

SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

REPORT TO: Northstowe and New Communities Portfolio Holder 20 September 2011

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PHASE 2 DETAILED WATER CYCLE STRATEGY TO 2031 MAJOR GROWTH AREAS IN AND AROUND CAMBRIDGE

Purpose

1. The purpose of this report is to highlight the completion of the Phase 2 Water Cycle Strategy for the major growth areas in and around Cambridge, and its availability for use as an evidence base.

This is not a key decision, because it is reporting the findings of a study. It was first published in the April 2011 Forward Plan.

Recommendations

2. That the Portfolio Holder notes the completion of the Phase 2 Water Cycle Strategy for the major growth areas in and around Cambridge, and its availability as an evidence base to support planning decisions.

Reasons for Recommendations

3. The study provides information on water infrastructure, sustainable drainage, and water efficiency that can be utilised when planning for the existing major developments, and can be used as an evidence base for the South Cambridgeshire Development Plan.

Background

4. Water Cycle Strategies (WCS) are examinations of water supply capacity, wastewater infrastructure, surface water drainage and flood risk management. They are undertaken to ensure that new development can be supplied with water services infrastructure in a sustainable way.
5. Cambridgeshire Horizons commissioned the Water Cycle Strategy for the major growth areas around Cambridge. They also brought together a stakeholder steering group to guide the WCS. This comprises representatives from Cambridge City Council, South Cambridgeshire District Council, Cambridgeshire County Council, the Environment Agency, Anglian Water, Cambridge Water, Natural England and the Swavesey, Old West and Swaffham Internal Drainage Boards.
6. The WCS was developed over two phases: Scoping, Outline (Phase 1) and Detailed (Phase 2). The Phase 1 WCS for the Major Growth Sites in and around Cambridge was completed in September 2008 and identified the baseline infrastructure required to serve the proposed new development without detriment to the environment, in accordance with legislation at that time. This fulfilled the requirements of East of England Plan policy WAT2 which requires the timely provision of infrastructure for

water supply and waste water treatment through partnership working between key stakeholders. The Phase 1 WCS identified no insurmountable technical constraints to the proposed level of growth proposed in the East of England Plan and South Cambridgeshire LDF. The Phase 1 study can be found on Horizon's website.

7. The Phase 2 WCS was produced by consultants Halcrow Group Ltd. The Phase 2 WCS goes further than the Phase 1 study, by providing evidence in support of a more aspirational vision for water management. It aims to:
 - Aspire to water neutrality (the concept that the total water used after a new development is no more than the total water used before the development in a given wider area. This requires meeting the new demand through improving the efficiency of use of the existing water resources. This can be through making new development as water efficient as possible and retrofitting measures in existing development);
 - Improve biodiversity by protecting environmental water quality, and;
 - Protect and enhance the environment through sustainable surface water management.
8. The Phase 2 WCS sets out a long-term vision to:
 - Achieve the highest levels of water efficiency in all new homes – reducing current water consumption of 125 litres per head per day (l/h/d) to 80 l/h/d
 - Aim for water neutrality through the introduction of enhanced metering, variable tariffs and the introduction of water efficiency measures in the existing building stock
 - Aim for all surface water in new development to be managed above ground where feasible through Sustainable Drainage Systems (SuDS)
 - Improve water quality in surface water runoff from new developments
9. The strategy recognises that these are ambitious aims and barriers are identified as well as possible ways to overcome the difficulties. The strategy highlights that achieving the long-term vision will require continued collaborative working between partners on the steering group and full engagement with the local community.
10. It must be recognised that the Phase 2 WCS will have limited influence over the major development sites that have already progressed significantly through the planning system, such as the sites in the Southern Fringe, NIAB1 and Cambourne where planning permission has already been granted. However, that is not to say that these sites have not already made achievements in sustainable water infrastructure and there will also be further opportunities when determining reserved matters applications. The North West Cambridge Area Action Plan, which covers the University site, already has a progressive policy on water conservation, requiring that homes meet Code for Sustainable Homes Level 5. The greatest potential is at the strategic sites in the earlier stages of planning.
11. In addition to the policy recommendations a pathway to sustainable water management has been identified up to 2031. The Strategy has identified opportunities and barriers that need further consideration by a broad set of stakeholders including local authorities, government, water companies and government agencies (Environment Agency and Natural England) to help deliver a sustainable water environment suitable for our future.
12. Implementation of much of the Strategy will depend upon the plan making process, with principles to be tested through consultation before being adopted in development

plans. The Water Cycle Strategy provides a detailed evidence base regarding issues that will need to be explored through the review of the Local Development Framework.

13. It should be noted that the study was largely completed in 2010 and the Housing Trajectory and policy background reflect the situation as it was at that time. However, the evidence base created is available to use to assist the consideration of development proposals. It will also assist the development of policy regarding water infrastructure in the new South Cambridgeshire Local Plan.

Implications

14. Financial	There are no direct financial implications. The Study was commissioned by Cambridgeshire Horizons. To implement some of the aspirational objectives explored in the study could have cost implications, depending on how they were implemented.
Legal	None.
Staffing	There are no direct staffing implications arising from this report.
Risk Management	None.
Equality and Diversity	There are no direct equal opportunities arising from this report.
Equality Impact Assessment completed	No.
Climate Change	The WCS will provide an evidence base which will inform the development of policies towards more sustainable water services infrastructure.

Consultations

15. The Study was reported to the Cambridgeshire Horizons Board on 8th December 2010, and the Board agreed that the study was complete subject to outstanding stakeholder comments.
16. A draft of the Phase 2 study was reported to the New Communities Portfolio Holder Meeting on 14th December 2010. It was determined to advise Cambridgeshire Horizons that a number of issues should be addressed further in the document. These are repeated below, together with an update of how they have been addressed in the final report:
- Clarification regarding the timescales of implementing water efficiency standards and the impact on water neutrality and wastewater calculations. *Update: Clarification has been added to the study, highlighting where assumptions represent the maximum achievable efficiency, and actual additional water demand will depend upon the water efficiency achieved in the houses built.*
 - Provide more details and examples of water efficiency measures such as greywater and rainwater recycling, and explore practicalities, in particular in small development schemes. *Update: A number of examples are included in the study. New examples of highly water efficient developments are emerging all the time. There may be further opportunities to explore examples through future evidence to support implementation of high standards.*

- Provide more details and examples regarding the relationship between 100% above ground drainage SUDS and housing density. *Update: Due to the site specific nature of proposals, it has not been possible to explore generalities, but examples are included of where developments including extensive SUDS schemes have been implemented.*
- It would also be helpful for the WCS to explore examples of where high water efficiency policies or water neutrality have been achieved or explored elsewhere, and lessons learnt. *Update: A review of policy examples implemented elsewhere in the UK has been included as an appendix to the main report.*

Consultation with Children and Young People

17. None.

Effect on Strategic Aims

18. We are committed to making South Cambridgeshire a place in which residents can feel proud to live – The evidence base will support the Council in pursuing policies towards sustainable development and combating climate change.

Conclusions / Summary

19. The Phase 2 Water Cycle Strategy for the major growth areas in and around Cambridge has now been published by Cambridgeshire Horizons. The study provides information on water infrastructure, sustainable drainage, and water efficiency that can be utilised when planning for the existing major developments, and can be used an evidence base for the South Cambridgeshire Development Plan.

Background Papers: the following background papers were used in the preparation of this report:

The phase 2 Water Cycle Strategy can be viewed here:

http://www.cambridgeshirehorizons.co.uk/our_challenge/environment_sustainability/water_cycle_strategy.aspx

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