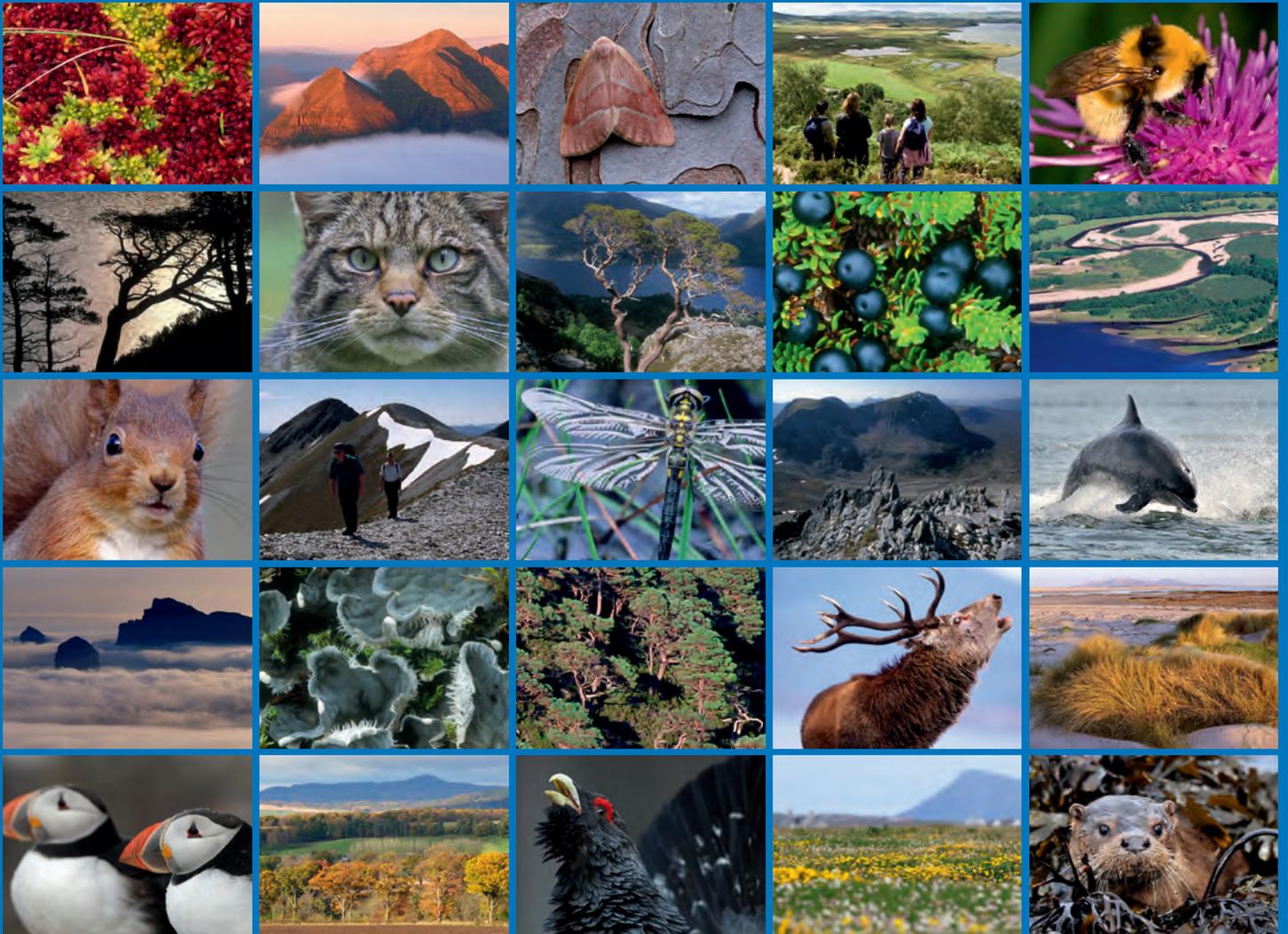


Landscape Capacity Studies in Scotland – a review and guide to good practice



COMMISSIONED REPORT

Commissioned Report No. 385

Landscape capacity studies in Scotland – a review and guide to good practice

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COMMISSIONED REPORT

Summary

Landscape capacity studies in Scotland – a review and guide to good practice

Commissioned Report No. 385

Contractor: Alison Grant in association with Pete Clarke (Creative Block) and Sinead Lynch (TPS Planning)

Year of publication: 2010

Background

There is growing experience of undertaking landscape capacity studies in Scotland, especially to assist in planning for housing allocations and wind farms. Scottish Natural Heritage (SNH) commissioned this review to examine the methods used and experience gained in producing useful 'landscape capacity' studies in Scotland.

In addition to reviewing available landscape capacity studies, the contractors carried out interviews with 23 planners and landscape officers who had been involved in commissioning or using landscape capacity studies. This report sets out the findings of these interviews and the review.

These findings have also informed:

- Recommendations for good practice, which have been further developed and presented in an accompanying on-line toolkit; and
- A comprehensive reference guide to the capacity studies produced in Scotland, which is one of the resources provided in the on-line toolkit.

Main findings

- Where studies have been useful, they have been successfully used to inform development plans and provide robust evidence in assessing development applications.
- Nevertheless, interviewees identified shortcomings as well as examples of successful techniques and outputs which have been used to inform good practice.
- Many of the recommendations for good practice relate to clarifying project purpose, the commissioning process and project management skills.
- There is a particular emphasis on the need to ensure that methods and outputs can be practically applied to meet clearly defined planning needs.

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Disclaimer

The content of this report is drawn from practitioner interviews and a review of landscape capacity assessments carried out by the contractor, Alison Grant, landscape architect and associate consultants, Sinead Lynch, planning consultant with TPS Planning Services and Pete Clarke of creative block. The content does not necessarily reflect the views of Scottish Natural Heritage (SNH).

Acknowledgements

This report would not have been possible without generosity and patience of the many interviewees who were interviewed during the course of this review. In addition, the consultants are grateful for the advice from the technical steering group, which comprised:

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1 INTRODUCTION

Scottish Natural Heritage (SNH) has commissioned this review and the accompanying on-line toolkit to examine the methods used and experience gained in producing useful 'landscape capacity' studies in Scotland.

The brief states that the aims of this study are to:

- Improve consideration of landscape issues in development planning, in particular encouraging the use of landscape capacity studies; and
- Assist in the development of landscape capacity methodology.

The study has set out to achieve these aims by:

- Establishing a clear understanding of what is meant by a 'useful' landscape capacity study;
- Carrying out a comprehensive review of the existing landscape capacity studies and then analysing their usefulness to users through both telephone interviews and a workshop;
- Developing an accessible, on-line toolkit for those individuals who will commission future landscape capacity studies, based on good practice gleaned from the review and the interviews; and
- Producing a reference list of landscape capacity studies.

1.1 Content and structure of this report

This report provides a review of the usefulness of landscape capacity studies, drawing on feedback from the interviewees and workshops, as well as the consultant's own analysis of the studies. This section of the report sets out the context for this study and a description of the method used. The remainder of this report is set out as follows:

- Section 2: A list of criteria, drawn from the study, which provides an understanding of what is meant by a 'useful' landscape capacity study;
- Sections 3-6: Feedback and review, which outlines the general findings from the interviews, workshop and studies reviewed;
- Section 7: Feedback and review: Settlement and housing studies, which outlines findings specific to commissioning and managing housing and settlement studies; and
- Section 8: Feedback and review: Wind farm studies, which outlines findings specific to commissioning and managing wind farm studies.

These sections are followed by Section 9, which lists references, a glossary in section 10 and a list of acronyms used in this report in Section 11. The annexes referred to in the text are at the end of the report.

1.2 Background

Information drawn from landscape character and visual assessments informs the siting and design of developments in three broad ways:

- Landscape character and visual assessment is often used by landscape architects and developers to decide where to site and how to design individual developments which are 'in keeping' with the existing landscape character;
- Planners and other decision makers often use the existing suite of SNH commissioned 'Landscape Character Assessments' (LCAs) to help them identify the key characteristics of a landscape and assess the effects of individual development proposals on the landscape character; and
- During the past fifteen years, methods of 'landscape capacity', or 'landscape sensitivity' assessment have evolved which aim to identify at a more strategic level where different types of development might be most readily accommodated within the landscape.

These latter 'landscape capacity' or 'sensitivity' assessments aim to be proactive. They are intended to be used to identify areas which have the future potential to accommodate landscape and visual change related to a specified development. If successfully incorporated into spatial planning advice, the studies can help steer development to areas where the landscape is most likely to be able to accommodate specified changes. They are most commonly used to inform spatial planning policy and land/coastal management strategies, advising on where there is most likely to be landscape and visual potential to accommodate the changes brought about by specified developments.

These studies are commissioned by Planning Authorities, sometimes with additional funding assistance from SNH or other bodies. They focus only on landscape and visual criteria. As a result they are always only one strand of information used to inform the planning frameworks and policies which draw on a wide range of other planning, infrastructure and environmental criteria to finalise proposals for development plans or strategies.

1.3 Definition

The Landscape Character Assessment Guidance¹, which is currently under review, provides a starting point definition of 'landscape capacity':

'Landscape capacity refers to the degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character, or overall change of landscape character type. Capacity is likely to vary according to the type and nature of change being proposed.'

The accompanying Topic Paper 6² goes further to provide a useful overview of the way the terms 'landscape capacity' and 'landscape sensitivity' are used, and is illustrated by examples of practice current at the time of publication.

Finally, it was noted by several interviewees and in discussion with the steering group that the term 'landscape capacity' can be misleading. The term implies that somehow the study will identify a quantifiable limit, possibly even a precise limit, to the amount of development which can be accommodated within the landscape. None of the studies quite do this, although some settlement/housing studies do identify clearly the specific location and amount of land considered appropriate for housing in landscape terms around each settlement.

¹ Swanick, Carys and Land Use Consultants (2002). *Landscape Character Assessment Guidance for England and Scotland*. Countryside Agency and Scottish Natural Heritage

² Swanick, Carys and Land Use Consultants (2002). *Landscape Character Assessment Guidance for England and Scotland Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity*. Countryside Agency and Scottish Natural Heritage.

