

Date: 20 September 2011
Our ref: O/N Lincs
Your ref: PMS.KJ.A.E11-0620



Peter Stephenson
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By email

Natural England
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Dear Peter,

RE: Able Marine Energy Park Mitigation and Compensation Proposals

Thank you for your letter dated 8 September 2011 regarding the amended mitigation proposals for the loss of SPA and Ramsar waterbird habitat within the AMEP footprint, and for your email of 14 September 2011 regarding the proposed compensation measures. I will respond to each of these matters in turn. Please note that this advice is given without prejudice to any advice Natural England may offer the competent authority in accordance with our statutory roles under the Conservation of Habitats and Species Regulations 2010.

Proposed mitigation

In light of this new proposal, I thought it would be useful to set out the advice, relevant to this application, which has been provided by Natural England directly to Able UK or is available through the South Humber Gateway strategic work:

Able 2009/0600 Planning permission at East Halton for port related storage.

As you will be aware, this development site supports significant numbers of SPA and Ramsar waterbirds and Natural England provided advice to Able UK over the course of 4 years before agreement was reached over the area of mitigation that needed to be provided to meet the requirements of the Habitats Regulations. During these discussions, the mitigation principles for developments within the South Humber Gateway were discussed in great detail. These principles are that a core area should be provided that is sufficient to meet the needs of the birds adversely affected by the development. The core area should be buffered by an area of 150m width where the adjacent land use is unsecured; this ensures that the core area is available to the birds at all times once the surrounding land is developed. All the mitigation area should be optimally managed as wet grassland.

South Humber Gateway Strategic Approach to Mitigation

A series of documents produced by the Ecology Group detailing the mitigation principles for the South Humber Gateway and the proposed strategic approach:

The South Humber Bank: Principles to underpin a strategic approach The RSPB's position
Feb 2009

Joint position statement regarding the emerging South Humber Gateway SPA/Ramsar mitigation strategy from Natural England, Lincolnshire Wildlife Trust and the Royal Society for the Protection of Birds **October 2009**

Memorandum of understanding for the delivery of the South Humber Gateway Strategic Mitigation **April 2010**

South Humber Gateway Conservation Mitigation Strategy Delivery Plan **August 2010**

Marine Energy Park - meeting minutes

Minutes of meetings dating back to 21 September 2010 where Natural England (and the RSPB) clearly explained the principles of the South Humber Gateway and the requirement for 4 x 50ha blocks of wet grassland mitigation to be delivered within the Gateway. There is agreement that Able UK only have to provide mitigation for the impact of their development in combination with other developments within the Gateway. Natural England's advice at these meetings was that Able UK's proposed mitigation area (approximately 28ha) is not sufficient to avoid an adverse effect on the site integrity of the Humber Estuary SPA and Ramsar site.

Marine Energy Park – Natural England written advice provided to Able UK

- Email from Emma Hawthorne dated 9 June 2011 stating that the proposed mitigation area (approximately 30ha) "is not of sufficient size to mitigate for the proposed development in combination with other developments.....We advise that a 50ha mitigation area – 20ha core plus suitable buffers (150m unless otherwise agreed) – is required in this location".
- Natural England paper "Advice from Natural England and RSPB on suitable buffers for SPA and Ramsar waterbird mitigation areas within the South Humber Gateway" dated 15 July 2011. This document sets out the evidence base for 150m buffers to support the core area "We believe that the proposed buffer of 150m is the minimum that should be considered in a situation where the adjacent land use is unsecured".
- Letter from Andrew Hearle dated 26 August 2011 "Your proposal for mitigation is for a total area of 28ha comprising 5.5ha of core area with a 150m buffer along three sides of this area.....Whilst we welcome in principle the core and buffer approach which you have proposed, Natural England's advice remains that we disagree with the methodology used in determining the extent of the mitigation area required and thus advise that the extent of core area proposed is inadequate to support the numbers of birds that are currently utilising the development land".

