Literature Review: Broads Landscape Sensitivity Study for Renewables and Infrastructure

Report by Planning Policy Officer

Summary: This literature review assesses the continued relevance of the Broads Landscape Sensitivity Study for Renewables and Infrastructure (2012) and concludes that the report is still relevant and still fit for purpose.

Recommendation: That Planning Committee note the report and endorse the continued use of the Broads Landscape Sensitivity Study for Renewables and Infrastructure (2012) where relevant.

1. Introduction

1.1 There is increasing demand for renewable energy but the infrastructure can impact on the nationally valued Broads landscape.

1.2 The Broads Landscape Sensitivity Study for Renewables and Infrastructure prepared by Land Use Consultants (2012)[1] assesses the sensitivity of the Broads landscape to wind and solar energy developments. This study assesses the impact of wind turbines and solar panels to provide criteria to planning applicants and inform policy. Its baseline is the Landscape Character Assessment and it should be read in conjunction with this.

1.3 The landscape sensitivity study was completed 6 years ago, which although relatively speaking is quite recent, other baseline document revisions have been made since its publication. It is therefore considered appropriate to conduct a literature review to ensure the document is still relevant and provide reassurance that the local plan has been positively prepared

2. Literature Review; Broads Landscape Sensitivity Study for Renewables and Infrastructure

2.1 The review is included at Appendix A. It assesses relevant more recent guidance and practice and compares the approach of the Authority's study against these. The assessment concludes that:

a) the Broads Landscape Sensitivity Study for Renewables and Infrastructure (2012) remains relevant.

b) the guidance reviewed and published since the study was compiled remains largely unchanged; many of the revisions lying within the more detailed guidance which would be more applicable at planning application stage.

c) Visually technology has also remained largely unchanged therefore concluding that the study remains fit for purpose.

[1] http://www.broads-authority.gov.uk/planning/planning-policies/landscape-sensitivity-studies

2.2 Notwithstanding, that technology and the landscape are changeable over time, it is recommended that the Broads Authority conduct a review of:

(a) the technologies available every 5 years,
(b) the continued relevance of the Broads Landscape Character Assessment every 10 years, and
(c) subsequently the Sensitivity Study as appropriate.

3. Financial implications

3.1 The literature review/assessment was completed by the Authority's retained Landscape Architect consultant as part of the contract work.

Background papers: None

Author: Natalie Beal

Date of report: 18 October 2018

Appendices: Appendix A - Literature Review; Broads Landscape Sensitivity Study for Renewables and Infrastructure

APPENDIX A

Literature Review;
Broads Landscape Sensitivity Study for Renewables and Infrastructure

Prepared by Zoe Tebbutt CMLI
28.09.2018

Background and Context

The Broads Landscape Sensitivity Study for Renewables and Infrastructure prepared by Land Use Consultants (2012) assesses the sensitivity of the Broads landscape to wind and solar energy developments. Using this assessment as a baseline, the Renewable and Low Carbon Energy Topic Paper (2016) further explores the potential of wind and solar energy developments in areas deemed to be of moderate sensitivity[2], the lowest landscape sensitivity identified in the Broads Executive Area. The topic paper identifies a number of local constraints in the areas identified to be of moderate sensitivity, therefore making them unsuitable for development of wind sourced renewables.

The Broads Local Plan is now at the examination stage where the inspector has raised some questions around the preparation of the climate change policies[3]. The question of particular relevance to this review is under Matter 10, item C,

'Is the approach to wind turbine development in Policy PUBDM14 in line with the Written Ministerial Statement dated 18th June 2015?'

The Broads Authority has provided further clarification in their response to this question[4], highlighting the relevant baseline information as briefly introduced above, and how policy conclusions have been reached. The response concludes that no areas were deemed appropriate for wind turbines in the Broads.