1.4 Landscape capacity studies reviewed for this report

The consultants identified 37 landscape capacity studies in Scotland. These are listed in Annex 1. The purpose of these studies can vary widely. In addition, the development types which are being considered range from wind farms and 'settlement' or 'housing' type studies, to aquaculture and open cast coal mining. As a result, the methods used vary widely – as they should – to reflect the different terms of reference for the individual commissions.

As noted above, the term 'landscape capacity' is loosely applied and can often be a misnomer. None of the studies aim to identify a definitive quantity of how much development can be accommodated in a landscape. Instead, the term is used to cover a wide range of studies which broadly explore landscape 'sensitivity' to identified forms of development. What these studies tend to have in common are:

- **A focus on a single development type**, usually because the Planning Authority is required to accommodate an expansion of this type of development;
- The identification of a **list of 'criteria', or characteristics and qualities of the landscape and sometimes visual experience** which are most likely to be affected by the specified development, and which are used as the basis of an assessment of landscape and visual sensitivity;
- **A mapped subdivision of the landscape into character types or areas** – often based on an amended version of the SNH published Landscape Character Assessment (LCA) for the study area;
- An **assessment of either the sensitivity of each of the character areas to the specified development**, or conversely the potential of the character areas to accommodate the specified development, based on the 'criteria' identified; and
- **Conclusions, which relate to the study brief**, and may include maps illustrating the sensitivity of the landscape to the specified development (or conversely, its potential to accommodate the specified development), and **often guidance** on how the development might best be designed to fit in with the individual character areas.

In terms of this study, therefore, the term 'landscape capacity study' is used to apply to any study which aims to identify the perceived potential of the landscape within a study area to accommodate the changes created by a specified development.

Most often, but not always, there is an expectation that the studies will provide locational guidance on expanding the amount of development that can be accommodated, by indicating 'areas of search' for development or identifying specific locations for expansion. Some studies however, do conclude that there is little or no potential for the landscape of an area to accommodate the specified development.

1.5 Review limitations

The primary focus of the brief was to determine what made a landscape capacity study useful. As a result, the review has focussed on the views and experience of those who have commissioned and used the landscape capacity studies, rather than those consultants who have carried out the studies. While initially it had been hoped to interview a small number of the consultants involved in producing the capacity studies, the limited time available within this study precluded this.

The approach used for this review was based around interviews with planners, landscape architects and other specialists both in Planning Authorities and SNH who had experience of commissioning or using one or more landscape capacity study. In all, interviews were held in relation to twenty six studies. Some interviewees were interviewed about more than one study, and some studies were the subject of more than one interview. The overwhelming majority of potential interviewees approached were very willing to be interviewed, and gave generously of their time. Interviews lasted between one hour and one hour and a half.

Interviews were carried out in confidence, and neither the names of the interviewees nor the studies which were the subject of the interview have been disclosed. The information gathered has been used both to guide and focus the review of individual studies carried out by the contractors and to inform the focus and content of the accompanying on-line toolkit. In addition, non-attributable quotes from the interviewees have been used to 'populate' this report.

The identified landscape capacity studies have been carried out by a relatively small range of consultants. Only five practices have carried out settlement or housing related studies, nine practices have carried out those which tackle wind farm related studies and only three practices and one practice have carried out landscape capacity studies for aquaculture and open cast coal mining respectively. As a result, the interviews aimed to cover studies which had been carried out by all practices. Where the methods used were the same over a number of studies for the same Planning Authority by the same consultant, interviews focused on one study selected at random by way of example.

Finally, Alison Grant, the lead consultant for this review has carried out or contributed to several landscape capacity studies which were reviewed for this study. To avoid a conflict of interest, all interviews which related to these studies were carried out by Sinead Lynch, who has had no previous connection with Alison Grant.

1.6 Study method

For the purposes of this study, the consultants:

- Sourced and became familiar with existing 'capacity studies' in Scotland;
- Interviewed planners and landscape officers who have commissioned and used the studies, to identify the strengths and weaknesses of all the studies;
- Reviewed the existing capacity studies more thoroughly in light of comments made by interviewees; and
- Held a workshop with planners and other individuals who have been involved in commissioning two or more of these studies, and who therefore could provide a comparative overview as users.

This research has then informed:

- This report, which provides the review of findings; and
- An on-line toolkit of guidance and resources which can be used by Planning Authorities and others minded to commission a 'landscape capacity' study.

These individual elements of the method are set out in more detail below.

1.6.1 Sourcing studies and initial review

The purpose of this stage was to become familiar enough with individual studies so that interviews could be conducted with confidence. This initial review analysed:

- The purpose of the study;
- The assessment method used; and
- The way in which the report was presented.

In addition, for some studies, the consultants obtained additional information, such as the project brief or Council papers which were discussed during the interviews.

1.6.2 Interviews

The consultants interviewed 23 planners and landscape officers who have commissioned or used the studies identified in the review.

The consultants used a 'qualitative market research' approach to interviews, based on a structured questionnaire, but allowing for wide ranging discussion and informal feedback. A summary of the method used for interviewing is available at Annex 2 of this report. A copy of the briefing for the interviewees is also provided at Annex 3.

During each interview, notes were recorded by hand, and these were then typed up, with a bias towards noting down the strengths and weaknesses identified for each study and the 'lessons learnt'. To protect the confidentiality of each interviewee these interview records have not been made available to SNH or the steering group and were destroyed by the consultants on completion of this project.

1.6.3 Review

All available 'landscape capacity' studies in Scotland were then reviewed in more detail, taking into account comments received from interviewees. The review included analysing:

- The purpose of each study;
- Commissioning and project management;
- The approach to landscape and visual sensitivity assessment, including the list of criteria, the way in which landscape areas were identified, and the method of identifying the degree of landscape and, if available, visual sensitivity;
- The accessibility and clarity of the method;
- The conclusions, and how they related to the objectives of the study; and
- The clarity of the presentation of the whole report and supporting material.

For each study, a short review of the purpose, content and approach has been summarised (available in the on-line toolkit). Planning Authorities can use this list to identify studies that may have relevance to their own work when they are considering commissioning a new study.

1.6.4 Workshop

One finding from the interviews was that very few individuals had experience of more than one study. Those who had a wider experience of more than one of the 'landscape capacity' studies were invited to contribute to a workshop. Their particular knowledge and ability to compare studies was used to explore specific interview findings in more depth.

1.6.5 Report

This report outlines the combined findings of the review, the interviews and the workshop.

1.6.6 On-line toolkit

Finally, the consultants developed an on-line toolkit for use by those who wish to commission a landscape capacity study. The toolkit will be made available through the SNH website. It provides an interactive and linking series of actions or guidance which can be used by planners and others who intend to commission a study. The toolkit includes examples of good practice, useful checklists and briefing papers and links to supporting resources, including a list of all the known landscape capacity studies commissioned to date.

A draft version of the toolkit was tested by volunteer planners and landscape architects.

The final toolkit takes on board comments made by the volunteers and the intention is that SNH will keep the resources pages up to date.

1.6.7 Steering group

The steering group was composed of representatives from Planning Authorities, the Scottish Government and SNH. The steering group met on three occasions, including attending the workshop, and provided comments on the draft report.

1.6.8 Development types

It has been established that in Scotland studies have been commissioned in relation to the following development types:

- Wind farms and wind turbines;
- Housing, settlement expansion or other built developments;
- Aquaculture development; and
- Open cast coal mining.

As a result, the guidance in the on-line toolkit is structured around each development type.

With this in mind, two sections of this report provide commentary on 'Housing and settlement' and 'Wind farm' studies separately. Separate commentaries were not included on the aquaculture studies and the open cast mining study, as the small number of studies involved meant that it was difficult to provide anonymous sources of information. The topics have been included in the on-line toolkit.

2 IDENTIFYING A USEFUL LANDSCAPE CAPACITY STUDY

The interviews and the reviews of landscape capacity studies have been used to identify the following list of likely indicators which can be used to identify a useful capacity study.

In the context of this review, 'useful' components of a study were elements used or specifically identified as successful by the interviewees. Not all studies, even those considered to be successful overall, had all these elements. Therefore this list presents an amalgam of the feedback received which was regularly updated as interviews progressed. The list is presented at this stage in the report as it provides a useful contextual summary of the key elements likely to be found in a useful landscape capacity study.

The listed likely indicators can be used for reviewing the likely usefulness of a study once it has been completed. However, the challenge in the on-line toolkit has been to take these elements and work them into guidance for commissioning a future landscape capacity study.

Elements which are likely indicators of a successful study include:

2.1 The process

- Well thought through, clearly articulated aims and objectives for the study, linked to specific task(s) and output;
- A steering group which represents potential future users;
- A clear brief;
- Adequate funding;
- Adequate timescales;
- Use of a clear methodology;
- Testing of the method, possibly through a fully worked pilot study, at an early stage in the process;
- The flexibility of the contractor and steering group to agree changes to method or output if necessary based on initial findings;
- Full engagement with the steering group and potential users;
- Workshops or some other fieldwork based session to ensure that the users of the study are fully engaged and understand the method and outputs;
- Engaging the consultants to present the findings to the council members; and
- Engaging the consultants to defend the study at a Public Local Inquiry (PLI) if necessary – at least once.

2.2 The product

- An output that addresses the aims and uses identified in the brief; or

- An output which addresses issues which have been refined and agreed with the steering group as the project has progressed;
- An output that is accessible and clearly understood by the client;
- A coherent, logical report structure;
- Use of plain English and a well edited document;
- Clear explanation of technical terms where they are used;
- Relevant and clear diagrams and other supporting information, including maps at the appropriate scale for the task;
- The final recommendations are easy to find, and are clearly and unambiguously presented;
- There is a clear 'step by step' process which allows users to link the recommendations to transparent justifications and explanations which are easy to understand and quote;
- The information within the report will not go quickly out of date unless it is for a specific task which itself has a limited timeframe;
- The report is available to those who need to use it, either as hard copy or on the web – and those who need to know about it have been made aware of it;
- Accessibility to different user groups i.e. planners, landscape professionals, SNH staff, councillors, developers etc.; and
- The report is supported by other outputs, including presentations to councillors and workshops with staff.

