2017s7149
Harlow-Gilston Garden Town Water Cycle
Harlow Council
25 October 2018
Fiona Hartland
Harlow-Gilston Garden Town Water Cycle Study Addendum 1.0



1 Harlow Water Cycle Study Addendum

This document has been produced to provide further clarification to sections of the Harlow Water Cycle Study (document reference: 2017s7149 Harlow WCS Final Report v5.0 (September 2018)).

Following approval of the Water Cycle Study by Harlow Council in September 2018, certain aspects were brought to attention to the Council, which required clarification to avoid any ambiguity. In addition, an update to the Thames Water Greater Harlow Position Statement was issued in October 2018.

The subsequent points raised do not require material changes to be made to the Harlow Water Cycle Study. However, the information presented within this addendum will provide an improved understanding to sections of the main report.

The clarifications, as well as the reasoning behind them, are outlined below. Where the text has required amendment, the existing version has been represented with a strikethrough (e.g. existing text) and edited versions are provided in bold (amended text).

1.1 Clarification 1: Section 2.1 Housing, Table Caption 2-1 (p.13)

1.1.1 Reason for clarification

The existing table caption infers that the net new dwelling numbers within Table 2-1 have already been 'allocated' within the respective Local Plans. Instead, the dwelling numbers are growth requirements for each authority between 2011 - 2033, as specified within the West Essex and East Hertfordshire Housing Market Area (HMA).

1.1.2 Amendment/addition

Table 2-1: Allocation of housing growth Housing requirements within the West Essex and East Hertfordshire Housing Market Area (HMA) Preferred Spatial Option for Harlow, East Hertfordshire, Epping Forest and neighbouring authorities.

Local Authority	Net new dwellings 2011 - 2033
East Hertfordshire Council	c. 18,000
Epping Forest District Council	c. 11,400
Harlow District Council	c.9,200
Uttlesford District Council	c.12,500
Total across the HMA	c. 51,100
Total provided in and around	c. 16,100
Harlow	

1.2 Clarification 2: Section 2.1 Housing (p.14)

1.2.1 Reason for clarification

Two housing growth forecasts were used within the Harlow Water Cycle Study: the Thames Water growth forecasts for the Rye Meads WwTW catchment, and the Department for Communities and Local Government (DCLG) 2014-based household







2017s7149
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projections to 2039 for England¹. Ambiguity was noted in Section 2.1 over which growth dataset had been used at each stage of Water Cycle Study assessment. The clarification below is intended to resolve any confusion.

1.2.2 Amendment/addition

The below additional text has been provided on the choice of housing growth estimates within Harlow Water Cycle Study:

The Thames Water growth forecasts for the Rye Meads Wastewater Treatment Works (WwTW) catchment are the main dataset used to represent housing growth within the Harlow Water Cycle Study. They are used as the basis of the following assessments within the study:

- Sewerage system capacity assessment (Section 5.1)
- Wastewater treatment flow permit assessment (Section 6.4)
- Water quality assessment (Section 6.5)

As the impacts of development on wastewater and sewerage are best assessed at a catchment-scale, using the Thames Water housing growth data allows a more direct comparison between outputs of the Water Cycle Study and other assessments carried out by Thames Water.

The one assessment in which Thames Water data is not used, is the water resource assessment (Section 4.3), in which housing growth estimates are compared against those within the Affinity Water draft Water Resource Management Plan (dWRMP) (see Section 4.3.3). In this instance, the Department for Communities and Local Government (DCLG) 2014-based household and population growth projections by district (to 2039) are used, to better match the datasets used by Affinity Water to plan for water resource demand.

1.3 Clarification 3: Table 5-1 RAG assessment for foul and surface water sewerage (p.58)

1.3.1 Reason for clarification

The caption and text for Table 5-1 had not been updated with the results from site SP5.2 (Water Lane Area) following receipt of latest Thames Water network assessment RAG scores. The table caption has now been updated to identify that the table only covers sites assessed as Amber or Red for foul or surface water sewerage capacity.

