

Date: 22 August 2013  
Our ref: 92916 Appendix 11 licence renewals , Catfield Fen  
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**BY EMAIL ONLY**

Dear Hannah

**Case name: Appendix 11 abstraction licence renewal in The Broads Catchment.  
Notice of Advice by Natural England under The Conservation (Natural Habitats &c.)  
Regulations 2010**

Thank you for consulting Natural England on 24<sup>th</sup> July 2013 with regard to two abstraction licence renewals to abstract water from crag boreholes at Ludham and Plumsgate road, Catfield, Norfolk, for the purpose of spray irrigation between April and October.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England is providing advice under The Conservation of Habitats and Species Regulations 2010 (The Conservation Regulations) and under Section 28(l) of *the* Wildlife and Countryside Act 1981 (as amended).

We acknowledge receipt of your Appendix 11 notices for recording likely significant effect of two abstraction licenses AN/034/0009/008 and AN/034/0009/009 on the Upper Thurne Broads and Marshes SSSI part of the Broadland SPA/Ramsar and The Broads SAC.

This letter may be taken to be Natural England's formal consultation representations under Regulation 61 of the *Conservation (Natural Habitats &c.) Regulations 2010*

Ecological Status of Unit 20 of the Upper Thurne Broads and Marshes SSSI:

Natural England have undertaken a further condition assessment on of unit 20 within the Upper Thurne Broads & Marshes on July 10<sup>th</sup> 2013

Summary of condition

- The condition of unit 20 from the features assessed on July 10<sup>th</sup> 2013 is **favourable**. Attention needs to be given to the scrub on the site in the near future, but this is not currently at a level to cause the unit to be recorded as unfavourable. Neither is it our opinion that scrub colonisation is as a consequence of dry conditions. It is our opinion that levels of scrub more reflect the intensity of site management.
- It is recommended that in line with current NE policy relating to the use of remedies and threats, the unit is recorded as **favourable**, with the threat category of **hydrological changes**. This threat is applied because of the rarity of the mire

communities in this unit and their vulnerability to changes in water levels and /or water chemistry and the location of this site at the edge of Broadland and so potentially sensitive to local catchment processes and management. The profile of threats (the successor to risks) now ensures that concerns recorded as threats will be addressed by the relevant organisations.

### Natural England's Judgement and Conclusions on LSE

The following points provide detail to support Natural England's conclusion that the two abstraction licences AN/034/0009/008 and AN/034/0009/009, are not likely to have a significant effect alone or in combination on the interest features for which The Upper Thurne Broads and Marshes SSSI has been classified.

1. Natural England is content with the Environment Agency's reliance on the 2009 Review of Consents (ROC) as a basis for approaching the Appendix 11. Natural England is not aware of significant changes that would result in the ROC no longer being relevant.
2. Natural England agree with the conclusions of the ROC that fully licensed abstractions are not acceptable in periods of drought, and that there do not appear to be any long term hydrological impacts from historical abstraction on Mrs Myhill's Marsh. Therefore in this case the baseline should be historical actual abstraction levels rather than naturalised.
3. Natural England agrees with the conceptualisation of the hydrological functioning of unit 20 (Mrs Myhill's Marsh) of the Upper Thurne Broads and Marshes SSSI (shown in Annex 5 of the Appendix 11). We also agree that Mrs Myhill's Marsh is similar to Catfield Fen in that it is at the edge of the fenland system, is largely isolated from the influence of the river and water input is characterised by a mix of groundwater and rainfall.
4. Natural England accepts that the site is predominantly rainwater fed with an upward groundwater flow representing around 25% of the total flow into the site. In our opinion, whilst groundwater input is less than rainfall, its actual influence may be greater under dry / drought conditions.
5. Annex 5 has provided important additional information to help understand the hydro-chemical functioning of the site and any potential changes to that functioning as a result of the Alston licences(s).
6. Natural England agrees that the hydrological criteria needing to be met as established for the RoC are still valid and these are:
  - Shallow water table and drains supported by upward groundwater flow from the Drift / Crag aquifers
  - Water levels should not fluctuate more than 30cm annually
  - For non-drought summers, soil moisture content kept above field capacity
  - For drought summers, water table in uppermost model layer above lowest historical water level

7. Natural England accept the overall licence quantity will be reduced from 843.4 TCMA to 657.2 TCMA (outlined in the Appendix 11 annex 5 table 1), however this is still above both the recent actual (2011) of 640.6 TCMA and the 1993 historical level of 592.8 TCMA.
8. Natural England agree that these reductions are reducing the largest effects of abstraction and therefore resulting in the Alston licences being less significant in combination.
9. Natural England agree that once the changes above are implemented, based on the modelling at fully licensed rates, the hydrological functioning of Mrs Myhills Marsh would appear to be maintained, except during some drought years. Both water quantity and water chemistry should not be significantly affected in the longer term, especially as water levels recover during winter / recharge periods.

#### Natural England's outstanding concerns regarding the Appendix 11

1. Overall Natural England believe the Environment Agency have provided a significant amount of additional information in the updated Appendix 11 in order to answer our questions and to support the conclusions of the Appendix 11. However the report continually refers to the Site Options Plan (SOP) and we feel that this information should have been reproduced in the annex to allow the report to be more transparent and to be seen as a standalone document. In particular we are not clear which scenario is being applied in the Fig 5 in the Appendix 11 as run 341 is not one of the 3 final options shown in the SOP.
2. Natural England advise that the key conclusions from the additional work presented in Annex 5 are reflected in the final conclusions of section A of the appendix 11.
3. From the information provided in the Appendix 11 and the SOP Natural England have not been able to directly assess the impact of the Alston licence(s) alone on Mrs Myhill's Marsh. However, we believe the impact will be less than from Overton, as the abstractions are further away. In particular, the larger of the two Alston licences is the furthest away (1.8km according to the Appendix 11).
4. Natural England are concerned that there is a potential for Mr Overton to use the base non-time limited licence and the timescales for amendments to include a 25% reduction to this licence are unknown at present. We therefore urge the Environment Agency to make the necessary changes as soon as possible and ideally before Mr Alston's licence is renewed.
5. Natural England advises the EA that the above issues should be addressed for clarity and transparency.

#### **Natura 2000 site – No objection**

Whilst Natural England have asked the Environment Agency to address our outstanding concerns we do not believe the final Appendix 11 will change significantly enough for our view on no likely significant effect to change, however if the Environment Agency consider the amendments to materially change matters we would expect to be re-consulted.

In light of the above, Natural England advises The Environment Agency that the two

abstraction licences AN/034/0009/008 and AN/034/0009/009, are not likely to have a significant effect alone and in combination on the interest features for which The Upper Thurne Broads and Marshes SSSI has been classified. Natural England therefore advises that The Environment Agency is not required to undertake an Appropriate Assessment to assess the implications of these licences on the site's conservation objectives.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact Anne Ramsay on 03000604941. For any new consultations, or to provide further information on this consultation please send your correspondences to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely



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Natural England

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