

NOTE TO FILE

JBA Project Code 2016s3990
Contract Aylesbury Vale SFRA and WCS
Client Aylesbury Vale District Council
Day, Date and Time 21 February 2017
Author Paul Eccleston
Subject HELAA Version 4 and the Water Cycle Study



1 Introduction

The Water Cycle Study (WCS) for Aylesbury Vale District Council (AVDC) based its assessments of sites on the Housing and Economic Land Availability Assessment (HELAA) version 3 published in May 2016¹, as well as on other sources including work on options for a new settlement and for potential site releases from the northern Green Belt areas of Wendover and Halton.

Following completion of the WCS assessments, a revised HELAA version 4 was published in January 2017². This note provides a brief review of the implications of the revised HELAA on the conclusions of the completed WCS.

2 Methodology

The HELAA version 3 and version 4 site boundaries were compared to identify where sites had been added, removed or otherwise modified. This enabled identification of potential significant increases or decreases in development within a settlement. The HELAA report was then used to check whether new sites were considered to be suitable or unsuitable. Sites marked as unsuitable were discounted, on AVDC's recommendation, and are not reported in this note.

Where new sites were considered to be suitable by the HELAA version 4, consideration was given to the potential implications for the conclusions of the WCS.

3 Results

Compared to HELAA version 3, version 4 sees a minimal 1% decrease in overall housing numbers, and a 14% decrease in employment land. The table below compares the two HELAA versions:

Measure	HELAA Version 3			HELAA Version 4			Difference			
	HELAA	Other sources*	Total	HELAA	Other sources*	Total	HELAA	Other sources*	Total (abs.)	Total (%)
Number of Potential Residential Dwellings	25,882	1,251	27,133	25,571	1,301	26,872	-311	50	-261	-1%
Potential Floor-Space for Economic Development (m2)	643,205	254,893	898,098	605,033	169,178	774,211	-38,172	-85,715	-123,887	-14%

* Includes sites outside HELAA settlements, sites below 5 units and windfall (housing) and sites with planning permission outside of HELAA settlements or small sites <500m² (employment).

For the WCS, the geography of any changes to potential development is as important as the total numbers of housing and employment space. A screening was carried out of the newly suitable sites that aren't commitments. Whilst there are numerous small-scale changes, the screening concluded that of these sites the only new suitable site that could potentially affect the draft conclusions of the study was at Haddenham – site HAD007.

3.1 Water Resources and Water Supply

3.1.1 Water Resources

The purpose of the HELAA is to identify capacity at a site level, rather than to set overall targets for housing and employment growth within the Aylesbury Vale District. The publication of HELAA version 4

¹ Aylesbury Vale District Council (2016) Aylesbury Vale Housing and Economic Land Availability Assessment (HELAA). Version 3. Accessed online at http://www.aylesburyvale.gov.uk/sites/default/files/page_downloads/Aylesbury%20Vale%20HELAA%20Draft%20Report%20UPDATED%20v3%20May%202016.pdf on 25/10/2016

² Aylesbury Vale District Council (2017) Aylesbury Vale Housing and Economic Land Availability Assessment (HELAA). Version 4.

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does not, therefore, alter the housing scenario on which the WCS assessed water resources, namely 33,000 homes over the plan period. The changes in sites would therefore not significantly alter the balance in growth between the north of the district, served by Anglian Water, and the south, served by Thames Water. Therefore, the water resource conclusions of the WCS remain unchanged as a result of HELAA version 4.

3.1.2 Water Supply

The only significant suitable site addition/enlargement identified in HELAA v4 compared to v3 is HAD007, a site to the north of Haddenham which was extended northwards, doubling its size in HELAA version 4. The site capacity could increase by approximately 100 homes. However, the HELAA commentary states that “the northern part should be excluded from development because of landscape/visual impact and intrusion into the open countryside.” The WCS assessment for water supply gave Haddenham an Amber rating, meaning that infrastructure upgrades are required to serve potential growth or diversion of assets may be required, but no significant constraints to the provision of this infrastructure have been identified.