1.3.2 Amendment/addition

Amendment to caption:

Table 1-1: RAG assessment results for sites with foul and surface water sewerage assessment scores of Red or Amber

¹ Department of Housing, Communities and Local Government (2014) 2014-based household projections to 2039 for England. Available at: https://www.gov.uk/government/statistical-data-sets/live-tables-on-household-projections.







2017s7149
Harlow-Gilston Garden Town Water Cycle
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Harlow-Gilston Garden Town Water Cycle Study Addendum 1.0



Amendment to table:

Site	Location	Local Planning Authority	Foul Sewerage Network Capacity Comments	Surface Water Network Capacity Comments
HS2-5	South of Clifton Hatch	НС	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS2-6	Riddings Lane	HC	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS2-8	The Evangelical Lutheran Church, Tawneys Road	HC	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS2- 11	Land between Second Avenue and St. Andrews Meadow	НС	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS2- 14	Elm Hatch and public house	HC	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS2- 18	Garage blocks adjacent to Nicholls Tower	HC	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS2- 19	Stewards Farm	HC	No comment	Discharge unknown but sites located in known very limited sewer capacity area
HS3	Strategic Housing Site East of Harlow	НС	Site modelled up to 2026 only	Discharge unknown but sites located in known limited capacity area
SP 5.3	East of Harlow	EFDC	Site modelled up to 2026 only	Discharge unknown but sites located in known limited capacity area
SP 5.1	Latton Priory	EFDC	Site modelled up to 2026 only. TW comment (04/04/2018): There is lack of capacity in local sewers and solution has to be implemented at a very	Discharge unknown but sites located in known very limited sewer capacity area







2017s7149
Harlow-Gilston Garden Town Water Cycle
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Site	Location	Local Planning Authority	Foul Sewerage Network Capacity Comments	Surface Water Network Capacity Comments
			early stage.	
SP5.2	West of Harlow - Water Lane Area	EFDC	TW comment (09/08/2018: Modelling has only been completed until 2026. We are arranging for this to be extended to cover the plan period.	Discharge unknown but sites located in known very limited sewer capacity area

1.4 Clarification 4: Table 5-2 Wastewater Collection System Assessment Actions (p.60)

1.4.1 Reason for clarification

In the existing text, Harlow Council was the only Local Planning Authority (LPA) assigned the 'Responsibility' for considering wastewater constraints on phased development, alongside Thames Water. All LPAs within the Harlow-Gilston Town have a responsibility to plan for infrastructure constraints, and this is now addressed within the action summary.

1.4.2 Amendment/addition

Amendment to table:

Action	Responsibility	Timescale
Take into account wastewater infrastructure	HC-LPAs Thames Water	Ongoing
constraints in phasing development in partnership with	mames water	
Thames Water		

1.5 Clarification 5: Figure 6-3 Rye Meads WwTW Headroom Forecast (p.67)

1.5.1 Reason for clarification

It was noted that the headroom assessment graph (Figure 6-3) did not include a legend, which made the graph more difficult to interpret. A legend identifying the 'Permit level' and 'Predicted flow' datasets has been added to the graph.





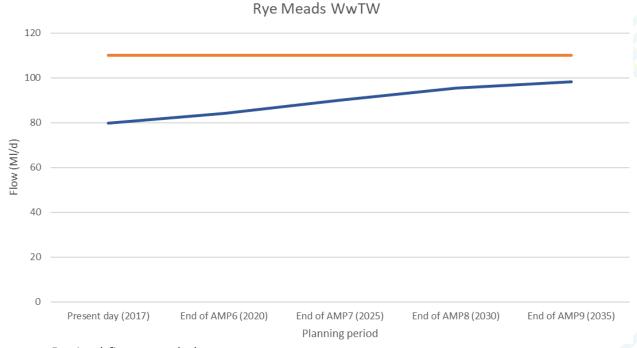


2017s7149
Harlow-Gilston Garden Town Water Cycle
Harlow Council
25 October 2018
Fiona Hartland
Harlow-Gilston Garden Town Water Cycle Study Addendum 1.0