In light of the above, we are disappointed to see that your latest proposal is for an area of mitigation smaller than the previous proposal which we had already stated was not adequate. Your current proposal is for a core area of 4.2ha surrounded by a 100m buffer on 3 sides and an operational buffer adjacent to the development site, resulting in a mitigation area of approximately 15ha which we assume will be managed as wet grassland. Our advice on this proposal remains as previously stated; this is that the area proposed for mitigation, now reduced in extent, is not adequate to meet the requirements of the Habitat Regulations.

We have considered the evidence presented in the documents which you have used to support your proposal for a reduced area of mitigation and make the following observations:

Wader day calculations

As you are aware, the wader day calculation put forward by North Lincolnshire Council's ecologist was used to reach agreement for Able UK's previous development at East Halton. We therefore recognise the rationale for using wader day calculations to calculate the size of the core area for this development. However, there appear to be a number of errors in the calculations presented and therefore we cannot agree with the results which it reports. It would be useful to discuss this with your team in detail, but in summary the issues are:

- Whilst a number of wet grassland sites are discussed in the paper - LCGM site 1, LCGM site 2, 8 RSPB reserves – only one site, LCGM site 1 has been used in the calculation. This is the site with the highest bird densities and therefore results in a calculation of the smallest mitigation area at Killingholme Marshes.
- The area of mitigation calculated has then been reduced by 50% owing to a comment from Roger Wardle¹ that “virtually no roosting waders are recorded on around 50% of the site” (LCGM site 1). Roosting birds will form dense flocks to reduce risks from predation and the loss of body heat, whereas feeding birds require greater areas due to inter and intra specific competition. Since the impacts of the development are on *feeding* curlew, the implication that surrounding land has no value based on a more limited area utilised by roosting birds is flawed.
- The proposed mitigation area has been further reduced as it is stated that “the pro-rata quantum of compensation (sic) needed for the AMEP development is around 60 per cent”. However, we have mapped the land within Killingholme Marshes that is utilised by curlew and determined that 83.6% will be either developed as part of the MEP or become the proposed mitigation land.
- Roger Wardle's report states that the counts on the Lincolnshire Coast grazing marsh sites are records of birds feeding, roosting and flying over. Therefore, the data analysis has not been undertaken on a like with like basis as records for Killingholme Marshes are only for feeding birds. Furthermore, the inclusion of birds flying over a site will overestimate the number of birds that the site can support; clearly birds flying over a site are not obtaining any ecological value from it.
- The new drawing AME-08050 revision B shows buffers around the core area of 100m. Natural England has already provided very pragmatic advice that 150m buffers are required, as evidenced in our paper sent to Able UK on 15 July 2011. No evidence is provided to support the reduction in buffer in this case, and therefore it is still Natural England's advice that a 150m buffer is required.

Required mitigation

The wader count data for the Lincolnshire Coast grazing marsh sites are provided in Roger Wardle's document entitled *Wader Roosting Assessment Additional Record Interpretation*, provided to Natural England in your email of 8 September.

¹ Wader Roosting Assessment Additional Record Interpretation Able Humber Ports Facility, Killingholme Roger Wardle July 2010

It is possible to skew the area of mitigation required, either upwards or downwards, by selecting a specific wet-grassland site with lower or higher bird densities respectively. There is no rationale for adopting either approach.

Rather than selecting the Lincolnshire Coast site with the highest bird density, if the available data are used as presented in the report (which takes into account areas with both higher and lower bird densities) the area of mitigation should be calculated as follows:

i) Correct area using wader days approach and Lincolnshire Coast wet grassland sites

Lincolnshire coast curlew counts (7 counts):

Date	16/12	14/01	14/02	23/02	07/03	14/03	29/03
Number of birds	60	15	6	0	75	774	261

- Total curlew count = 1191 birds
- Mean curlew count = $1191 / 7 \text{ counts} = 170 \text{ birds}$
- Count period = 16 weeks = 112 days
- Therefore wader days = $170 * 112 = 19,056$

Killingholme curlew counts (16 counts):

- Total curlew count = 768 birds
- Mean = $768 / 16 \text{ counts} = 48 \text{ birds}$
- Count period = 16 weeks = 112 days
- Therefore wader days = $48 * 112 = 5,376$

Area of mitigation required:

- Lincolnshire coast = $46 + 73 = 119\text{ha}$
- Bird days per hectare = $19,056 / 119 = 160$

Therefore requirement at Killingholme Marshes:

- $5,376 \text{ wader days} / 160 \text{ wader days per ha} = 33.6\text{ha}$ required

As discussed previously, this should form the core area, which should then be surrounded by a buffer of 150m to ensure that the core area is available to birds at all times.