In order to further support the Broads Authority's position, this literature review will assess the continued relevance of the Broads Landscape Sensitivity Study for Renewables and Infrastructure (2012).
The landscape sensitivity study was completed 6 years ago, which although relatively speaking is quite recent, other baseline document revisions have been made since its publication. It is therefore considered appropriate to conduct a literature review to ensure the document is still relevant and provide reassurance that the local plan has been positively prepared.

Scope

Given that landscape effects and environmental constraints are the primary reasons for the lack of suitable areas for renewable wind development in the Broads, this review will

[2] Definition of moderate as per Landscape Sensitivity Study; Some of the key characteristics and qualities of the landscape are sensitive.

to change from the type and scale of renewable energy being assessed.

[3] Broads Local Plan Examination, Matters, Issues and Questions,18 May 2018. Matter 10 – Other Environment Policies

[4] Broads Authority response to Matter 10 – other environment policies June 2018. Evidence base ref. BAS.10

focus on those documents concerned with the assessment and evaluation of landscape which have informed the production of the landscape sensitivity study.

These include;

1) National guidance for landscape character assessment

2) The Broads Landscape Character Assessment

3) Natural England Guidance including, Making Space for Renewable Energy: Natural England's Approach to Assessing On-Shore Wind Energy Development. 2010. (Catalogue Code: NE254)

4) CPRE guidance including, tranquillity and intrusion mapping

5) Scottish Natural Heritage Guidance including, Visual Representation of Windfarms Good Practice Guidance. Although produced for Scotland, this is widely accepted technical guidance for the assessment of the impact of windfarms. 2006.

6) Landscape East Guidance on assessing the sensitivity of the landscape of the East of England. Prepared by Land Use Consultants. 2011.

The review will also take any new relevant UK guidance into consideration.

Review

1) National Landscape Character Assessment Guidance

Broads Landscape Sensitivity Study used	Publisher	Former Countryside Agency and Scottish Natural Heritage
	Date	2002
	Title	Landscape Character Assessment - Guidance for England and Scotland
	Author	Swanwick C and Land Use Consultants
Current Guidance	Publisher	Natural England
	Date	2014, minor revisions 2018
	Title	An Approach to Landscape Character Assessment
	Author	Christine Tudor

The Scottish Natural Heritage guidance has long been recognised as industry best practice for undertaking landscape assessments. Natural England more recently produced their own landscape character assessment guidance for England. First published in 2014, this new publication is highly influenced by the Scottish guidance as well as other more recent unpublished works by largely the same authors. In response to this new guidance, the Broads Landscape Character Assessment (LCA) was reviewed and republished (2016) in a more publically accessible format that better reflects the needs of users of the document within the authority.

The Broads Landscape Sensitivity Study uses the Broads LCA as a baseline for its sensitivity assessment, so it is imperative that the identified character areas reflect

national guidance in how they are defined, and that their key features remain applicable to the areas which they are attributed.

2) Local Landscape Character Documents

Broads Landscape Sensitivity Study used	Publisher	Broads Authority
	Date	2012
	Title	Broads Landscape Character Assessment
	Author	Broads Authority
Current Guidance	Publisher	Broads Authority
	Date	2016
	Title	Broads Landscape Character Assessment
	Author	Norwich City Council Design, Conservation and Landscape.

The Broads Landscape Character Assessment (LCA) was reviewed and updated in 2016 in order to ensure that the assessment was still representative of the local character areas and reflected the new assessment guidance published by Natural England. The review also sought to re-produce the document in a more accessible format for both the general public and local planning authorities, enabling landscape themes to be more easily interpreted and referenced throughout the emerging local Broads Local Plan and supporting documents.

Whilst the Sensitivity Study references the 2012 version of the Broads LCA, the landscape character areas and their key characteristics on which the Sensitivity Study is based, remain principally unchanged in the 2016 revision.

3) Natural England Guidance

Broads Landscape Sensitivity Study used	Publisher	Natural England
	Date	2010
	Title	Making Space for Renewable Energy: Natural England's Approach to Assessing On-Shore Wind Energy Development. (Catalogue Code: NE254)
	Author	Natural England
Current Guidance	Publisher	Natural England
	Date	2010
	Title	Making Space for Renewable Energy: Natural England's Approach to Assessing On-Shore Wind Energy Development. (Catalogue Code: NE254)
	Author	Natural England

The above Natural England Guidance used at the time of the Sensitivity Study remains unchanged.