2.3 Use of the product

- People know about the study, and where they can find it when they need it;
- Those involved in commissioning the study can explain it to colleagues;
- The users have confidence in the output and use it regularly and appropriately for the task for which it has been commissioned;
- The users have a clear understanding of its purpose and limitations;
- The users are not overwhelmed by the size, complexity or lack of transparency of the study, and find it easy to find what they need to know;
- The final recommendations are easy to find, and are clearly and unambiguously presented;
- The users, including those not on the steering group, find it easy to identify the rationale behind the final recommendations;

- Evidence of regular and appropriate use relevant to the study, e.g. to inform a development plan or used at a PLI or to support case work, or a masterplan;
- Whether the study is given 'material consideration' status by a planning committee or taken on board as supplementary planning guidance (if relevant);
- Users feel comfortable about 'quoting' from the study in support of recommendations and in discussions with developers;
- Users refer developers and applicants to the study;
- The study has stood up to robust scrutiny in a PLI – either Development Plan or casework PLI – and if possible received positively by a reporter, or at least been perceived to underpin the reporter's recommendations; and
- Planning Authorities would commission this work again, or are planning to do more!

2.4 Other issues which may be relevant

- Identifying a contractor who can defend a study at a PLI, at least at first, to establish positive support from a reporter which will act as a precedent for the use of the study in future PLIs;
- Making sure that where necessary, there is consistency of method with previous successful 'sister' reports and vice versa; and
- There is clear design guidance, or advice on mitigation, or enhancement, which complements the main recommendations of the study. These tend to be 'add ons' to a spatial assessment. Sometimes they have been useful in their own right, as well as providing an output which has lasted beyond the spatial strategy.

3 FEEDBACK AND REVIEW: INTRODUCTION

The remaining sections of this report present the feedback sourced from interviews, the workshop and the review of studies which was undertaken by the consultants.

Much of the content of this part of the report draws on the views expressed to the consultants in the interviews undertaken with planners and other professionals who had commissioned or who were using landscape capacity studies. Wherever possible we have added quotes from the interviewees, and these are indicated in italics. Wherever it has been constructive, we have quoted from both positive and negative feedback.

There were many positive comments about the studies we reviewed – ‘Fulfilled brief and was designed to meet the requirements of this task’; ‘Good to have a project which tackled a specific problem and could get to grips with these applications’; ‘Simple, easy to understand, focussed, makes great sense on site, no jargon and no one has identified any flaws in PLIs (Public Local Inquiries); The study outputs are clear and have proven to be robust in standing up to scrutiny’; ‘Perhaps the greatest proof is that staff fully support the desire to carry out the same study for future local plan reviews (budget permitting of course!)’

It was clear from the interviewees that when done well, the ‘landscape capacity’ assessments were valued as extremely useful tools and were used to both inform planning policy and development management.

However, all interviewees identified at least one thing which could have been done better. It is inevitable within a report such as this that the focus will be on learning from these shortcomings and identifying how to improve future studies. This should not detract, however, from the many positive responses which the consultants recorded.

The review and feedback is presented in the following sections:

- Section 4 – Feedback and review: The commissioning process;
- Section 5 – Feedback and review: Methods;
- Section 6 – Feedback and review: Presentation and ‘aftercare’;
- Section 7 – Feedback and review: Specific comments on settlement and housing studies; and
- Section 8 – Feedback and review: Specific comments on wind farm studies.

4 FEEDBACK AND REVIEW: THE COMMISSIONING PROCESS

This section outlines the commentary and analysis provided on setting up and commissioning 'landscape capacity' studies. The importance of this stage in the process cannot be underestimated. Many of the problems identified by the interviewees in retrospect might have been resolved if more time had been allocated to thinking through the project during the commissioning stages.

4.1 Identifying need – why studies were commissioned

There are a wide variety of reasons why a 'landscape capacity' study is commissioned.

Most studies were commissioned by Planning Authorities as a proactive assessment of landscape potential to inform spatial policies which would be incorporated within a draft development plan - *'We had lots of wind farm interest, but no landscape strategy'*; *'The study was commissioned to inform the Local Plan'*.

Alternatively, some studies were commissioned in response to pressures on planning staff resulting from a sudden upsurge in developments, and usually required some sort of assessment of potential development sites or cumulative effects on the landscape. *'We were inundated with developments, especially in one area'*; *'We had several applications coming in at once so cumulative issues were looming'*.

In addition, four wind farm studies were commissioned by SNH to explore methodologies for assessing the capacity of the landscape to accommodate wind farm development³.

The range of potential uses of the studies also varied according to development type, as indicated in the table below:

³ These are:

Land Use Consultants 2004. *Ayrshire and Clyde Valley windfarm landscape capacity study*. Scottish Natural Heritage Commissioned Report No 065 (ROAME No F01AA309c).

Land Use Consultants 2002. *Assessment of the sensitivity of landscapes to windfarm development in Argyll and Bute*. Unpublished report - Scottish Natural Heritage and Argyll and Bute Council

Benson, J.F., Scott, K.E., Anderson, C., Macfarlane, R., Dunsford, H. and Turner K. 2004. *Landscape capacity study for onshore wind energy development in the Western Isles* Scottish Natural Heritage Commissioned Report No. 042 (ROAME No. F02LC04)

Macaulay Land Use Research Institute and Edinburgh College of Art 2004. *Study into landscape potential for wind turbine development in East and North Highland and Moray*. Scottish Natural Heritage Commissioned Report No. 070 (ROAME No. F02AA302).

Table 1: Potential uses of landscape capacity studies

		Potential purpose				
		Development plan/ management plan, including Local Plans	Development management – responding to planning applications	Development management – advice on enhancement/ mitigation	Casework response or Public Local Inquiries (PLI) associated with specific proposals	Cumulative effects of development
Development type	Housing/settlement expansion, including ‘greenbelt’ related studies	Yes – especially to inform location of housing allocations for draft plans	Yes – particularly in rural areas	Yes, including advice on advance site preparation and general settlement enhancement		
	Wind farm studies	Yes – particularly spatial policies – identifying potential locations for wind farms	Yes	Yes – guidance on mitigation	Yes – to deal with overwhelming casework load	Yes – either to inform a conjoined PLI or to deal with overwhelming casework load
	Aquaculture	Yes – largely to inform marine spatial plans	Yes	Yes – guidance on mitigation		

4.2 Setting up and the commissioning process

Although there were many positive comments about the studies, all interviewees also identified at least one thing which, in retrospect, they would have done differently in the studies they had commissioned. Nearly all the changes mentioned could have been incorporated in some way into the commissioning process.

Interviewees felt that clarifying purpose would have improved the study – *‘We need to make sure that the outputs can be used in planning policy’*; *‘We needed lines on maps’*; *‘We did not pay enough attention to planning context, like the Planning Advice Note and the Scottish Planning Policy’*; *‘Perhaps it was not really a green belt review that we needed’*; *‘Preferred areas were not identified – but then this wasn’t in the brief.’*

Some of the changes proposed by interviewees could have been incorporated into the assessment method - *‘The consultants could have done more fieldwork’*; *‘We should have asked the consultants to pilot the method’*; *‘Existing allocations should have been assessed’*.

Other changes interviewees identified would be incorporated into the project outputs – *‘Maps produced are not at the right scale’*; *‘Sensitive areas were not identified – only areas of search – which is a shortcoming’*; *‘Think about future use/application – is the report to be adopted by the Council?’*

While it is unreasonable to expect those commissioning a study to prepare for every eventuality, there was a resounding feeling from interviewees that most studies would

benefit from more time spent researching other studies, thinking through the purpose of the study clearly, and preparing a well thought out brief – *‘Make sure you spend time on the brief, be very specific and think through what you want’*.

Comments were also received on the shortcomings of the procurement process... *‘Make sure you get the right tenderers at the beginning’*...and on the lack of time allocated for the project... *‘The timescale was too tight to allow flexibility in the brief and the method could not easily be changed as the study evolved’*.

As a result of this feedback, the on-line toolkit is structured towards giving Planning Authorities resources and advice at the beginning of the commissioning process. The key themes which emerged from the interviews, and which we followed up in our review have been described in the remainder of this section under the following headings:

- Clarifying purpose; and
- Commissioning a study.

4.3 Clarifying purpose

Studies were commissioned in response to an identified need. The purpose, however, was not always clear in the brief, or was sometimes set aside as the project evolved, and the subsequent method and outputs were then not always provided in a form which is useful for the objective – *‘On reflection, the consultant was less able to target the ‘planning’ requirements of the brief than the guidance part’*; *‘Planning needs needed to be better spelt out’*.

A frequent response from interviewees was that the study did not always properly take into account what were called ‘the planning needs’.

4.3.1 Defining the ‘planning needs’ or study aims

Nearly all landscape capacity studies are required to inform the planning process in some way – *‘needs to be targeted at planning needs’*; *‘We are concerned that the non-statutory basis might affect robustness at appeal’*. It is important that the consultants know exactly which aspects of the planning process the output is intended to contribute to. The brief should make it clear that:

- Studies which are required to inform a **development plan need to have a spatial planning focus – lines on maps** – which is capable of underpinning policies;
- Those which need to be used by **development management** planners, responding to individual planning applications as they come in, **need to have easily understood justifications for the recommendations, and supporting design guidance** for planners to use in their written responses to applicants;
- Nearly all will need to be used at **Public Local Inquiries (PLIs)** at some stage, so the method and presentation needs to have **a clear rationale behind the recommendations**;
- The method will need to take into account the **current national planning policies and guidance**; and

- If a study is to be **adopted by the Council**, for example as Supplementary Planning Guidance, then **a clear idea of what format is likely to be acceptable** to the Council should be indicated in the brief or at an early stage in the project.

Many of the most successful studies provided an output which was tailored to meet the planning objectives – *‘It gives the planners what they need to make a decision’*; *‘The individual maps of specific constraints are useful – you can see exactly what issue is where’*; *‘They used existing LCAs, because they have been used for other planning policies’*.

Sometimes the planning objective was clearly expressed in the brief, sometimes the consultant brought experience of planning with them, and sometimes the planning focus evolved as the study progressed.

There is no doubt, however, that if the output is to be useful for a specific planning purpose, then the commissioning process, brief, method and output needs to be tailored to that end.

4.3.2 Linking purpose and outputs

While it may seem premature to think about outputs early on in the commissioning process, doing so usually helps to clarify a project brief.

Within the wider context of identifying planning needs, interviewees frequently stressed that in retrospect, they would have clarified more precisely how the study was to be used before preparing the brief – *‘It’s not prescriptive enough’*; *‘Preferred areas would have been useful in retrospect’*; *‘I expected a final map, but there does not seem to be one’*; *‘More design guidance would have been useful’*.