- Total area of mitigation including 150m buffers mapped to be approximately 77ha

This area is almost exactly the same extent as the area currently utilised by curlew that will be lost, i.e. 32.5ha significant/ frequent use, 32ha used by low numbers, 12ha which will now form most of the proposed mitigation area; a total of 76.5ha.

ii) Acceptable area based on South Humber Gateway strategy work

Despite our calculation that a core area of 33.6ha is actually the correct figure that should have been arrived at based on the wader day calculation, Natural England still believe that a 20ha core area plus 150m buffer as outlined in the South Humber Gateway Conservation Mitigation Strategy Delivery Plan August 2010 would meet the requirements of the Habitats

Regulations. These 4 x 50ha mitigation areas were determined from the South Humber Gateway INCA bird survey data and based on expert opinion from national Natural England and RSPB staff based on their knowledge and experience across the country.

It is accepted that the 20ha core area, plus 150m buffers for the South Humber Gateway Strategy was based on the loss of all of Killingholme Marshes. Therefore, we agree that the 20ha core area can be reduced to take account of the area of land utilised by curlew that will be affected by the proposed AMEP; constituting a reduction of 16.4%. As discussed previously, this core area should be surrounded by a buffer of 150m where the adjacent land use is unsecured and the entire mitigation area should be optimally managed as wet grassland. Whilst we are happy for an operational buffer to be in place adjacent to the development site, the terms of this buffer require further discussion as they have been amended since our earlier conversations and are not consistent with the operational buffers currently in place at North Killingholme Haven Pits.

We therefore calculate that the core area should be:

83.6% of 20ha = 16.72ha

In conclusion, we consider that a core area of almost 17ha with a buffer of 150m is required to mitigate for the impact of AMEP on the SPA and Ramsar waterbirds that utilise Killingholme Marshes. The entire mitigation area (excluding the operational buffer) should be optimally managed as wet grassland. If mitigation can be provided at this level, it is Natural England's advice that this mitigation would satisfy the requirements of the Habitat Regulations; our advice is that your plans do not currently provide for this.

Proposed compensation

Our advice on compensation is based on the information currently before us and is given without prejudice to the decisions that are required to be made by the competent authority with respect to the statutory alternatives and imperative reasons of overriding public interest tests. This advice is also provided without prejudice to the view we may form in light of all of the scientific information available to us during the formal consultation process under the Habitats Regulations.

According to your email we understand that your compensation proposals are for:

- A managed realignment site of 110ha
- A maximum of 38ha of temporary grassland fields including a seasonal shallow lagoon if practicable

As we have stated previously, we have been provided with numerous different figures for the scale of impacts at North Killingholme with regards to the amount of designated site habitat that will be lost due to direct and indirect impacts. These losses will need to be clearly set out in the Habitats Regulations Assessment. For the purposes of this response we have assumed that the total losses are as set out in the ERM report entitled *AMEP Compensation Site on North Bank of Humber* dated September 2011. That is 18.4ha of subtidal habitat, 33ha of direct intertidal mudflat loss and 7ha of indirect mudflat loss through disturbance.