4) CPRE Guidance

The guidance on tranquillity and intrusion mapping that can be accessed through the CPRE website[5] has remained unchanged since the writing of the Broads Landscape Sensitivity Study. Publications include;

- Northumbria University (2008) Tranquillity Mapping: Developing a robust methodology for planning support. Revised.
- CPRE and Countryside Commission (2007) Intrusion Map: England
- Land-Use Consultants (2007) Developing an Intrusion Map of England
- CPRE (2006) Saving Tranquil Places; how to protect and promote a vital asset
- CPRE (2005) Mapping Tranquillity; Defining and assessing a valuable resource

5) Visual Representation of Windfarms Guidance

Broads Landscape Sensitivity Study used	Publisher	Scottish Natural Heritage
	Date	2006
	Title	Visual Representation of Windfarms; Good Practice Guidance. * *Although produced for Scotland, this is widely accepted technical guidance for the assessment of the impact of windfarms.
	Author	Scottish Natural Heritage
Current Guidance	Publisher	Scottish Natural Heritage
	Date	2017
	Title	Visual Representation of Windfarms; Good Practice Guidance. V2.2
	Author	Scottish Natural Heritage

Version 2.2 of the Scottish Natural Heritage Guidance was published in 2017 following the completion of a period of research into the use of windfarm visualisations and feedback from a steering group made up of relevant professionals, representatives of professional bodies, public bodies, and planning authorities. The Summary of Key Changes published in February 2017 by Scottish Natural Heritage highlights the key areas of the guidance which have been revised and clarified. Given that the Broads Landscape Sensitivity Study was not assessing the appearance of specific turbines in specific locations, it was assessing the effects that a turbine proposal of a certain scale would have on the key features of a particular character area, the revisions to this document are not considered to impact on the validity of the study.

[5] CPRE, Land Use Consultants et al. Tranquility and Intrusion Publications [Online] available at: https://www.cpre.org.uk/resources?q=&filter_order=date&filter_order_Dir=desc&t%5B%5D=3481 (Accessed 28.09.2018)

6) Regionally Compiled Landscape Guidance

Current Guidance	Publisher	Landscape East
	Date	2011
	Title	Guidance on assessing the sensitivity of the landscape of the East of England
	Author	Land Use Consultants

Landscape East forum, established in 2004, brings together landscape, biodiversity, geodiversity, historic environment and spatial planning interests together to develop an East of England Landscape Framework. The forum is made up of relevant landscape professionals representing local authorities, statutory and non-statutory government agencies, other organisations and the private sector. Originally set up to aid in the preparation and review of the Regional Spatial Strategy, Landscape East has commissioned studies and championed a cross-disciplinary approach to the environment.

The Landscape East guidance proposes a method of assessing landscape sensitivity in the East of England. Whilst the Broads Landscape Sensitivity Study does not directly reference this guidance, it was produced by the same authors, Land Use Consultants, less than one year after the Landscape East publication and the methods are comparable. The Broads Landscape Sensitivity study is therefore still considered relevant and in line with regional guidance.

Other Guidance

Other Guidance	Publisher	Scottish Natural Heritage
	Date	2010
	Title	Landscape capacity studies in Scotland – a review and guide to good practice. *Scottish Natural Heritage* Commissioned Report No.385.
	Author	Grant, A. in association with Clarke, P. and Lynch, S.

Often used interchangeably, the terms "landscape capacity" or "landscape sensitivity" refer to landscape studies that assess a landscape's susceptibility to a particular type of development. This is considered to be a legacy of terminology that has evolved as the methods of landscape assessment have been developed and refined over time.

