

**to:** Iain Page; Helen Ward; Mike Burrell; Sue Bull; Mike Cook; Steve Moncaster  
**from:** Jayne Owen  
**copy:**  
**our ref:** GNDP EIP  
**your ref:** AW  
**subject:** GNDP EIP  
**date:** 17 November 2010

---

Following Anglian Water's (AW) representation at the Greater Norwich Development Partnership Examination in Public on the 11th November (Matter 8) we feel that our explanation regarding the 20MI/d sustainability reduction on the Wensum and our commitment to reducing abstraction at Costessey to historic levels (6MI/d decrease) as part of the interim 'agreement of common understanding' requires further clarification:

The Environment Agency (EA) as part of its Review of Consents (RoC) under the Habitats Directive identified the River Wensum Special Area for Conservation (SAC) as presently having unfavourable conditions in relation to water quality, abstraction, siltation and physical modifications to the channel. The RoC Stage 3 appropriate assessment identified that the river reach between the Costessey Pits Intake and the limit of the SAC at Hellesdon Mill does not achieve the Habitats Directive Environmental Required Flow (HDERF) and fully licensed AW abstraction at Costessey has adverse effects.

Consequently, the EA identified that a significant reduction in flows, especially in the lower reaches are required for the site to meet its environmental objectives. This includes the need for a reduction in the AW Costessey abstraction of up to 49 million litres per day (MI/d) to be achieved progressively over successive business planning cycles. This would involve an initial 20MI/d reduction in the short term.

We are currently appraising the options available to achieve the initial reduction of 20 MI/d and have committed to outlining our preferred option by January 2012. Until the solution is in place we have agreed to prevent any further deterioration of the River Wensum SAC by restricting the level of abstraction at Costessey to historic levels. This is defined as the annual average abstraction in 2005 which leads to a 6 MI/d reduction in the Norwich and the Broads (NTB) WRZ.

The draft Norwich Joint Core Strategy (JCS) document sets out an aim to build approximately 22,500 households between 2010 and 2020. As part of the consultation process for this strategy Natural England have advised that any proposals coming forward ahead of the adoption of the JCS and the implementation of the RoC solution for the River Wensum SAC should not act to exacerbate the adverse affect on the Wensum by involving increased abstraction from Costessey.

As part of our 'common understanding agreement' with the Environment Agency and Natural England we committed to undertake an assessment into the level of growth that could be accommodated by our existing sources over AMP5 with the inclusion of the reduced abstraction at Costessey to historic levels (2005). Our assessment is based on outputs from our Water Resources Management Plan (WRMP) final planning scenario (WRP4) for the Norwich and the Broads WRZ, February 2010 and is summarised below:

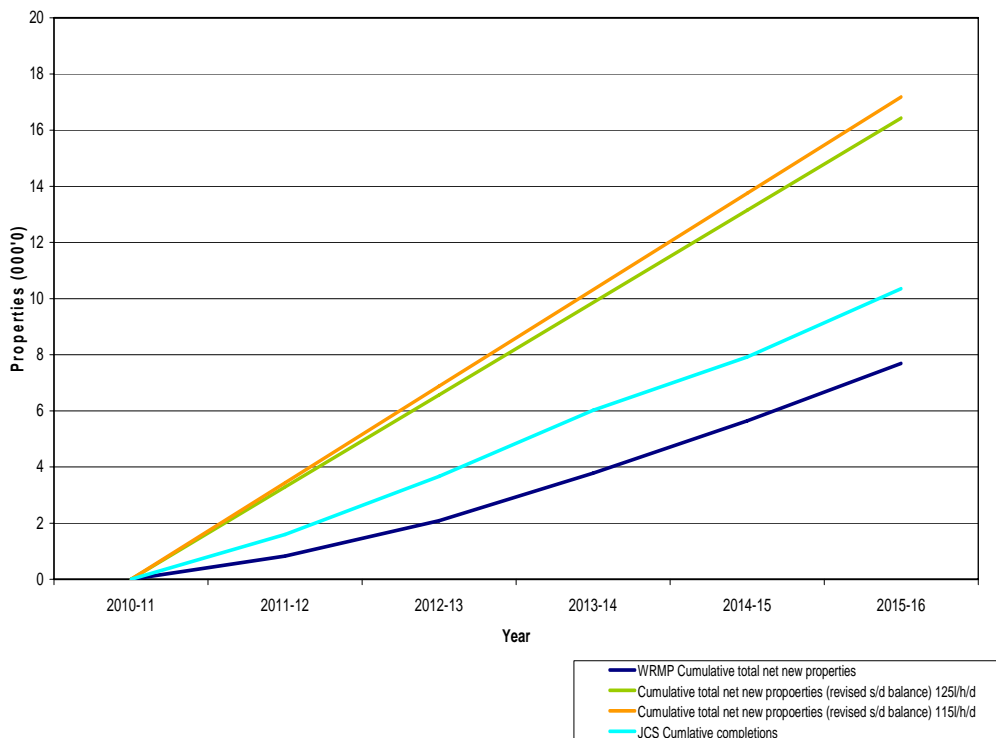
Description	Units	2010/11	2011/12	2012/13	2013/14	2014/15
Norwich & The Broads (NTB) WRMP supply demand balance	MI/d	10.21	10.11	9.72	9.02	8.22
Revised supply demand balance (capped abstraction from Costessey)	MI/d	4.22	4.12	3.73	3.03	2.23
Cumulative new Properties included in WRMP (WRP table 4)	000's	0.82	2.09	3.78	5.65	7.69
Additional build capacity at 125 l/h/d (using the revised supply demand surplus)						8.74
Additional build capacity at 115 l/h/d (using the revised supply demand surplus)						9.50
Total build capacity at 125 l/h/d (including WRP forecast)	000's					16.43
Total build capacity at 115 l/h/d (including WRP forecast)	000's					17.19

Norwich and The Broads WRZ revised supply demand balance and build capacities

With the revised supply demand balance of 2.23 MI/d we would be able to meet our growth forecasts of 7,690 properties and also accommodate an additional 8,740 properties (based on 125l/h/d consumption) or 9,500 properties (based on 115 l/h/d consumption) by 2015. At this level of growth we are able to maintain our levels of service commitments to our customers and our supply demand balance remains in surplus.

By annualising the total build capacities that could be supported under the two consumption rates we would be able to fully support the property growth forecast in the Joint core strategy as shown in the graph below.

**Properties that could be supported up to 2015 in the Norwich and the Broads WRZ with abstractions reduced to 86% from Costessey**



Our demand forecast assumes that the population served will increase between 2010 and 2035, having taken into account the current economic downturn and the expected recovery from it. In our WRMP we also assumed an overall decline in measured water consumption to 130l/h/d by 2030. These growth forecasts have been scrutinised and accepted by our regulators.

On the basis of this assessment, the forecast level of growth outlined in our WRMP would be achievable under the revised abstractions from Costessey and we are confident that the JCS housing projections could also be supported.