

Changes made to 'The Groundwater Summary Report'* between the Final version (18th February 2014), and the current version (17th March 2014)

**Full title: Alston Licence Renewals: Alston Plumsgate Road AN/34/0009/008 and Alston Ludham Road AN/34/0009/009 Groundwater Report: Assessment of the Acceptable Level of Abstraction within the Ludham-Catfield Area in the Vicinity of the Ant Broads and Marshes SSSI Summary Report (Environment Agency 2014)*

Alterations to text:

Text box added on cover page for version control:

Final Version 18th February 2014.

Current Version 17th March 2014: issued following corrections and proposed amendments identified by Environment Agency staff to the February 2014 version.

Page 3- 'The Summary Report should be read in conjunction with three separate Technical Notes...' corrected to 'The Summary Report should be read in conjunction with four separate Technical Notes'.

Title of 4th technical note added: 'Assessment of the effect of model grid size on model predictions (AMEC, 2014d).' Dates of other technical notes updated to 2014.

Page 4- paragraph 6 'Environment Agency is confident would not adversely affect the ecology of the wetland site.' Changed to 'Environment Agency is confident would not adversely affect the ecology of the water feature.' Last paragraph 'This report therefore expands on methodology'- 'the' inserted.

Page 6- paragraph 1 'Alston Plumsgate Road is located about 1.35 km N and NE of Catfield Fen near to Plumsgate Road'- 'the' inserted.

Page 8- paragraph 4 'Catfield Fen is located on the eastern side of Ant Broads & Marshes SSSI'- 'the' inserted.

Page 10- paragraph 2 'Whether the community has been lost and, if so, potential causes remain to be confirmed.'- 'the' inserted.

Page 12- paragraph 5 Phrase 'This is due to the fact that the licensed abstraction for spray irrigation is effectively a peak quantity and is only taken up in very dry summers.' – to help understanding.

Page 14- paragraph 4 'Unit 35, that sits within Unit 11, is also reported unfavourable recovering condition' 'to be in' inserted.

Page 15- paragraph 2 'S27 is found in situations of intermediate base status, but covers a wide range and has been found to occur through a pH range from 4.6 to 7 with a mean of 5.7'- 'covers a wide range and' removed.

Page 16- paragraph 3 'The dipwell readings from UoB 13 located on Middle Marsh (Fig. 4.1) show a water table fluctuation of just over 0.5m' changed to 'The dipwell readings from UoB 13 located on Middle Marsh (Fig. 4.1) show a water table fluctuation of about 0.6m, probably representing a similar depth relative to ground level.' Paragraph 4- 'summary report' capitalised.

Page 23- paragraph 2 'The model simulates groundwater levels and flows within the main Chalk and Crag aquifers, but also within the London Clay and the superficial deposits, importantly including the peat deposits typically found at wetland sites.'- word 'importantly' deleted.

Page 24- paragraph 3 words 'This is not represented on Fig. 8.6, but is presented in the AMEC Main Report.' added.

Page 26- paragraph 3 'The yellow shading on the time-series plots identifies the driest years formally recognised as drought years by the Environment Agency.' Words 'which are' inserted.

Page 26- section 8.2 Water Chemistry- '...base-poor character of groundwater that could result from changes to the Crag upward flow resulting from abstraction.'- 'changes to' changed to 'a reduction of'.

Page 48- paragraph 1 'For instance, the maximum drawdown of 2mm' corrected to 2 cm.

Page 49- section 11, paragraph 7, 'Sutton Broad (Unit 24 of the SSSI) is reported to be in unfavourable recovering condition (Recovering well following scrub removal, restoration of the unit continues).'" and changed to: "Sutton Broad (Unit 24 of the SSSI) is reported to be in Unfavourable Recovering condition. Restoration of the unit continues; the unit is reported to be recovering well following scrub removal."

Alterations to tables and figures:

Table 3.1 corrected so that column 6 adds up correctly.

Table 8.1 corrected to say Figure or table where appropriate.

Fig 6.2 Corton Formation added to give consistency with geological map extract shown in Fig 6.1

Fig 7.1 Layer 2 line made visible.

Figs 7.1 and 7.2 Comment added to helping link observed data to modelled layer.

Fig 8.7 Incorrect spelling of 'vertical' corrected.

Fig 10.3 Groundwater Heads- Recent Actual abstraction profile was being shown instead of historical- this was corrected.