The most successful studies have been realistic and focussed, with outputs which can be used by planners and others to meet the purpose of the study – *‘Design guidelines are useful’*; *‘Maps are good – the scale is just right’*; *‘Guidance, based on LCAs, is very good and well laid out’* *‘We use the maps and the tables’*.

On a more practical level, occasionally the product was not compatible with the software systems available to the commissioning bodies – *‘Cannot access the maps as we do not have that particular software.’* The brief, or discussion at the inception meeting, should make it clear what computer software and system requirements are likely to be acceptable to the commissioning bodies.

On this evidence, it is good practice, therefore, to give at least some thought to outputs – in terms of product and format – at an early stage.

4.3.3 Identifying study objectives

A review of the studies and the interviews quickly identifies a wide range of potential objectives which need to be considered when preparing the brief, all of which reflect different planning needs. Examples, drawn from the interviews and review of the studies, include:

- Assess the **cumulative effects of known developments**;
- Identify **preferred locations for future developments** which have least landscape and visual impact;
- **Review the green belt** in relation to the Scottish Planning Policy (SPP) objectives;

- Identify the **best locations for housing in landscape and visual terms** over the next fifteen years;
- Contribute to identifying **broad areas of search** for wind farms;
- Explain clearly the **landscape opportunities and constraints for accommodating a specified development** within the whole of a study area;
- Explore **scenarios to identify an optimum solution** for locating and designing a specified development;
- Provide **advice on design guidance** and mitigation;
- Identify a **preferred sequence of development**, or a graduated series of preferred areas, with limitations clearly articulated;
- Simply **identify the very optimum sites for development** from a landscape perspective;
- Identify areas **with most potential and least potential** to accommodate a specified development;
- Consider the landscape and visual implications of **different development scenarios**;
- Focus the **sensitivity assessment on locations which have already been identified as being the most likely sites**, taking into account other planning considerations;
- Find sites to **accommodate a target allocation** or ‘number’ of developments; and
- Invite consultants to **identify potential** with no target figure for number of developments.

The challenge when commissioning future landscape capacity studies will be to think far enough ahead to make sure the brief delivers outputs which meets the planning needs or project aim, and delivers specific objectives without then undermining useful innovation by the consultants.

The Planning Authority, or other commissioning body, needs to devote adequate time to prepare the ground for the study well in advance, clarifying planning needs and objectives and thinking about what outputs are required to meet those objectives. It might be useful at this stage to research the purpose and outputs used in other studies. To this end, the on-line toolkit provides a list of the existing studies including a summary of their objectives and outputs.

4.4 Commissioning a study

Having pinned down the planning needs and the specific objectives, a further range of comments from interviewees related to the project brief and other commissioning issues.

The issues have been described in this section under the following topic headings:

- Selecting a steering group;
- Setting a realistic timescale;

- Procurement;
- Deciding whether or not to include a method in the brief;
- Other factors which may affect the scope of study; and
- Project management.

4.4.1 Selecting a steering group

The steering group should include representatives of those likely to use the study, to make sure that the outputs reflect their needs. Frequently the steering group did not include, for example, development management/control officers, even although they are expected to use the output. Development management interviewees in particular raised this issue, but they were not alone – *‘Colleagues need to come to us to see the documents and we need to explain it’*; *‘They are not routinely used in development management, so are not a success’*. The issue here is not really the clarity of the document – of course, the output will have to be accessible to those not on the steering group – but the need to make sure that the output includes the information that all the users will need.

For some studies, steering groups involved more than one Planning Authority. Interviewees noted that there were specific project management implications of working across authority boundaries. In particular, it was important to ensure that the study was of similar priority to all the authorities involved. This level of engagement could be difficult to secure, as all authorities are at different stages in the development planning process – *‘Too big a steering group’*; *‘People did not have time to input and review, it was quite stressful’*; *‘Not everyone could give it the same priority’*.

A further point which was raised by interviewees was that the steering group, over time, could become over familiar with the project and the report in various drafts, so they found it difficult to identify shortcomings – *‘Get some one else to read it over – not just the steering group who become too familiar with it and cannot challenge it objectively’*; *‘Leave the report for a while and go back to it’*.

When identifying the steering group, it might therefore also be helpful to have someone ‘in the wings’ who will not be involved in on going management of the project, but who can look at a later draft of the report with fresh eyes. This person will be more able to identify weaknesses, including unintelligible terms and opaque methods with which the steering group has become familiar over time. It was suggested that this role could be provided by SNH, or someone more senior in the Planning Authority who was required to ‘sign off’, or quality assure, the study. It was also recognised that this ‘extra’ late stage in the process might have time and cost consequences for the project, so needed to be identified at the outset.

Finally, some interviewees valued a wider steering group. This is particularly the case where there was a need, often in a smaller community, to ensure that the output of the study had a wide ownership – *‘It was very useful to have all interests secured, including the enterprise company – it would have been hopeless if we had gone alone’*.

4.4.2 Timescale

Some interviewees indicated that the timescales for the projects they had commissioned was too short – *‘The timescale was too tight to allow flexibility in the brief and method could not really be changed as the study evolved’*; *‘More time’*. Timescales varied widely – from

12 weeks to just over a year – although they seemed to bear no relationship to the scope of the work. Rather, the timescales seemed to depend on ‘external’ deadlines which were in place before the work was commissioned.

Based on the interviews, it has become clear that when establishing timescales, clients should take into account:

- **The time required to prepare and set up the project.** This includes time to clarify the planning aims and the specific objectives, as well as prepare a well written brief;
- **The time required to undertake the procurement process.** This includes possibly allowing for pre-qualification questionnaires as well as final tenders, and even interviews, as well as being aware of in house procedures;
- **The size of the study area.** Both the physical size of the area, and its accessibility should be considered. It is also useful to consider the range of viewpoints required to fulfil the brief (are the contractors required to climb Munros, for example, or consider the experience from the sea?);
- **The time of year.** In winter, daylight is limited and the weather is unpredictable, which limits field work. In summer, the day light is longer, but both contractors and the steering group have to allow for school holidays;
- **Opportunities to reflect on the methodology.** It is very useful to undertake a pilot study, for the steering group to have a chance to see the method in action, and test its application fully;
- **Time to revise the methodology,** or even, on occasion, the direction of the study. It is not uncommon for the purpose of a study to become more focussed as it progresses, and there may be a need to alter the emphasis of a study in response to initial findings and further clarification of purpose;
- **The availability of the steering group to comment on drafts.** The project manager and the steering group will have other commitments. Adequate time for reading, reflecting on the output and commenting on drafts, as well as for the consultants to provide feedback on and incorporate the amendments, should be built into the project timetable;
- **The need to edit.** First drafts – and often final reports – of these studies invariably include terminology, sections of text or concepts and assumptions with which the contractor and steering group are familiar, but which may not be clear to anyone else. It is important to build in time for a period of reflection, or editing by someone who is unfamiliar with the details of the study but who understands its purpose and may need to use the output;
- **Quality assurance.** This formal process is becoming more common and can have particular implications for timescales, depending on the procedures used by the commissioning body; and
- **Existing commitments of potential tenderers.** It is very rare that consultants are sitting waiting for a tender to arrive. It makes sense to allow several weeks – preferably up to two months – before a successful tenderer will be able to give their full attention to a project.

If, taking all the above into account, the time allocated to the study looks like it will be less than required to undertake the work to the satisfaction of the client, it may make sense to reconsider the scope of the brief. It may be possible to undertake some tasks in house, to reduce the study area or to focus the project on a particular task. This is likely to be preferable to undertaking an ambitious study in too short a timescale.

4.4.3 Procurement

Most studies are now commissioned by Local Authorities using the Scottish Government procurement system. This can be a lengthy process, one interviewee indicating that the combined in house and website process could extend to over three months. It is also known that the wide trawl of this system can encourage large numbers of tenders for each project. This uses up lots of administration time from both all the contractors and the clients. Concern was expressed that despite (or perhaps because of) the scope of this procurement process, there was not always confidence that the best tender was identified.

Based on the experience of interviewees, therefore, and in particular discussion at the workshop, the on-line toolkit recommends that a three stage appointment system is considered. This system is already used by SNH and by some Councils. The process involves:

- **Undertaking an initial ‘sieving’ process, by advertising a project and inviting potential tenderers to note an interest.** Tenderers are then sent a pre-qualification questionnaire (PQQ), which is then assessed. Both the initial advert and the questions in the PQQ need to be clear on the skills and experience required for this process to be effective;
- **Tenderers who pass the PQQ are then invited to submit a tender.** The client will be confident that these tenderers are capable of satisfactorily undertaking the work; and
- **For complex projects, interviewing shortlisted tenderers before final selection can prove invaluable.** They allow the Planning Authority to understand how the consultant will interpret or expand their methodology, to assess their communication skills and to clarify or elaborate on issues which have been ‘glossed over’ in the tender submission.

This three stage process has advantages for potential tenderers, as they do not spend time initially preparing a lengthy full tender submission for work for which they are not considered suitable. But more significantly, it allows Planning Authorities to work through the process stage by stage, and refine tender requirements based on experience gained during the process.

Tender assessment should be focussed on value for money, not simply cost. To assist in this, tenders should be constructed to allow adequate scope for assessing tender quality, the detail of the proposed method, clarity of expression, time allocated to identified tasks and experience of the consultants actually carrying out the work. The tender assessment criteria should also be detailed in the project brief, to allow tenderers to address the key idssues.

4.4.4 Budget

Interviewees were asked about the cost of individual studies, as it was the original intention of the consultants to establish a guide price range as part of this review. However, many interviewees could not remember the costs, and some prices which were given are known to be incorrect.

In addition, known prices ranged widely. This was in part due to inflation the many years over which studies have been commissioned, and in part due to the very varied briefs, different requirements in terms of development types and scenarios and the different sizes and complexities of study areas. As a result it was not possible to include a robust or fair assessment of costs within the review, and guidance on prices has not been included in the on-line toolkit.

Nevertheless, the review identified a number of ways in which the costs of studies could be limited if there are budget or timescale constraints. These include, for example:

- **Limiting the geographic study area**, by removing physical constraints to the development, or focusing on areas or settlements facing most pressure for change;
- **Reducing the terms of the brief**, and leaving out those elements which could be commissioned separately at a later date, such as for example, excluding a visibility analysis; and/or
- **Limiting the number or range of development scenarios**, by focussing on those which are immediate priorities.