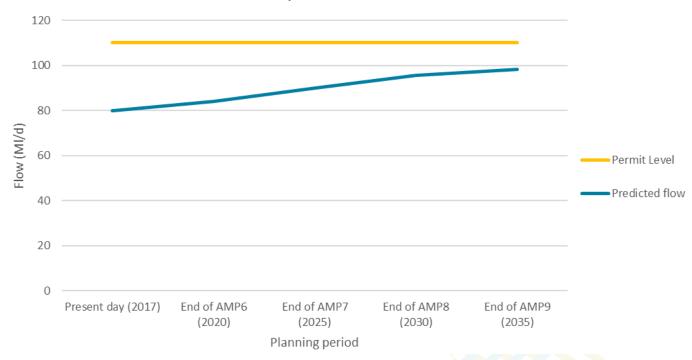
1.5.2 Amendment/addition

Original figure: legend missing.



Revised figure: as below.

Rye Meads WwTW









2017s7149
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Harlow Council
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Fiona Hartland
Harlow-Gilston Garden Town Water Cycle Study Addendum 1.0



1.6 Clarification 6: Thames Water Position Statement (October 2018)

1.6.1 Reason for clarification

Subsequent to issue of the Harlow Water Cycle Study in September, Thames Water released their October 2018 updated position statement for the Greater Harlow area.

1.6.2 Additional text: Section 5.1.3 Sewerage System Capacity Assessment Results (p.57)

Amended text:

Thames Water RAG Assessment

Correspondence with The October 2018 Thames Water Greater Harlow Position Statement² identified that modelling of outputs of the growth assessment impacts on the foul infrastructure network had been completed up to 2026 had concluded that 'the existing network has some additional capacity and on most occasions will be able to accommodate proposed growth'.

Arrangements were being made to extend the capacity modelling to cover the entire Harlow Local Plan period, up to 2033, and Thames Water were confident in the available capacity to accommodate approximately 3,000 homes on the Gilston Allocation (GA1).

Thames Water has identified areas of the network in the Harlow-Gilston Garden Town with insufficient capacity for growth, however has established high level solutions to manage this, including limiting infiltration into the foul sewer network 'through system separation and creation of extra capacity for proposed development'. This is a flexible solution which allows Thames Water to 'gradually increase sewer capacity to match growing need' and will be implemented at 'Harlow East, Latton Priory, Sumners, Katherines and developments in Sawbridgeworth'.

However, 'for the Newhall and Gilston Park developments more traditional minor upgrades will be required.'

In addition, a Statement of Common Ground is being prepared between Harlow Council and Thames Water, to set out areas of joint interest between the two parties, including the agreements on wastewater network and treatment capacity to support the delivery of growth within the Harlow-Gilston Garden Town area.

1.7 Additional text: Section 6.4.3 Wastewater Treatment Flow Permit Assessment (p.65 - 66)

Amended text:

Rye Meads WwTW

Based on growth forecasts and capacity assessments, Thames Water **currently** expect to have treatment capacity at Rye Meads WwTW up to 2036. However, delivery of additional upgrades may be required, including 'refurbishment in AMP7 (2025–2030), with potential upgrades required to increase processing capacity in AMP8 (2030–

2 Kasselman, G. Thames Water - Greater Harlow Position Statement. October 2018.







2017s7149
Harlow-Gilston Garden Town Water Cycle
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 $\frac{2035}{}$ 'upgrades in sludge and storm streams during AMP7/8 (between 2020 and 2030)'3.

Thames Water are currently producing a 2020 - 2025 business plan. Any requirements for additional capacity, if required, will be subject to 'growth review and modelled view of risk to prioritise which sites will need a project and when'.

3 Kasselman, G. Thames Water - Greater Harlow Position Statement. October 2018.