Whist the Broads Landscape Sensitivity Study states at paragraph 3.18 that it does not comment on landscape capacity, is does make assessment as to the sensitivity of the different landscape character areas to different scales of wind and solar development both in terms of individual size and number of structures. The 2010 Scottish Natural Heritage study further clarifies that while often called ‘capacity studies’, they are more usually used to assess the sensitivity of landscape characteristics to a particular type of development, so that areas which do / do not have the potential to accommodate development can be mapped, alongside areas which are deemed to be particularly sensitive to that type of development (pp. 47, Para 8.1).

Whilst terminology has evolved over time, given the content and conclusions of the study by Scottish Natural Heritage, it is considered that the Broads Landscape Sensitivity Study was conducted appropriately and reflected best practice guidance at the time of writing.

New Publications

Publisher	Scottish Natural Heritage
Date	2015
Title	Spatial Planning for Onshore Wind Turbines – natural heritage considerations Guidance
Author	Scottish Natural Heritage

This new publication by Scottish Natural Heritage is by far the most influential spatial planning guidance produced with regard to wind turbines since the Broads Landscape Sensitivity Study was written.

The document sets out how to plan for onshore wind turbines and how landscape capacity studies[6] can support the strategic planning process. Despite including requirements of the Scottish Planning Framework, as is to be expected, the process identified is broadly in keeping with the approach the Broads Authority has taken by undertaking the landscape sensitivity study. The process is set out as follows:

1. identifying landscape policy objectives;
2. identifying the inherent capacity of the landscape to accommodate wind turbine development;
3. assessing the degree of cumulative change that has resulted from the operating and consented wind turbines in the study area; and
4. assessing the level of further development that could be acceptably accommodated within areas without unacceptable negative cumulative effect.

(pp. 13)

With regard to landscape objectives that would apply, these are commonly viewed to be: landscape protection, accommodation or change. For the Broads area, a member of the national park family (a national landscape designation), the overriding objective must be landscape protection in the first instance, particularly where key features of a landscape character area are identified as sensitive to change.

Given the national status of the Broads administrative area, and the different development thresholds and pressures, it is considered that the Landscape Sensitivity Study and Broads Authority approach to assessing landscape suitability to wind turbine development can be likened to this more recent Scottish Natural Heritage guidance.

<u>Other Considerations</u>

Whilst landscape assessment techniques and best practice has been reviewed, the other variable with potential to render the Broads Landscape Sensitivity Study obsolete is technology, in particular the appearance of wind and solar technologies.

Whilst efficiencies have been made in this area, and technologies evolved, the appearance and scale parameters of renewable structures have not changed dramatically. Many landscape assessment guidance publications have however begun to

[6] Often used interchangeably, the terms "landscape capacity" or "landscape sensitivity" refer to landscape studies that assess a landscape's susceptibility to a particular type of development.

integrate 'repowering[7]' of existing wind turbines into their documents in preparation for potential changes to existing scenarios.

The Broads Landscape Sensitivity Study is therefore still considered relevant in respect of technology.

Conclusion

Despite the review and publication of new guidance, it is clear that the Broads Landscape Sensitivity Study for Renewables and Infrastructure (2012) remains relevant. Following comparable methodologies and continuing to reflect industry best practice, the guidance reviewed and published since the study was compiled remains largely unchanged; many of the revisions lying within the more detailed guidance which would be more applicable at planning application stage.

Visually technology has also remained largely unchanged therefore concluding that the study remains fit for purpose.

Notwithstanding, that technology and the landscape are changeable over time, it is recommended that the Broads Authority conduct a review of:

- the technologies available every 5 years;
- the continued relevance of the Broads Landscape Character Assessment every 10 years; and
- subsequently the Sensitivity Study as appropriate.

Should major change factors occur during intervening times e.g. sudden technological advance or significant landscape altering circumstances such as new and prevalent pest / disease, these reviews should be conducted sooner.

[7] Definition: Repowering is the process of replacing older power generating technologies with newer ones that have greater capacity or more efficiency resulting in a net increase in the power generated.