It is also suggested that SNH might undertake to monitor costs, particularly of those studies in which they have been involved, to advise Planning Authorities on budgets in the future.

4.4.5 Deciding whether or not to include a method in the brief

This was one area where the response from interviewees was extremely mixed. Generally, the consultants were encouraged to outline the method they were going to use in the tender submission. For Planning Authorities this was often considered an advantage, especially where a choice of methods was then available at tendering stage – *‘We interviewed people based on a range of approaches’*.

Interviewees therefore frequently had relied on the greater experience of the consultants to advise them on the best method – *‘The methodology had been used by the consultants to undertake similar studies elsewhere in Scotland’*; *‘The consultants provided the methodology’*; *‘Consultants developed it for this study, based partly on Topic Paper 6⁴ and reading other methods’*; *‘The consultant had a very clear and convincing approach’*.

Other sources of advice on method came from SNH – *‘SNH input’*; *‘The method came generally from SNH advice and information, but was partially based on our experience of a similar study with a previous consultant’* – and from the Planning Authorities experience of studies elsewhere – *‘Mainly from previous successful experience with landscape capacity assessment in a different Council’*.

It was also noted that often the method did evolve as the project progressed, regardless of the original source of the method. Usually, although not always, this seemed to result in a more robust and useful study – *‘The method evolved in a positive way’*; *‘A buffer area was added subsequently, for example, to take into account concerns from neighbouring councils’*; *‘Yes, we changed the criteria to make them more positive’*.

Finally, it was noted that to secure a ‘level playing field’ for procurement, a method might need to be suggested by the Planning Authority, or at least elements of a method, so that

⁴ Swanick, Carys and Land Use Consultants (2002). *Landscape Character Assessment Guidance for England and Scotland Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity*. Countryside Agency and Scottish Natural Heritage.

prices could be fairly compared, especially when a large percentage of the tender assessment is weighted towards cost.

A 'middle' option is to draw up a 'performance specification'. This sits between offering no method at all, and offering a tightly drawn method.

A 'performance specification' details the key objectives which the study is expected to tackle, and a list of issues or individual elements which the method is expected to explore, but does not set out exactly how these elements are to be combined into a process.

This approach ensures that issues identified as crucial by the steering group are included in every tender. Examples of issues include dealing with cumulative effects, ensuring that a pilot study is undertaken and presented to the steering group, assessing the effects of a specified development on designated landscapes, establishing separate landscape character and visual criteria or providing guidance on how to accommodate a specified development in each landscape character area. A 'performance specification' approach requires tenderers to address these key issues, but also leaves room for the tenderer to add additional elements if they feel they are necessary.

The 'performance specification' option is likely to become more readily used as a way of expressing the commissioning requirements within increasingly generic procurement processes. The option perhaps offers the best compromise between creating a 'level playing field' and encouraging individual tenderers to make the most of their own experience and creativity.

In response to these varied comments and the lack of a clear steer towards a preferred approach, the on-line toolkit will set out the elements which were identified by interviewees as being most useful and helpful in terms of the methods used (see Section 5 of this report). If a preferred method has not been identified by the steering group, these elements can inform a performance specification if required.

4.4.6 Other factors which may affect the scope of study

When preparing the brief there are several other factors, raised in the interviews, which may influence the scope of the studies.

4.4.6.1 Non-landscape issues⁵

While there may be a temptation to extend the scope of the studies to include additional, non-landscape related considerations, this was strongly discouraged by interviewees – *'Just landscape, this was a good idea as the issues are clear and there are no "muddied waters"'*; *'Content that the landscape capacity assessment is limited to landscape only'*; *'Would not include other indicators/issues'*; *'No other issues included, purely landscape, as other issues are addressed in Local Plan and Structure Plan.'*

The only exception relates to settlement studies, when a small number of respondents indicated that an assessment of potential in relation to identified sustainability criteria would have been a useful additional layer of assessment. One interviewee also indicated that in housing studies, a degree of 'common sense' was helpful in identifying possible sites.

⁵ Landscape issues in this context refers to issues associated with understanding landscape character, experience, perception and values.

4.4.6.2 Geographic study areas

While for some studies the geographic area may be tightly specified – for example, the whole of the Planning Authority area, plus perhaps for wind farms, a specified buffer area, or the whole of a particular loch system for aquaculture studies – for housing studies in particular, the actual geography of the area is often left to the tenderer, who will have to indicate the criteria against which ‘settlement envelopes’ have been defined.

Some studies provide a limited study area, which omits identified physical constraints, such as areas at risk of flooding in housing studies, or areas where airport radar will prevent the construction of wind farms. This reduces the overall costs of a study, as well as ensuring that time is spent on the areas most likely to be developed.

4.4.6.3 Setting an allocation or ‘target’ quantity

Most of the studies commissioned were ‘open ended’ in terms of identifying landscape potential, that is to say that they did not set ‘targets’ or ‘allocations’ which needed to be met – *‘Very much an open-ended assessment’; ‘It was completely open-ended’; ‘No – but dealt with proposals which were coming in’.*

However, some studies commissioned to identify sites for housing, where the Planning Authority had an allocation to meet, were given a target number of notional house sites to find. There was also some disappointment expressed if an ‘open ended’ study failed to find potential sites, but the Planning Authority still had to find sites to meet their allocation.

Arguably, if a quantitative allocation is identified, it may appear to compromise the study’s landscape objectives. However, if a study is to meet planning needs, it may be very necessary for the ‘best’ locations, in landscape terms, to be identified to meet that need.

It is also reasonable to expect consultants to identify sites ‘tiered in order of preference/potential’, or for ‘broad areas of search’ to be identified. While these studies are perceived by some to not be ‘true’ landscape capacity studies, they do all still require an assessment for landscape sensitivity to achieve their objectives.

4.4.6.4 Engaging the Community

While a very small number of studies had engaged with communities directly in meetings during or after the preparation of a study, it was recognised by all interviewees that capacity studies were not the appropriate vehicle for community engagement – *‘Public perception did not really influence the outcome’; ‘From the public’s feedback, not as easy to understand, some technical details and terminology which cannot be avoided are difficult for the public to understand’.*

The preference was for the capacity studies to remain ‘stand alone’ professional assessments and for public consultation to take place through consultation on the development plan, once other planning issues had been factored in to the process – *‘No public consultation process specifically, but the study is part of the Local Plan (LP) and Structure Plan (SP) public consultation process’; ‘Use the development plan process for public input, the landscape capacity work is not the place for this’.*

4.4.6.5 Development scenarios

All studies set out a ‘development scenario’, a description of the type of development which is the focus for the assessment. Some times it can be quite simple – stating, for example that locations will only be assessed for their potential to accommodate residential

development, not other types of built development. Others are more complicated, assessing the landscape in terms of 'capacity' to accommodate different sizes of development. This is particularly the case for aquaculture and wind farm developments.

Identifying the right development scenarios, and expressing them clearly, is an important consideration in the brief – *'Only did modelling for 100m tall turbines, perhaps could have done them for smaller turbines, too'; 'Quite a bit of interest in large, single turbines, too'; 'More consideration of different sized turbines might have been useful.'*

In aquaculture studies a decision had to be made about how to describe different sizes of development – by size of cage, volume, or surface water area covered.

Interviewees recommended that careful consideration of scenarios, paying particular attention to what is being supported under current policy initiatives – *'Clarify from the outset what are going to be the key issues. A first sift on ideas would have been good, for example now Scottish Rural Development Programme (SRDP) support for renewables (maybe 60m to hub height), this would be a key feature now'*.

4.4.7 Project management

In all studies there was liaison between the steering group, other staff in the commissioning Authority and the consultants during the project. The balance between consultation from the consultants and input from the steering group seems to be a fine judgement.

Some studies relied on meetings only, and the circulation of draft reports, to advise the steering group on progress and obtain feedback and input. Others involved piloting methods, field visits, and more active engagement of the steering group.

All projects benefit from good project management. This includes adopting and imposing realistic timescales, ensuring that the project is managed so that there are opportunities to learn from the outcomes as the project progresses, and maintaining a good record of agreed changes to method and output.

Studies where the steering group felt that they had a good interaction with the consultants, the comments, and the outputs, overall received much more positive feedback in the interviews – *'The planners went out on site with the consultant which was very valuable and seemed to inform the approach of the consultant'; 'Officers felt included and it was very useful'; 'The planners built up a better understanding of landscape issues through working with the consultant'; 'There was discretion, or flexibility, to weight the study towards objectives as study progressed'; 'Valued collaboration between officers and consultant'*.

Alternatively, if the steering group was less engaged in the process, or in particular if there was unresolved tension between the contractor and the client group, there seemed to be generally (although not always) less satisfaction in the study overall – *'The consultants did what they did in an earlier study for another authority, although we asked them not to'; 'We needed more analysis, which we did not get'; 'Far too much was expected from the steering group – you wanted the consultant to give you the answer, not for the steering group to monitor or advise on key judgements, we did not have the time or the expertise'; 'Would have challenged more – felt a bit out of my depth'*.

For some of the interviewees, even if there was some uncertainty about the way a project was progressing, there was a sense that 'the consultants are the experts'. The steering group did not always feel confident about challenging them, even if they were uneasy. These could result in studies which did not meet planning needs, or where the method was

less likely to be understood by the Planning Authority. As one interviewee warned: *'make sure you understand the process and the method, not just the recommendations'*.

It is crucial to the success of a landscape capacity study that it addresses the needs of the project and that the Planning Authority has confidence in the output. Robust management of a project should ensure that methods are explained and fully scrutinised. The consultant should be encouraged to explain, demonstrate or pilot test the method, preferably in the field. Planners should not shy away from challenging the consultants. In addition, it is important to ensure that the study does not drift into an academic exercise when the output is needed for a specific, and practical, application.

5 FEEDBACK AND REVIEW: METHODS

5.1 Overview

This section of the report focuses on general comments made by interviewees on strengths and weaknesses of methods used in the landscape capacity studies reviewed.

A wide range of methods have been used in the studies reviewed, but the largest variety of approaches related to those used to assess the potential of the landscape to accommodate for wind farm developments.