- i) Replacement estuarine habitat

We advise that the compensation ratios set out in the ERM report – 2:1 for intertidal mudflat and 1:1 for estuarine habitat – appear adequate to meet the test of maintaining and enhancing the overall coherence of Natura 2000. We believe that the measures outlined in the ERM report and supported by the detail and assurances given by Black & Veatch in their letter of 8 September 2011 give sufficient confidence that the managed realignment site is capable of delivering the required amount of compensation for the designated site habitat destroyed and/or disturbed as a result of the AMEP development – a minimum of 80ha of intertidal mudflat and 18.4ha of estuary habitat. Our view is that provided these measures are implemented and applied as described in these documents, the requirements of the Habitat Regulations should be met.

ii) The provision of a maximum of 38 ha temporary grassland habitat

There is recognition that the compensation habitat will not be provided in advance of the loss of designated site habitat and there will also be a significant time lapse between the creation of the realignment site and its ecological functional value as feeding habitat for SPA and Ramsar waterbirds. There are also uncertainties around how much mudflat can be created and maintained in the longer term; your letter states that the amount of mudflat that will remain after 10 years can only be estimated. It is therefore Natural England's advice that the wet grassland should form an integral part of the compensation package. It will be an important feeding resource for birds displaced by the AMEP development whilst the feeding value of the compensation site is established and will also reduce the uncertainties surrounding the long term predictions of sustainable mudflat habitat.

Therefore we advise that the compensation proposals should include:

- The establishment of an area of wet grassland (the detail of this to be agreed including the proposed creation of a seasonal shallow lagoon).
- The wet grassland habitat to be established before the development breaks ground in order for the grassland to be of feeding value for displaced birds as soon as possible and before the existing feeding habitat is lost. Natural England would wish to be consulted and to advise on the design and engineering of the land including drain/ditch management to create and maintain wet grassland habitat.
- The land should be optimally managed as wet grassland and maintained until such time that it is no longer required. This will be informed by the results of a detailed monitoring programme which Natural England will be happy to advise upon.

Habitats Regulations Assessment of the proposed compensation site

Natural England (and the RSPB) have previously advised Able UK that the impacts of the proposed compensation site also need to be assessed under the Habitats Regulations; you will recall this was mentioned in our response to the HRA in our email of 16 August 2011. The inclusion of an assessment of existing bird usage of the compensation site in the HRA was also minuted in the meeting of 9 August 2011. The HRA can be done as a separate stand-alone assessment of the realignment site or included in the existing HRA of the proposed development. The report by ERM refers to the loss of an area of 2ha of saltmarsh that will be removed to create the new breach. This will need to be assessed under the Habitats Regulations. We are also aware that the proposed realignment site provides terrestrial habitat for several SPA and Ramsar waterbirds. The draft chapter 35 states "Five species listed in the SPA assemblage were recorded within the Compensation Site in Zones 1-9, curlew (640 in September), grey plover (26 in October), mallard (9 in March), teal (42 in February) and lapwing (787 in February)". These are significant

numbers of SPA/ Ramsar birds and this chapter appears to recognise this, stating “Construction of the Compensation Site will cause loss of roosting and feeding habitat for waterbirds utilising the fields behind the existing embankment at Cherry Cobb Sands. This is an important roosting area for certain waterbirds, including Curlew and eight other SPA designated species”. If this loss of terrestrial habitat is determined to have an adverse effect on the integrity of the SPA and Ramsar site then mitigation will be required in order to avoid these impacts. We advise that it would be sensible to deliver this mitigation alongside the proposed wet grassland area which forms part of the compensation proposals. As we have not had sight of the HRA of the managed realignment site, it is not possible to advise how much wet grassland is required in addition to the area which will form part of the compensation scheme.

The information provided above relates specifically to the issues raised in your recent correspondence regarding specific mitigation and compensation proposals. We will write to you separately in relation to matters concerning protected species.

Natural England recognises the importance of Able UK’s proposed Marine Energy Park to the regional and national economy; however a development of this scale will have major impacts on the Humber Estuary designated site which need to be fully considered and managed as a matter of law. It is Natural England’s role to work with you to ensure compliance with the statutory protection that the site is afforded and to reduce, as far as possible, the impacts of the proposed development on the nature conservation interest of the site. I look forward to continuing discussions, within what I recognise is a pressing timetable.

Yours sincerely

Alan Law
Director, Land Use