

BRECKLAND DISTRICT COUNCIL

Report of: Cllr Bambridge - Executive Member for Growth
To: Local Plan Working Group – 17th March 2017
Author: Jemma March – Principal Planning Policy Officer (Capita)
Subject: Water Cycle Study Update (WCS)
Purpose: The purpose of this report is to advise Members of the content of the Water Cycle Study Update

Recommendation(s):

- 1) It is recommended that Members note the Water Cycle Study Update (WCS) as evidence to support the Local Plan and publish the WCS on the Council's website.

1.1 Background

1.2 The Council published the first Water Cycle Study (WCS) in 2010 which assessed growth as planned in the Local Development Framework for implications on the water environment and water infrastructure provision in the District. The Local Plan proposes a new growth strategy and consequently the Water Cycle Study Update was commissioned to address the revised growth targets and detailed options and preferred sites identified in the emerging Local Plan.

1.3 The National Planning Policy Framework (NPPF) sets a requirement for Local Plans to plan positively for the development and infrastructure required in the area. Furthermore para 162 states: "Local Planning Authorities should work with other authorities and providers to: assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands".

1.4 The WCS also assesses compliance with the Water Framework Directive, to ensure that growth, through abstraction of water for supply and discharge of treated wastewater does not prevent waterbodies in Breckland (and more widely) from achieving the objectives of the Water Framework Directive (WFD).

1.5 The Water Cycle Study addresses the requirements set in the NPPF and the WFD, presenting a technical assessment of water supply, resources and infrastructure. The WCS Update has been developed through consultation with Anglian Water Services (AWS) and the Environment Agency (EA). This evidence informs the Infrastructure Delivery Plan and therefore forms a key part of the evidence base to support Breckland's Local Plan.

1.6 Key Findings of the WCS

1.7 The Water Cycle Study assessed existing commitments and completions in addition to the proposed growth in the Local Plan over the plan period (2011-2036). The study additionally considered the planned growth beyond the plan period which includes a portion of the allocation for Thetford and Attleborough. The key findings are as follows:

1.8 **Wastewater Treatment and water quality**

- 1.9 All Wastewater Treatment Works (WwTWs) are issued with a permit to discharge by the Environment Agency, which sets out conditions on the maximum volume of treated flow that it can discharge and also limits on the quality of the treated flow. These limits are set to protect the water quality and ecology of the receiving water body. They also dictate how much flow can be received by each WwTW, as well as the type of treatment processes to be used at the WwTW.
- 1.10 The WCS has assessed the impact of the growth proposed in the Local Plan on WwTWs and determined that additional treatment capacity will be required at four Wastewater Treatment Works (WwTW) serving the District. Improvements or new discharge permits are required at these WwTW to ensure that water quality targets, set to meet the requirements of European legislation such as the Water Framework Directive (WFD) and Habitats Directive (HD) are not exceeded within the rivers which will receive the additional treated wastewater flow. This affects growth proposed in Attleborough, Dereham, Garboldisham (Elm Grove) and Watton.
- 1.11 Improvements required at the WwTW serving Watton and Garboldisham (Elm Grove) are relatively straightforward and readily achievable within the limits of conventional treatment methods and would not present a barrier to growth, nor affect phasing of development in these locations. Both would require process upgrades at the WwTWs to allow revised discharge permits.
- 1.12 In terms of the allocation of Attleborough SUE, there is no immediate constraint to growth. Attleborough WwTW has available flow headroom in the discharge permit to enable growth of 1,800 dwellings (from the 4,000 allocated). The planned phasing of the SUE means that there would not be an issue with capacity until the year 2030, which ties in with the next Anglian Water Investment Plan. Current capacity at Dereham WwTW is more limited, but due to a number of planning applications for strategic sites being submitted in advance of the Local Plan process, solutions are currently being explored to enable growth. The WCS shows available headroom at both Matishall WwTW and Bylaugh WwTW which serves Bawdeswell and Swanton Morley. There is potential for either WwTWs to receive additional wastewater, in excess of that received by their own catchment. This could be achieved by a piped network, however potential solutions for any development site would be subject to further discussion between the EA, AWS and Breckland Council.
- 1.13 The preferred solution for Dereham is for the continued management of treatment headroom through several measures including: reducing water use (and hence wastewater generation) within the existing property in the town; and, monitoring changes in occupancy rate.
- 1.14 The WCS highlights the long term solution for both Attleborough and Dereham WwTWs is to utilise non-conventional methods to improve treatment quality on discharge. Trial testing of advanced technologies (both by AWS and national water companies) is showing positive results and therefore is likely to feature in the next investment plan by Anglian Water Services (2020 – 2025). The WCS presents a workable solution which has been agreed by both the EA and AWS. Policies in the Local Plan for Dereham and Attleborough will require development proposals to be accompanied by a pre-development enquiry with AWS to demonstrate that sufficient capacity is available to treat wastewater from the proposals.
- 1.15 Chapter 3.2 of the WCS presents detailed information on the ecological assessment, flood risk assessment and solutions required to accommodate additional