As with studies as a whole, where methods were clear and understood by the Planning Authority, and tailored to meet their objectives, the methods were endorsed enthusiastically – *‘The sensitivity to change classification is very useful, very user-friendly’*; *‘Very sound, 9/10 for clarity, although details sometimes difficult to understand’*; *‘Overall happy with the methodology used, as the studies are fit for purpose’*; *‘There are methodology issues which could be nit-picked, but overall, conclusions are robust and defensible’*; *‘No real issues as the method was discussed in detail before the study was commissioned’*.

Conversely, some methods were not well understood by the commissioning bodies, and shortcomings were readily identified by interviewees – *‘Not able to do a lot of fieldwork, and it showed’*; *‘Better understanding and clearer explanation of criteria for each area would have helped’*; *‘Too complex, too long, too many stages’*; *‘Complicated process’*; *‘Some ‘leaps of faith’ – i.e. professional judgement could have been better explained’*.

This review does not recommend a preferred methodology. The many varied objectives and required outputs from these studies often require ‘tailor made’ methods which are designed to meet the requirements of a well drafted brief.

Nevertheless, this section highlights elements of methods used which were consistently well received by interviewees, and those elements which were most likely to cause confusion or undermine understanding.

As with other sections, the comments are listed under topics which draw upon the themes identified by the interviewees.

5.2 Becoming familiar with other methods

Before beginning, commissioning bodies should look at other studies which aim to achieve the same or similar objectives – *‘We should have looked at more studies elsewhere before commissioning this one’*; *‘I had previous successful experience of landscape capacity assessment with a different Council’*. This may seem to be time wasted, but reviewing methods and the presentation of other studies can be invaluable for both advising on method, interrogating potential tenderers at interview, or challenging the consultants when the project is under way.

However, it is recognised that leafing through a study for another area is not an easy way to identify a workable and accessible method which has inspired client confidence. It is often easier to discuss a finished study with someone who was involved, and understands its strengths and weaknesses. As a result, Planning Authorities should therefore consider:

- **Reviewing two or more studies which have already been undertaken by different consultants** to meet similar objectives as those identified by the commissioning body;

- **Phoning the Planning Authorities who commissioned these earlier studies** – asking them what worked, what they would do differently;
- **Speaking to SNH** – several interviewees commented on SNH’s role in relation to monitoring and advising on appropriate methods – *‘SNH’s national perspective could provide consistent information’*; *‘SNH could provide clearer advice on best practice’*; *‘SNH have a monitoring/overview/review role, and should be keeping one step ahead’*; and
- **Using the on-line toolkit which accompanies this review.** The on-line toolkit includes guidance on good practice, and provides supporting tools, such as checklist of the key elements identified by interviewees as being successful within the methods reviewed.

5.3 The sensitivity assessments

Interviewees valued sensitivity assessments which were clearly expressed, easy to access and understand, and simply laid out – *‘Clear understanding of what makes the landscape more or less sensitive was expressed in the study, so was easy to understand’*; *‘Sensitivity assessment is simple and easy to understand’*; *‘Happy that the study has achieved a clear matrix system’*.

A sensitivity assessment will identify aspects of landscape character and experience, including visual issues, which might help accommodate the specified development successfully into the landscape, or alternatively which might be negatively affected by the specified development. These are often called the ‘criteria’.

The purpose of the ‘sensitivity assessment’ is to carry out an analysis which identifies how each of these criteria, or landscape and visual sensitivities, are affected by the specified development, in each of the landscape character areas. The analysis is often presented as a matrix or table.

5.3.1 Scope of criteria

Sensitivity criteria usually relate to one of four broad categories:

- Landscape character and experience;
- Visual amenity;
- Visibility; and
- Landscape value.

Not all studies use criteria from each of these categories – many avoid, for example, landscape value related criteria, such as landscape designations or ‘SNH wild land search areas’, preferring to address these when taking on board other, wider planning considerations.

Studies were supported by Planning Authorities if they had confidence in the selected criteria and the sensitivity analysis was clear, easy to understand, consistently applied and robust under scrutiny – *‘Criteria seem to relate well to the landscape of the study area’*; *‘Consistent if mechanistic approach’*; *‘The studies use qualitative assessments, but they are clear and easy to understand’*; *‘Classification, criteria and sensitivity very clear’*.

Conversely, where the selection of criteria was not clear, or some of the criteria seemed to be too similar to each other, the interviewees had less confidence in the study – *‘Could not really determine which criteria were important, and wondered about this’*; *‘Better understanding and clearer explanation of criteria for each area would have helped’*; *‘Some of the complexities on reflection seem unnecessary’*.

5.3.1.1 Scoring systems

Most methods describe each of the landscape character areas using the landscape and visual criteria identified as being most likely to be affected by the specified development. Usually, the landscape sensitivity within each character area is assessed for each of these individual criteria. At its simplest, the assessors will judge whether or not each landscape character area is of ‘High’, ‘Medium’ or ‘Low’ sensitivity in relation to the likely impact which the specified development will have on each of the criteria.

At this stage, professional judgement of the consultants has been used to first:

- Identify the relevant criteria; and then
- Undertake the sensitivity assessment.

For most studies, the sensitivity assessment is then left as a comprehensive analysis of each individual criteria in each character area. The conclusions then summarise the sensitivity which then informs the recommendations.

In some studies, however, a further layer of processing is added, as numerical scores are used instead of ‘High’, ‘Medium’, ‘Low’, which are then added together across all the criteria so that it is the aggregate score which is the most important measure of sensitivity. If the focus moves from the individual criteria to the aggregated score without the background analysis of each individual criterion being available to work out what has informed the aggregate score, then this approach can be difficult to understand.

It is important that the Planning Authority can see the sensitivity assessment for each of the individual criterion in each landscape character area separately – without this, it can be difficult to follow the consultant’s train of thought.

In a very few studies, the ‘adding together’ of scores or layers of information goes one stage further and aggregates on different topics are further aggregated, or are weighted differently, resulting in complex layers of information which can then be difficult to unravel.

Again, these studies were considered overly complex, and are difficult to unpick – *“Layer upon ‘layer’ of information, like lots of scores being added together, means that the sum is a muddle of the parts, with more assumptions and more opportunities for error built in’*; *‘Unnecessary complexities, with some criteria too similar, and others categorised with different degrees of significance which don’t seem quite right, almost too much information’*; *‘Too complex, too many stages’*.

To conclude, interviewees were most comfortable with a clear set of criteria, each of which has been assessed against the potential impact of the specified development in each landscape character area. They liked having this information, and they were less comfortable when the assessment was not available to them. Clearly expressed, this part of the assessment should give a clear ‘rationale’ between early analysis and recommendations – *‘The planners can look and see what characteristics or visual sensitivities are being compromised, and make their own judgement about what the value of these factors are in each individual case’*.

5.3.2 Weighting

As noted in the above section, some methods ‘weight’ individual criteria, ascribing different degrees of either value or significance to criteria. This adds a further layer of professional judgement into the method:

- Identify the relevant criteria; and then
- Weight them according to value or significance; and then
- Undertake the sensitivity assessment.

The interviewees did not find that this extra degree of sophistication helped clarify sensitivity. Generally, weightings were considered unnecessary – *‘Weightings are crude and oversimplified’*. The additional layer of professional judgement builds more assumptions into the assessment process and they should be used with discretion.

5.3.3 Double counting and cancelling out

All methods can be subject to ‘double counting’ of sensitivity criteria, sometimes inadvertently. An example of this is when ‘wildness’ is counted firstly as an attribute of landscape character which limits development, and then for a second time, when ‘wildness’ is counted as an attribute in terms of landscape value which also limits development.

Conversely, some attributes can be scored positively for one set of criteria, but then negatively in other respects, thus ‘cancelling out’ the scoring. For example, ‘wildness’ might score high for value based criteria, but then low for number of receptors in any visibility analysis.

Methods should be studied closely to ensure that ‘double counting’ and ‘cancelling out’ is avoided, or where it is built into the process, it is recognised.

5.3.4 The need for a clear rationale

The sensitivity assessment should be able to be interrogated to provide the justification behind the recommendations.

Where there was no clear and ‘easy to follow’ link between analysis and recommendations, the all-important ‘audit trail/ rationale’, as it was described by one interviewee, became ambiguous and undermined the usefulness of the study – *‘Better rationale for recommendations needed’*; *‘Looking back, it is not always clear what the rationale for each site is, and some terms are not fully explained’*; *‘It is not always clear what the justification is behind the recommendations’*.

5.3.5 Keeping it simple

The clarity of this stage in the process is crucial in establishing confidence in the study. It is important that the assessment does not introduce more variables or complexities than are required – consultants should be encouraged to think about how others will defend a study at a PLI, possibly the most rigorous test of the clarity of a ‘landscape capacity’ study. In some cases, studies seemed to have become overly academic and unnecessarily sophisticated, with consultants pursuing their own interests within the context of the commission, and rather losing sight of the practical application of the output.

Finally, it is evident from interviews that methods do not need to be complex to be effective. There was no evidence to suggest that weighting criteria, introducing fine variations in significance of criteria, complex layering of information or even simplified, 'adding up' scoring systems produced a more understandable method. In fact, more simple, consistent, succinct, possibly even rather unadventurous and certainly unsophisticated methods seemed overall to be the most readily understood.

5.4 Field visits

Field visits, to look at the application of the method on site, jointly undertaken by the consultants and the steering group, were identified as being particularly useful, even if they were not linked to testing or piloting a method – *'Site visits and workshops were a strength'; 'The field work was particularly useful in highlighting some key considerations'*.

Taking time out to look at the method, and try using it themselves, always gave the steering group more confidence in the method. This was often an indicator of a successful study.

5.5 Piloting or testing the method and field visits

Where studies piloted a method, or where part way through the project, the method was presented to the steering group, often on a field visit, this was well received by interviewees – *'Contractor did pilot the criteria/method and discuss it with the steering group, who liked what they saw'; 'On site discussions and presentations were very useful'; 'Do site visits – these were very important for sceptics'*.

Futhermore, where piloting and/or a site visit to discuss the method with the steering group had not been undertaken, it was frequently identified as something which interviewees regretted – *'No piloting/interim field work which should have been useful'; 'Should have piloted method/done joint field work with the consultants; 'The consultants were keen for us to go out and spend some time seeing an assessment in action but we never had the time - we would not make the same mistake again'*.

