



Supplementary Environmental Information

Sensitive Time Periods for Birds at AMEP Compensation Site

Explanatory Note EX 11.18

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EXPLANATORY NOTE ON THE SENSITIVE TIME PERIODS FOR BIRDS AT AMEP COMPENSATION SITE

INTRODUCTION

- 1.1.1 The AMEP compensation site on the north bank of the Humber lies on farmland at Cherry Cobb Sands (CCS), in an area immediately inland from the intertidal habitats (mudflats and saltmarsh) at CCS. The intertidal habitats are used by a range of qualifying interest bird species from the Humber Estuary SPA/Ramsar site, which the farmland supports. The main bird species which uses the farmland on the compensation site is curlew.
- 1.1.2 This explanatory note provides information about the time periods which are regarded as sensitive due to the presence of important numbers of qualifying interest waterbirds of the Humber Estuary SPA/Ramsar (*ie* >1% of the Humber Estuary population). Such information helps inform the most appropriate time periods during which construction works on the compensation could commence, a question which has been raised by Natural England in consultations.

SENSITIVE TIME PERIODS FOR SPA QUALIFYING INTEREST BIRD SPECIES

- 1.1.3 Bird surveys undertaken between August 2010 and April 2011 by the Institute of Estuarine and Coastal Studies (IECS) in an area which covered both the intertidal habitats at CCS and in the inland farmland which will form the compensation site, showed that the foreshore was used by important numbers of one or more of the qualifying interest species of the SPA/Ramsar site throughout the period August to April.
- 1.1.4 Species such as shelduck, grey plover, curlew, redshank, knot and dunlin were present in numbers usually well in excess of 1% of the Humber Estuary SPA/Ramsar population at both high and low tides in almost all the months surveyed. Curlew was also present on the compensation site fields in important numbers over the autumn passage period (September – October). Other species such as teal, lapwing and golden plover were present in numbers exceeding 1% in October and December to March, with black tailed godwit present in December and January, and bar-tailed godwit in most months between November and April. Passage interest included ringed plover and greenshank both of which were present on the foreshore in important numbers in August, ruff in September, and little egret on the foreshore in October.

- 1.1.5 WeBS counts (see *Section 35.7.9* of the *ES*) shows that important numbers of some species can occur even over the summer months (eg ringed plover in May and dunlin in July).

IMPLICATIONS FOR CONSTRUCTION OF THE COMPENSATION SITE

- 1.1.6 The compensation site will take approximately six months to construct using standard excavators and associated vehicles to remove the surface layers, alter the existing ground contours and move excavated materials within the site to create the new flood defence embankment on the inland side of the compensation site. All excavated materials will remain within the site. Once the construction is complete a breach in the existing sea defence wall will be necessary to allow the compensation site to flood. There will only be one breach and this will take no more than two days to create.
- 1.1.7 The works will take place between the months of April and October. This period avoids the main winter months when the adjacent intertidal mudflats are heavily used by waterbirds on a regular basis.
- 1.1.8 Whilst the adjacent intertidal mudflats still support waterbirds during the period April to October, the works will be undertaken behind the existing sea defence wall at CCS. The existing sea defence wall will act as a screen which will help protect birds using the intertidal habitats at CCS from sources of visual and acoustic disturbance from the works within the compensation site. As the creation of the compensation site will entail excavations the effectiveness of the sea defence as a barrier to visual and noise disturbance is likely to increase over time as the ground level is lowered.
- 1.1.9 An existing coastal footpath runs along the length of the foreshore in this location and it will be permanently diverted inland around the foot of the new embankment before re-joining its current alignment along the foreshore. Walkers are sometimes one of the greatest sources of disturbance to birds, and the diversion will therefore remove an existing source of disturbance, and may increase the habitat available to SPA birds as a result. Significant effects on birds using the intertidal habitats are therefore not predicted.
- 1.1.10 Work on the creation of the embankment at the inland site of the compensation site, which for much of the compensation site is at least 300 – 400 m away from the edge of the intertidal habitats, and in places is approximately 750 m, is beyond the range associated with disturbance effects. The intertidal habitats themselves can extend to

approximately 1 km from the existing sea defence wall depending on the location and the tidal state. Hence work on the embankment is not predicted to affect birds on the intertidal habitats.

- 1.1.11 The agricultural fields that form the proposed compensation site are only used by curlew in any numbers on a regular basis. It has been agreed with Natural England that the birds currently supported on the agricultural fields that comprise the compensation site can be supported in adjacent fields. Much of the work on the inland embankment will have been completed prior to the main period of use during the autumn passage, and construction work will not be ongoing across the whole 3 km of the new embankment all at once. Hence there will be adjacent fields that will not be subject to disturbance from the works that will be available for the birds to use throughout the period they are likely to be present.
- 1.1.12 The diverted coastal footpath will be separated from these adjacent agricultural fields by Cherry Cobb Sands Drain. Hence users of the footpath will not stray from it onto the fields. Given that the curlews are using the fields which currently lie inland of the coastal footpath, the relative level of disturbance to the birds as a result of walkers is unlikely to be any greater than that from walkers along the existing footpath. The effect of the footpath diversion inland is, therefore, not predicted to have any significant effect on their use of the adjacent inland fields. In addition new grassland habitat is to be created further inland at Old Little Humber Farm, which will provide opportunities for curlew in addition to its intended purpose for black-tailed godwit.
- 1.1.13 Whilst there are records of important numbers of birds present on occasions on the intertidal habitats over the summer months, the overall numbers of birds using the intertidal habitats are lower at this time. Subject to prey availability, this may allow the birds which are present a greater choice of location. The longer daylight hours during the summer months will also allow extended disturbance free feeding time for birds compared with the autumn and winter months. So in addition to the protection afforded by the sea defence wall and the removal of existing sources of disturbance, there may also be more opportunity for the birds to find foraging and roosting areas away from the compensation site works.
- 1.1.14 Works on the compensation site are likely to continue into the autumn passage period. However, many of the factors described above will still be relevant including the distances from the works of the majority of the intertidal habitat, the screening of areas closer to the site by the existing sea defence wall, and the relatively long daylight hours. In

addition the invertebrate biomass in the intertidal habitats is likely to be high at this time of the year.

CONCLUSIONS

- 1.1.15 The compensation site is in a location adjacent to CCS, an area of intertidal habitat which supports important numbers of the Humber Estuary SPA/Ramsar waterbirds over large parts of the year, but especially over the winter and passage periods. Despite this the works to create the compensation site are not predicted to have significant effects on the SPA bird species. This is largely due to the visual and acoustic screening of the works which is expected from the existing sea defence wall, the diversion inland of the coastal footpath which will remove a source of disturbance to birds on intertidal habitats (which may be having effects at present) without increasing the effects on birds on inland fields, and the timing of the works to cover predominantly the summer months. This is a period when the intertidal habitats are typically less well used by waterbirds the birds have more choice of location in which to forage and roost, and there is more daylight and good benthic invertebrate food availability across the intertidal mudflats. In addition the creation of the new embankment is several hundred metres away from the edge of the intertidal habitat which is very extensive.