growth for the four areas.

1.16 **Wastewater network capacity**

1.17 In considering capacity in the network to move wastewater from new development to the WwTW's, the WCS identifies that the majority of sites proposed in the plan would require upgrades. The WCS identifies the settlements of Matishall, Yaxham and Old Buckenham as exceptions, where only some of the sites would require upgrades. The WCS lists each settlement and the preferred and reasonable alternative sites in Chapter 5 and assigns each site a RAG rating (red, amber, green) to illustrate where upgrades would be required. The study recommends that all applications for development proposals for sites highlighted with a potential constraint are accompanied by a pre-development enquiry with Anglian Water to demonstrate that sufficient capacity is available to transfer wastewater for treatment and to demonstrate where a developer needs to financially contribute to that position. This could be achieved by adding a clause to final policies in the Local Plan for specific sites.

1.18 **Water Supply**

1.19 Resource Availability – Anglian Water confirms that the level of growth assessed in the WCS update has been factored into the current Water Resources Management Plan which has been approved by the Environment Agency (EA) and DEFRA. Due to the restrictions on water abstraction managed by the EA, Anglian Water seeks to manage strategic resources using a twin track approach. Short term demand management will be attained by reduction in consumption via water efficiency measures in addition to reduction of leakage in the supply network. In the long term the preferred option is to create a winter storage reservoir in the Norfolk Fens.

1.20 Efficiency –The WCS recommends consideration of a policy to contribute to management of demand from the existing population in the District to complement the approach in Anglian Water Services Water Resources Management Plan. Appendix D.6 of the WCS presents financial cost considerations for water neutrality scenarios. As a policy on water efficiency has not been presented in previous versions of the Local Plan, it has not been factored into the work on viability testing. Due to the advanced stage of the Local Plan it may be preferable to provide some additional wording to relevant proposed development management policies adapted from the Preferred Directions document, to ensure that water efficiency is considered in the design of new development, as opposed to a stand alone new policy which has not been subject to consultation previously.

1.21 **Infrastructure Delivery Plan (IDP)**

1.22 The Draft Infrastructure Delivery Plan (IDP) identifies the infrastructure requirements to deliver growth proposed in the Breckland District Local Plan over the plan period (to 2036). The full version of the draft IDP was presented to members at the Working Group Meeting on 3rd February 2017. The IDP is a 'living' document and therefore the chapter on Water has been updated to reflect the findings of the WCS. An extract of the IDP is attached as Appendix 1 to this report. The IDP is a developing document which is not currently published on the website. The final version of the IDP will be subject to Member's consideration prior to publication, therefore the attached wording is provided for information only at this stage.

