

Humphries S (Sophie)

From: Gayle.Holland@gov.scot
Sent: 08 November 2017 16:13
To: Sarah Arthur
Cc: Tom Young; Andrew Blyth; Jim.Mckie@gov.scot; Frances.Pacitti@gov.scot; Nicola.Bain@gov.scot; Tracy.Mccollin@gov.scot; Sophie.Humphries@gov.scot
Subject: RE: Response to ICOL scoping opinion ornithology questions 8 September 2017

Importance: High

Hi Sarah,

Thank you for alerting us to these points. SNH have responded as follows:

ICOL raise a couple of points which result from using the EA3 HRA appendix (dated 15/12/2015) rather than the Smartwind appendix from August 2015.

[https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010056/EN010056-000556-5.4%20\(3\)%20Information%20to%20Inform%20HRA%20Appendix%203.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010056/EN010056-000556-5.4%20(3)%20Information%20to%20Inform%20HRA%20Appendix%203.pdf)

Having considered these points and checked back as to what has been consented and is publically available, SNH agree that there is a need to update the advice provided. SNH apologise for using outdated information, but were not aware of the East Anglia Three updated information when drafting the example.

The information and approach used to undertake the calculations of non-breeding season collisions for the East Anglia THREE assessment differs from those used by SNH in two important ways:

- (i) The estimated size of the different breeding populations of gannet which are deemed to have connectivity to the North Sea during the passage periods have been updated from Furness (2015) and amongst other differences include the more up-to-date colony estimates provided by Murray *et al.* (2015). These differences are illustrated by comparing Table 2.2 in the East Anglia THREE Appendix 3 with Tables 14 (p314) and 16 (p316) in Furness (2015). These differences in population estimates affect the estimated proportional contribution of the Forth Islands gannet population to the autumn and spring passage populations in the North Sea and Channel. **SNH advice:** The population figures in table 2.2 of EA3 have been updated (although the year of count against each colony has not been – hence the overlooking of this fact). It would be better to use the updated figures, as these are available for most colonies of interest.
- (ii) Information on flight direction data from tracking studies is used to re-estimate the proportion of passage birds flying through the North Sea in autumn and spring, with it being stated that in Furness (2015) ‘the proportions were estimated without specific reference these tagging data.’ These details are provided in paragraphs 4 – 6 of the East Anglia THREE Appendix 3. On this basis, it is estimated that 63% of Forth Islands gannets will fly south through the North Sea during autumn passage and 27% will take the same route north in spring (as opposed to 100% and 70%, respectively, for adult birds as suggested in Furness (2015)). **SNH advice:** The proportions of birds in the North Sea and English Channel differ in some cases between EA3 and Furness 2015 (e.g. in autumn; Iceland 0.42, c.f. 0.3 in Furness 2015, Bass Rock 0.63, c.f. 1 in Furness 2015). As the EA3 appendix was compiled by MacArthur Green it can be assumed that the proportions have been updated by or with knowledge of Bob Furness. Therefore we would agree that these new figures are an update and an improvement on those presented in Furness 2015.

I have asked SNH to update the illustrative example for completeness but in the meantime I trust that the advice provided here will allow you to progress the assessment, if you have any other queries please contact me.

Kind Regards
Gayle

From: Sarah Arthur [mailto:sarah.arthur@redrockpower.co.uk]
Sent: 08 November 2017 10:09
To: Holland G (Gayle)
Cc: Tom Young; Andrew Blyth; McKie J (Jim) (MARLAB); Pacitti F (Frances); Bain N (Nicola) (MARLAB); McCollin T (Tracy) (MARLAB); Humphries S (Sophie)
Subject: RE: Response to ICOL scoping opinion ornithology questions 8 September 2017

Hi Gayle,

Further to your email below we have some comments on the illustrative example that has been provided by SNH. ICOL appreciates the work that SNH have undertaken to provide an outline of the approach to estimating the non-breeding season gannet collisions along with a helpful and clearly illustrated example to accompany this.

However, ICOL notes that SNH do not appear to use the most recent information and approach for estimating the non-breeding season collisions to gannet. Thus, in undertaking steps 1 and 2 of the required calculations (as outlined by SNH), the approach SNH are proposing uses the information from:

- (i) Furness (2015) - Non-breeding season populations of seabirds in UK waters: Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Natural England Commissioned Reports, Number 164.
- (ii) The Smartwind Appendix N on apportioning predicted gannet mortality to the Flamborough and Filey Coast pSPA population, which is from August 2015.

The SNH approach does not make use of the more recent information (from November 2015) presented in Appendix 3 of the East Anglia THREE Information for HRA (Apportioning of the Flamborough Head and Filey Coast pSPA Gannet Population among North Sea Offshore Windfarms - [https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010056/EN010056-000556-5.4%20\(3\)%20Information%20to%20Inform%20HRA%20Appendix%203.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010056/EN010056-000556-5.4%20(3)%20Information%20to%20Inform%20HRA%20Appendix%203.pdf)).

The information and approach used to undertake the calculations of non-breeding season collisions for the East Anglia THREE assessment differs from those used by SNH in two important ways:

- (i) The estimated size of the different breeding populations of gannet which are deemed to have connectivity to the North Sea during the passage periods have been updated from Furness (2015) and amongst other differences include the more up-to-date colony estimates provided by Murray *et al.* (2015). These differences are illustrated by comparing Table 2.2 in the East Anglia THREE Appendix 3 with Tables 14 (p314) and 16 (p316) in Furness (2015). These differences in population estimates affect the estimated proportional contribution of the Forth Islands gannet population to the autumn and spring passage populations in the North Sea and Channel.
- (ii) Information on flight direction data from tracking studies is used to re-estimate the proportion of passage birds flying through the North Sea in autumn and spring, with it being stated that in Furness (2015) 'the proportions were estimated without specific reference to these tagging data.' These details are provided in paragraphs 4 – 6 of the East Anglia THREE Appendix 3. On this basis, it is estimated that 63% of Forth Islands gannets will fly south through the North Sea during autumn passage and 27% will take the same route north in spring (as opposed to 100% and 70%, respectively, for adult birds as suggested in Furness (2015)).

The East Anglia THREE documentation represents an update to the information presented in Furness (2015), and will be based on input from the same author (as the East Anglia THREE assessment was undertaken by MacArthur Green). Given this, ICOL considers that the information and approach used in the East Anglia THREE assessment should be used for undertaking steps 1 and 2 of the calculations proposed by SNH, unless there are valid reasons for rejecting these modifications to the approach developed in Furness (2015).

Thank you for your time to consider this request for clarification and a response on our proposed approach to steps 1 and 2 before the end of the week would be greatly appreciated.

Many thanks and kind regards,
Sarah