# Offshore Wind Farms

## EAST ANGLIA ONE NORTH
**PINS Ref: EN010077**

**and**

## EAST ANGLIA TWO
**PINS Ref: EN010078**

# SEAS response to the Secretary of State's (BEIS) request for further Information (Flooding)

DEADLINE – 30 November 2021

by

SEAS (Suffolk Energy Action Solutions)
Unique Ref. No. EA1(N): 2002 4494
Unique Ref. No. EA2: 2002 4496

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SUFFOLK ENERGY ACTION SOLUTIONS

The Secretary of State
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London SW1H 0ET

28th November 2021

*Re. Application by East Anglia One North Limited, East Anglia TWO Limited ("the Applicant") for an Order granting Development Consent for the proposed East Anglia One North, East Anglia TWO Offshore Wind Farms and associated offshore and onshore infrastructure ("the East Anglia One North project", "the East Anglia TWO project")*

Dear Sir,

We thank you for inviting comment on the question of flooding with regard to climate change caused or exacerbated by the above project. We note that you have asked Environment Agency to consider and report back to you on all relevant flood events.

SASES has already written to you and to the Environment Agency concerning flooding events in and around the proposed substation site in Friston.

SEAS would like to draw attention to the flooding problems east of the substation site in the cable corridor, particularly in the valley of the River Hundred, which the cable corridor crosses. Rather than simply listing flood events, SEAS has attempted to provide a little contextual information to help paint a clearer picture for BEIS and the Environment Agency.

Below is relevant information on flooding in Aldringham. We believe that the Environment Agency will not have been informed of all such events and therefore might not be aware of them. We also offer information which ought to help modelling in the light of climate change.

1 East Suffolk Councils' *Strategic Flood Risk Assessment*[1] records fluvial flooding from the River Hundred in 1979, 1981, and 1993 twice (causing significant damage to property), but does not map these, and omits the repeated pluvial flooding on the B1353 in Aldringham which required drainage correction by the local Council in 2020. It also omits the seasonal flooding alongside and on the B1122 in Aldringham, on the cable corridor, which is both pluvial and fluvial.

*Pluvial flooding, junction of B1122 and B1353*

Repeated flooding, due to blocked underground seepage by a housing development in the valley, cut the village of Aldringham in half — this image was taken in 2019; drainage was eventually installed in 2020.

[1] https://[redacted]

2 DEFRA maps describe the Hundred's floodplain as benefitting from defenses; these are bunds, catches, channels, reedbeds, and manually-operated sluice gates which protect the Aldeburgh-Leiston SSSI (RSPB North Warren and The Haven Wetland Reserve) as well as the Mere in Thorpeness, controlling freshwater flow downstream and out to sea as well as halting sea incursion. The river in seasonal spate raises the levels of water in the Reserve above levels safe for the important biodiversity there and so requires draining back to equilibrium.

In the village settlement, the Hundred regularly overtops and threatens properties along its banks in Gypsy Lane and downstream. Residents have not been reporting these events to the Environment Agency.

*Fluvial Flooding January 2021*

River Hundred at the proposed trenching point in January this year

3 No proper assessment of the Applicant's proposed disturbance to the important wetland environment of the River Hundred's floodplain has been carried out by the Applicant, who seems to have relied on a generic assessment of trenching through a ditch,[2] therefore any change in flooding events during and after extensive excavation has not been considered.

4 DEFRA's MAGIC maps do not yet show aquifer data here. The Applicant has admitted it is unaware of the proximity to the surface of aquifers in the valley, which are at risk from trenching. Several dwellings in the valley rely on these aquifers for drinking water, and no household known to us has been contacted by the Applicant to date. We conclude that a thorough geological survey is also wanting of the water table and aquifers through which the excavations must pass.[3]

5 Since the existence, extent and the wetland character of the riparian woodland in Aldringham were missed by the Applicant on submission, their proposal to remove this specialised vegetation of the area cannot be mitigated, not least because it has not been planned for. Both the riparian woodland and part of the marsh used for grazing on the east bank will have to be removed.[4]

[2] [redacted]

[3] SPR Ecology Update Meeting Notes 140521, author Joanna Young, SPR.

[4] [redacted]

6 As the removal of the woodland is permanent, both sequential and exception tests of the *National Planning Policy Guidance Update* should be invoked in this instance, and have not been.

7 In the light of climate change, this should be particularly unwelcome. This specialised, wetland woodland acts as a carbon sink in wet environments, strengthens the river bank, absorbs flow energy, prevents erosion, removes pollutants, and cools the water before it enters the fen and lagoons of the SSSI immediately downstream.[5]

Removing it therefore fails the *National Planning Policy Guidance Update, Section 14, Meeting the challenge of Climate Change*, in paragraphs 152, 153, 154, 159, 160, 161.

Its loss therefore will increase the risks from flooding to property and the community in the immediate area. It will also transmit problems of erosion, volume and flow, plus pollution from silt and run-off, downstream, thus compromising the protected biodiversity, landscape, and coastal security in and around the important reserves fed by the Hundred.

8 The Applicant's development is to be followed by the National Grid Ventures' Nautilus Interconnector, and several further Windfarms and Interconnector projects due to connect to the National Grid at Friston before 2030.

9 Consequently, Aldringham and the River Hundred Valley face permanent distortion of the floodplain with increasingly unpredictable flooding affecting both local settlement and biodiversity.

10 The wetlands 'ability to counter balance climate change, to enhance ecological connectivity corridors, and to sympathetically buffer increasingly challenging coastal processes will be removed.

Thank you for the opportunity to share this information. We hope you find it useful.

Yours faithfully,

Dr G Horrocks

SEAS

cc Environment Agency, Suffolk County Council

[5] [redacted]