1.23 **Conclusion**

1.24 The WCS Update demonstrates that the growth proposed in the plan is deliverable with respect of the water environment and water infrastructure. Individual solutions are

detailed in the WCS for the four areas of Attleborough, Dereham, Garboldisham (Elm Grove) and Watton to enable the full planned growth to be achieved. The WCS Update comprises a key piece of the evidence base to support the Local Plan and interlinks with the wider Infrastructure Delivery Plan.

1.25 **RECOMMENDATION**

1.26 It is recommended that the Water Cycle Study Update forms part of the evidence base for the Local Plan and is published on the website.

2.0 **OPTIONS**

2.1 There are two options available:

2.2 Option 1 - Members agree for the Water Cycle Study Update to be published on the website and form part of the evidence base for the Local Plan.

2.3 Option 2 - Members do not accept the findings of the Water Cycle Study Update and do not publish the WCS.

3.0 **REASONS FOR RECOMMENDATION(S)**

3.1 Option 1 is recommended as the Water Cycle Study is an important piece of evidence which supports Breckland's Local Plan and fulfils requirements set out in the National Planning Policy Framework. The document demonstrates that due consideration had been given to the water resources and infrastructure required to support growth in the plan.

3.2 Option 2 is not recommended at this stage of the plan process as it is likely to delay submission of the Local Plan or risk the plan being found 'unsound' at examination as it would not be possible to demonstrate that due consideration had been given to the water resources and infrastructure required to support growth in the plan and therefore the plan would fail to meet the requirements outlined in the National Planning Policy Framework.

4.0 **EXPECTED BENEFITS**

4.1 The NPPF requires Local Authorities to prepare Local Plans. The Study forms an essential part of the evidence base for the Local Plan and demonstrates that requirements set in the National Planning Policy Framework have been met.

5.0 **IMPLICATIONS**

5.1 **Carbon Footprint / Environmental Issues**

5.1.1 It is the opinion of the Report Author that there are no implications.

5.2 **Constitution & Legal**

5.2.1 It is the opinion of the Report Author that there are no implications.

5.3 **Contracts**

5.3.1 It is the opinion of the Report Author that there are no implications.

5.4 **Corporate Priorities**

5.4.1 The Local Plan aligns with corporate priority: Supporting Breckland to develop and thrive; providing the right services at the right time and in the right way; developing the local economy to be vibrant with continued growth and enabling stronger, more independent communities. The production also aligns with the priority of enabling effective planning and delivery of housing solutions to meet local needs.

5.5 **Crime and Disorder**

5.5.1 It is the opinion of the Report Author that there are no implications.

5.6 **Equality and Diversity / Human Rights**

5.6.1 It is the opinion of the Report Author that there are no implications.

5.7 **Financial**

5.7.1 It is the opinion of the Report Author that there are no implications.

5.8 **Health & Wellbeing**

5.8.1 It is the opinion of the Report Author that there are no implications.

5.9 **Risk Management**

5.9.1 It is the opinion of the Report Author that there are no implications.

5.10 **Safeguarding**

5.10.1 It is the opinion of the Report Author that there are no implications.

5.11 **Staffing**

5.11.1 It is the opinion of the Report Author that there are no implications.

5.12 **Stakeholders / Consultation / Timescales**

5.12.1 It is the opinion of the Report Author that there are no implications.

6.0 **WARDS/COMMUNITIES AFFECTED**

6.1 All wards in Breckland will be affected by the Local Plan

7.0 **ACRONYMS**

- AWS: Anglian Water Services
- DEFRA: Department for Environment, Food and Rural Affairs
- EA: Environment Agency
- IDP: Infrastructure Development Plan
- NPPF: National Planning Policy Framework
- SUE: Sustainable Urban Extension
- WCS: Water Cycle Study
- WFD: Water Framework Directive

- WwTW: Wastewater Treatment Works

Background papers:-

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Key Decision: No

Exempt Decision: No

This report refers to a Mandatory Service

Appendices attached to this report:

Appendix 1:
Extract: Infrastructure Delivery
Plan – Chapter 3 Water
Appendix 2: Water Cycle Study
Update