Features’. See Appendix 1. As the mitigation has been considered after HRA screening, this HRA Appropriate Assessment is in line with the People over Wind CJEU Court ruling and, being beyond reasonable scientific doubt concerning the effects of the work envisaged on the site concerned, is also in line with the Holohan and Others v An Bord Pleanála court ruling. Having prepared this Appropriate Assessment of the implications of the project for the Arun Valley sites in view of their conservation objectives, subject to consultation with Natural England and fully considered any representation received where necessary, the authority can now agree to project under regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended).
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Approving Planner: Steve Astles

Date: 16.09.2022

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	Arun Valley SPA 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). 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>. Arun Valley SAC 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).
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Qualifying Features for Ramsar	Arun Valley Ramsar Ramsar criterion 2 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 Ramsar criterion 3 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. Ramsar criterion 5 Assemblages of international importance: Species with peak counts in winter: 13774 waterfowl (5 year peak mean 1998/99-2002/2003)
Conservation Status of the relevant Qualifying Features	Arun Valley SAC, SPA and Ramsar 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. The Arun Valley is one of the remaining strongholds for the Little Whirlpool Ramshorn Snail.
Conservation Objectives (Only Relevant for SPA/SAC)	Arun Valley SAC & SPA 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.