5.6 Fieldwork

Finally, interviewees were positive when consultants had undertaken detailed or comprehensive site work – *'Level of detail was good'*. This was recognised as a way to inspire confidence in the output – *'Great knowledge of area, lots of site work – very good at inspiring confidence in the study'*.

Conversely, where it was absent, the lack of fieldwork was occasionally noted as a shortcoming – *'Consultants should have done more fieldwork'*. This was particularly the case if interviewees were unhappy with the study overall, and lack of knowledge or familiarity of the study area was perceived to be a contributing factor to a weak report.

6 FEEDBACK AND REVIEW: PRESENTATION AND 'AFTERCARE'

The third broad category of comments made by interviewees have been presented in this section of the report, and broadly relate to how a report has been used and the experience of the Planning Authorities after the study was completed.

As with other topics, there were many positive comments – *'Happy with the studies, in retrospect appreciate what was done in a very tight budget'; 'The study is available to all and there has been no negative feedback'; 'Objectives achieved, success can be measured by Council's acceptance of final studies and their use in planning policy formation and development control'.*

Identified shortcomings tended to fall into two categories:

- Problems with report format, structure and presentation; and
- The 'aftercare', or additional support which may be available from the consultants, especially in relation to PLIs.

6.1 Report format, structure and presentation

Interviewees indicated that the accessibility of the report, in terms of its availability and format, as well as the logic of its structure and presentation, did affect the usability of the final report.

6.1.1 Report structure

Most reports were recognised as being logically structured, and specific forms of presentation were recognised as being of particular value, especially tables or matrices, and maps which illustrated analysis and recommendations at an appropriate scale – *'The summary in the table is good, and the maps are clear and useable'; 'The report looks complicated at first glance, but can be worked through systematically'; 'We use the maps and illustrations, then work back to the text and justification, which are used in responding to applications'; 'The study reports are broken down into clear stages with key recommendations set out at the end. Drawings and maps are clear and illustrate the key points made in the text.'*

It was notable though, that poor presentation could make an otherwise sound report difficult to use – *'Poor structure – recommendations are in a separate part of the report to the analysis, which makes it difficult to read. Not all the information referred to on the recommendations tables is on the recommendations maps'; 'Expected to see a map showing outcome of the study findings, and there is not one. The document is difficult to interpret.'*

6.1.2 Maps

Some interviewees identified the level of detail of mapping, or even the graphics, as an issue which then affected the usefulness of the final document – *'Easy to use in terms of practicalities but scale of maps is wrong should have been more finely grained and they are difficult to read'; 'Problems with the use of red and orange on the maps – colours too similar'.*

Positive comments about mapping identified the usefulness of an appropriately detailed scale and clear graphics – *'Clear maps, and a good detailed scale'; 'Graphics are clear and easy to interpret'; 'Mapping overlays a particular strength'.*

Planners in particular remarked on the need to have 'lines on maps' and clearly defined areas to ensure that policies could be readily developed and applied – *'Maps showing recommendations are largely good and useable – planners like firm boundaries'*. It was understood that boundaries could be 'transitional' areas in terms of landscape character and recommendations, but if the report is to be properly useful in planning terms, consultants do need to address the spatial policy needs.

6.1.3 Electronic documentation

Finally, perhaps not surprisingly, it was recognised that some of the earlier studies, undertaken before the advent of widely available Geographic Information System (GIS) or electronic document formats, were less available and less widely accessible today – *'Paper copies hard to find in the office and not a standard reference document'; 'Mapping on a GIS layer, not just paper copies, would have been useful, but not available at the time'; 'No GIS layers available, due to age.'*

Interviewees liked electronic copies of the documents, which ensured that they were widely available to colleagues. More recent studies also include maps compatible with the in-house GIS which are then also easily accessible. In addition, many Councils placed pdf copies of the studies 'on-line', so that they are accessible to the public.

6.2 Aftercare and follow up

Interviewees identified a number of ways in which 'aftercare' provided by the consultant had encouraged and enhanced the use and applicability of studies. Aftercare included:

- Workshops/site visits;
- Presentations to Councillors; and
- Representing the Council at PLIs.

6.2.1 Workshops/site visits

Some consultants offered workshops or site visits when the studies were complete, which were recognised by interviewees as being a good way of consolidating the use of the studies, especially with staff who might not have been involved in commissioning them. They allowed staff to become familiar with interpreting maps and commentary on site – *'Went on site visits, field trips with the consultant, with other officers (not on the steering group) included and we felt this was very useful'; 'Workshops were useful'*.

This point was further reinforced by some interviewees who identified that some type of final presentation would have been useful – *'Would have done a debrief – this is important, especially for people not involved in commissioning the study, but now using it'*.

6.2.2 Presentation to councillors

Where consultants were commissioned to present a study to councillors or others, this was considered to be an asset by interviewees – *'A series of workshops were held during the Local Plan alteration, discussed with community councils and developers. No real issues arose and there were no specific challenges to the study'; 'Very strong verbal presentation, and a great presentation to councillors which was important'*.

6.2.3 Public Local Inquiries (PLI)

Several consultants were subsequently commissioned to defend the study findings in support of the Council at PLIs, either in relation to Development Plans or in relation to specific planning applications. For these Planning Authorities, as stated by one interviewee, *'aftercare by the consultants is important'*.

For some Planning Authorities, the experience and availability of the consultants to appear at PLIs was an important feature at tender selection. It was noted that sometimes the steering group did not pay perhaps as much attention as they should to the method, because they were expecting it to be defended at future PLIs by the consultant, although of course there is no guarantee that the consultant will always be available – *'Follow up from consultants is useful – you need to make sure they are around to defend the study at PLIs'; 'The consultant's experience of PLIs has informed the focussed output'; 'The contractor does good follow up, and always appears at PLIs'; 'It is important to have the consultant available to attend the PLIs and be successful, to set a good precedent'; 'The consultant was asked to represent the Council on landscape issues for the Local Plan PLI, and the reporter supported the studies in all but one case, where the case was determined on non-landscape issues anyway.'*

In addition, it was strongly felt by interviewees that a product which could be scrutinised at a PLI and then supported by reporters was a sign of a very effective and valuable study – *'Has been robustly tested and stood the test of time'; 'Specific successes include that no reporters have questioned it at PLIs'*.

7 FEEDBACK AND REVIEW: SPECIFIC TO SETTLEMENT/HOUSING STUDIES

Interviewees were generally positive about landscape capacity studies for housing development, and many had been very useful in informing the development plan process, and had stood up well to scrutiny at PLIs – *‘Informative and has been used for Local Plan Policy’; ‘The development plan process was well informed by these studies’; ‘The study outputs are clear and have proven to be robust in standing up to scrutiny.’*

Nevertheless, interviewees did identify specific issues which were both particularly useful and relevant to settlement/housing studies and which could have been done differently and improved the outputs.

This section identifies those points made by interviewees which specifically apply to commissioning landscape capacity studies for housing development, over and above the commentary provided in Sections 4 to 6 of this report.

7.1 Clarifying purpose

The output from a landscape and housing capacity study is likely to be used in the development plan process, normally when allocating sites for future development. It will not be the only factor taken into consideration when allocating land for housing (or another type of built development), but it will be a consideration. The purpose, the method and the format of presentation should reflect the planning needs.

7.1.1 Range of settlement type studies

Although called ‘capacity studies’, these studies have generally focussed either on settlement expansion (thereby taking into account the landscape character and qualities of the settlements as well as the surrounding landscape), or, in more rural areas with scattered housing patterns, on identifying sites for housing which reflect the existing patterns.

Some studies have reviewed the existing green belt, and in so doing use a ‘landscape sensitivity’ type of assessment, so were included in the list of studies reviewed for this report. It was noted that it was difficult to set clear objectives for these ‘green belt’ studies, largely because they try to combine both protecting the green belt (which has a higher level of protection than non-green belt designated land around settlements) and allocating housing sites, which created tension when setting objectives – *‘The green belt was maybe a bit of a red herring, perhaps there was too much emphasis on this, and not enough on thinking how the settlements should evolve over time’; ‘There was confusion over focus. The study was about the conservation of the greenbelt, and perhaps the outcome shows that the conservation of the green belt has been successful to date, as there are few opportunities for development identified, but now we need to think about where to put some allocation. Perhaps we should have given this more strategic thought to begin with.’*

In preparing a brief, therefore, it is important that a clear objective is identified. A review of the studies undertaken to date identifies the following possible objectives:

- Undertake a **review of the green belt**;
- Identify **the best sites for a specified housing allocation**;
- Identify **which areas can best accommodate housing**, regardless of allocation;

- Assess the **landscape sensitivity of sites identified by developers** as part of a ‘development bid’ process;
- Provide **an assessment of the landscape sensitivities which can be used to undertake an SEA** of the settlement expansions proposed in the development plan;
- Provide **recommendations on the mitigation of settlement expansion**; and
- Provide **design guidance**, e.g. for housing styles and layout.

These are all very different purposes and outputs, some of which are mutually exclusive and it is therefore important to maintain a focused brief which also realistically reflects the timescale and budget. Where more than one output is required, it may be possible to commission each task separately if necessary.

7.1.2 Providing an allocation

There was no indication from interviewees that giving the consultant a specified housing allocation to work with produced a better study – many of those which had not been given an allocation to work with somehow had identified enough sites for the Planning Authority to draw on.

Nevertheless, this could be considered a bit of a ‘risk’ if Planning Authorities have to accommodate a specified housing allocation, and want to know where best to locate these in the landscape. Therefore, if a Planning Authority has a housing allocation in mind, then it makes sense to ask the consultants to identify the best sites to accommodate this number of houses – or more than is needed, as not all sites identified will be suitable for other, non landscape reasons. Otherwise, the Planning Authorities may then have to allocate housing sites anyway, without the landscape advice to assist them.

One approach to addressing this issue, used in a number of the studies, was to identify sites in order of development preference – *‘Tiering the sites in order of development preference was useful’*.

7.1.3 Development scenarios

These studies focussed on housing. Although occasionally sites for other forms of built development were identified as part of the output, they were rarely requested within the brief. Sometimes the recommendations or conclusions from the assessment indicated a size or type of housing, or even a pattern or density of development as being most appropriate for a site.

7.1.4 Topic scope of study

While there is a preference for landscape-focussed studies, so that there is ‘no muddied water’, some clients indicated that if it is possible to consider sustainability issues in an assessment this would be helpful.