There are no significant net reductions in sites which would be expected to negate the need for additional water supply infrastructure. Consequently, the update to the HELAA has negligible impact on the conclusions of the WCS. The key message remains that developers should engage as early as possible with the water supply company to ensure that sufficient time is allowed to enable infrastructure upgrades to be constructed.

3.2 Wastewater Collection and Treatment

3.2.1 Sewerage System Capacity Assessment

The potential increased growth, consisting of 100 additional homes is not anticipated to change the conclusion of the sewerage capacity of Haddenham, the local WwTW. The conclusion remains that infrastructure upgrades are required and there are no significant constraints to providing that infrastructure identified. Again, developers of all sites should ensure early engagement with the sewerage undertaker. For all of the other changed/new sites, the conclusions on available capacity in the sewerage capacity remain unchanged as a result of HELAA version 4.

3.2.2 Wastewater Treatment Flow Permit Assessment

Haddenham is the only catchment expected to experience significant additional growth as a result of HELAA version 4 (HAD007). The assessment of treatment flow capacity indicates that Haddenham Wastewater Treatment Works (WwTW) has limited available capacity at present and will require an upgrade to accommodate potential growth (5,448 homes identified in HELAA v3). The addition of 100 further homes at HAD007 would be a small additional increase within the catchment, and therefore the WCS conclusion remains valid. For all of the other changed/new sites, the conclusions on available capacity in the wastewater treatment works remain unchanged as a result of HELAA version 4.

3.2.3 Wastewater Treatment Works Odour Assessment

An odour impact screening was undertaken following Anglian Water and Thames Water procedures (see main report for details). Three sites new to HELAA version 4 were found to be close enough to wastewater treatment works that an odour impact assessment is recommended:

Sewerage Undertaker	Site Ref	WwTW	Direction of the WwTW from the site	Site boundary distance from WwTW (m)
Thames Water	AYL115	Aylesbury	West	310
	AYL119	Aylesbury	West	650
	CDN003	Cuddington	North	730

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3.3 Water Quality

The potential increase of 100 further homes in Haddenham WwTW's catchment is small compared to the total number of new homes assessed within the water quality assessment (5,448). The conclusions of the WCS found that the potential growth could be accommodated without deterioration and without requiring a tightening of the flow consent, this conclusion would remain valid. Whilst other catchments may see small increases in overall housing numbers, these are not expected to be large enough to change the overall conclusions of the water quality assessment.

3.4 Flood Risk

The WCS did not identify any WwTWs where the increased effluent discharge would significantly alter flood flows in the receiving watercourse. This conclusion remains valid for HELAA 4. A flood risk screening of viable sites new to HELAA version 4 was also carried out. See the Strategic Flood Risk Assessment (SFRA) for these results.

4 Conclusions

A detailed water cycle study was prepared based on the suitable housing and employment sites in HELAA version 3 that didn't already have a commitment for water cycle infrastructure upgrade, as well as on other sources including work on options for a new settlement and for potential site releases from the northern Green Belt areas. The WCS was based on the Draft VALP documents available in July 2016.

This note has reviewed the impact of the updated Aylesbury Vale HELAA version 4, published in January 2017, and concludes that it has a negligible impact on the conclusions of the current Water Cycle Study. The key impacts of the revised HELAA version 4 on the Aylesbury Vale District Council Water Cycle Study are shown below.

- The changes in the pattern of growth at the settlement and wastewater treatment works catchment scale, as a result of the publication of HELAA version 4 are minor and the conclusions of the WCS on available water resources, water supply, sewerage, wastewater treatment, water quality and flood risk remain valid.
- Three additional sites, AYL115, AYL119, CDN003 have been screened as being sufficiently close to a WwTW to recommend that an odour impact assessment is carried out.
- Developers for all sites are encouraged to engage at an early stage with the water supplier and sewerage undertaken, to ensure that sufficient time is allowed to enable detailed assessments of local infrastructure capacity and, where required, the construction of additional infrastructure ahead of development.