There was no support for other environmental issues – such as biodiversity issues or archaeological issues – to be considered in the same assessment. Interviewees preferred a ‘clean’ landscape-only assessment – *‘Simply landscape issues were considered, and we were happy and content that the LCA was limited to landscape only. We would not include other issues’*; *‘Restricting the studies to landscape was a good idea, as the issues were clear’*.

Nevertheless, one interviewee pointed out that there could be problems if lots of sites identified really were not suitable because of lack of access or other, obvious constraints – *‘Some grasp of other, non landscape issues, so that silly sites were not identified, would have been useful’*.

7.1.5 Geographic scope of study

Interviewees indicated that study areas should extend around the entire settlement, thereby encompassing all land adjacent to the settlement, not just areas where development might be possible. This gave a comprehensive assessment, which was felt to be more robust – *‘Wrap around advice – i.e. advice for all land right round the settlement – works better’*; *‘Should have assessed around the whole village’*.

In addition, one interviewee indicated that the study would have been more useful if it had included an assessment of existing allocations – *‘The report did not re-visit existing allocations, so there was no information about the suitability of these sites, which was a mistake’*.

Especially where budgets and timescales are tight, it may be possible to limit the geographic area of the study by sieving out areas of known physical constraints. Examples include areas of known flood risk, land protected for future infrastructure such as a bypass, and land which is considered to be too steep for development or which has been designated for nature conservation or other interests.

7.2 Method

Many of these landscape capacity studies were used in to inform the expansion of a settlement. Methods, therefore, needed to take into account the character, layout and pattern of existing development, and how the settlement has historically evolved to respond to the landscape, not just the character of the landscape itself – *‘We really wanted a fresh look at the settlement as a whole, for an understanding of the ‘whole settlement’ to lead the study.’*

This section highlights the elements of methods used which were specific to settlement or housing studies and which were either consistently well received by interviewees, or which were most likely to limit usefulness of the studies.

7.2.1 Scope of assessment

Some studies had only identified and justified areas where there was potential to accommodate housing, and this was perceived as a shortcoming – *‘Should have identified the rationale behind areas not suitable for development – these were just left blank, and so there was no understanding of how they came about’*; *‘Sites which should not have been developed were not identified’*.

In some studies, areas where there was no potential for housing had been identified, but there was no accompanying justification – *‘Sites where development should be discouraged should be clearly identified and an explanation given’*.

The method therefore should identify both areas which have potential to accommodate development in landscape terms (low landscape sensitivity), and areas which are constrained (high landscape sensitivity). These areas should be logically defined and relate to clearly justifiable areas of landscape character. As one interviewee noted, *‘the ‘settlement*

envelopes' were sometimes very wide and this can be awkward – large washed areas of sensitive landscape were identified'.

Finally, having identified areas which are both potentially suitable and not suitable for development in landscape terms, the consultants should be required to provide a clear rationale, or justification, for both.

Knowing exactly what the landscape and visual sensitivities or constraints to housing are in each area that is not identified as having landscape potential for housing is as important as providing justification for why some areas do have potential.

The most successful studies undertook assessments for every piece of land around a settlement, and mapped the results leaving no blank spaces. A list of the specific opportunities, constraints or sensitivities was clearly listed against each mapped area. This allowed Planning Authorities to identify the best opportunities in landscape and visual terms, and to consider if the identified sensitivities could be mitigated. These comprehensive reports also provided text which could be used in responding to future development applications on any site adjacent to the settlement.

7.2.2 Sensitivity criteria

There are many examples of landscape capacity studies for housing or settlement expansion. They all use criteria concerning the effect that housing expansion will have on the character of the landscape, the settlement and its setting. It is important that the list of criteria is succinct and relates to the specific effects of settlement or housing expansion.

Most of the studies use a simple assessment of sensitivity, using a three or five point scale, ranging from 'no' or 'low' to 'high' sensitivity. The feedback from interviewees indicated that these simple approaches, when supported by clear explanations for each rating and how they applied in each character area, were used in successful studies. There was no support for more complex approaches.

7.2.3 Visibility analysis

There was little enthusiasm for detailed, Zone of Theoretical Visibility (ZTV)-type analysis of visibility as a tool to identify preferred housing allocations. However, the impact of housing on key visual features, landmarks and important views was often included in the lists of sensitivity criteria.

7.3 Additional outputs

7.3.1 Phased allocations/identification of preferred areas

Interviewees indicated that 'tiering' of allocations, either by using a 'preferred/potential/ no potential' type of approach, or through some sort of phasing (for example through identifying immediate and long term allocations), was helpful.

This allowed Planning Authorities to prioritise sites, and gave them additional options if sites identified as having potential in landscape terms were unlikely to be developed for other planning reasons.

7.3.2 Mitigation guidance

Several studies identified potential mitigating, or enhancement measures, such as advance planting, establishing recreation links, green networks or open space. Even where some of

this broad brush guidance was ambitious, it was considered to be useful by planners for opening a dialogue with potential developers – ‘*Design guidelines are useful*’; ‘*Tables outlining mitigation/advance works etc are useful*’.

7.4 Product

Most of these studies are used at a PLI, usually at least for the development plan. As noted in Section 6, a concise report, with a simple, clear method, a clear link between analysis, sensitivity assessment and the expression of the rationale behind recommendations is required.

Planning Authorities invariably expected the contractors to be available to defend the studies at PLIs, but this may not always be possible, especially as funds may be limited. It is therefore very important that a client has confidence in the study, understands it and can defend it.

7.4.1 Mapping

Maps at an appropriate scale were considered crucial to the successful presentation of recommendations. The studies deemed most successful had used maps of 1: 10,000 scale.

7.4.2 Geographic Information Systems (GIS)

Several interviewees commented that the findings from older reports are only available on paper maps. Interviewees would now expect the mapped conclusions to be placed on a GIS base, which would make it more accessible.

7.5 Summary of key elements to consider when commissioning settlement studies

- Clarify purpose, especially **in relation to planning needs**;
- If a **review of the green belt is required, consider this in light of a wider strategy for housing allocations**, and be clear in the project objectives;
- Decide whether or not the consultants should **identify sites to accommodate a specified housing allocation**, even as a series of preferred sites, or whether the study is best managed as an ‘open ended’ assessment;
- Different **types of development** – housing, industrial estates, for example, **have quite different landscape effects**, and so will require different assessments;
- Consider whether or not incorporating ‘**sustainability**’ **as well as landscape-related criteria** into the assessment might be appropriate;
- Make sure **that the scope and method leads to an assessment which extends around the whole settlement**, and does not focus exclusively on the areas with potential;
- Ensure that the consultants **provide a justification or rationale for areas where landscapes were considered to be too sensitive for development**, not just the areas where potential was identified;

- **Interrogate the criteria**, making sure that an understanding of the 'whole settlement' informs the study, that the character of the settlement as well as the landscape is taken into account, and that the criteria reflect those issues most likely to be affected by settlement or housing expansion;
- If the contractor is going to use **a more complicated method than a three or five scale assessment of landscape sensitivity or potential, be confident that this gives added value**;
- Expect the consultant to **back up the sensitivity assessment with a short written analysis** of the issues identified in the assessment for each landscape area assessed, which can then be used by development managers when responding to planning applications; and
- Expect **detailed mapping, preferably at 1: 10,000 scale**, which was the scale used for those studies which had been most well received by interviewees.

8 FEEDBACK AND REVIEW: SPECIFIC TO WIND FARM STUDIES

8.1 Clarifying purpose

The findings of a study is likely to be required to inform the development plan process. Unlike housing, the Planning Authority has no specified allocations for wind farm development. The output from a landscape capacity study is therefore more likely to be used to inform the identification of ‘areas of search’ for wind farm development, and to underpin the spatial expression of development plan policies.

Although called ‘capacity studies’, these studies do not aim to define the number and extent of wind turbines which can be accommodated in the landscape. They are more usually used to assess the sensitivity of landscape characteristics to wind farm development. These are then mapped to define areas which have the potential to accommodate wind farm development, and areas which are deemed to be sensitive to wind farm development.

Landscape capacity studies have also been commissioned when several wind farm proposals have been received by a Planning Authority, and an assessment of cumulative impact has been required. This may be triggered, for example, by a forthcoming conjoined PLI, where two or more development applications are to be scrutinised in one PLI, and the cumulative effects of the proposals on the landscape and visual character have been difficult to untangle.

A further purpose for a landscape ‘capacity’ assessment may be to provide the Planning Authority with guidance on the location and design of wind farm developments. This guidance is usually provided by landscape character area.

A study can be commissioned to undertake a ‘pure’ assessment of the ability of the landscape to accommodate wind farm development. This, however, may result in identifying no areas which are able to accommodate some types of wind farm development – usually larger turbines are perceived to be the hardest to accommodate.

However, in the light of Scottish Planning Policy (SPP), which requires Planning Authorities to ‘*set out a spatial framework for on shore wind farms of over 20 megawatts generating capacity*’⁶, landscape capacity studies are required to assist in identifying areas of search for such proposals. If ‘areas of search’ are required, then it may be that areas which are sub-optimal – that is have characteristics which will be compromised by the presence of a wind farm – but are still better than all others within the study area, are identified.

To summarise, it is important, in preparing a brief, that a clear objective is identified. Reviewing the studies undertaken to date identifies the following possible objectives:

- Identify **preferred ‘areas of search’ for specified sizes of wind farm developments** – that is, identify the best locations relative to all the locations available within the study area, even if the selected areas might be ‘sub-optimal’;
- Undertake an **assessment to identify the ability of all the landscape character areas within a region to accommodate specified sizes of wind farm developments**, even if this means that no potential is identified for specific development scenarios;
- Develop **design guidance**, for example, in relation to size, siting and layout, for wind farm development within all the landscape character areas within a region;

⁶ Scottish Government, February 2010, *Scottish Planning Policy*, paragraphs 189 – 191.

- Undertake **an assessment of the potential cumulative impacts of specified wind farm** applications; and
- To **test scenarios**, based on hypothetical numbers, heights and locations of wind farms, to assess the best way to accommodate wind farms in the landscape.

These are all very different purposes and outputs, and it is important to maintain a focused brief. Where more than one output is required, it may be possible to commission each task separately if necessary.

8.1.1 Allocations

Although individual Planning Authorities do not have an allocation of the amount of wind power (in MW) or a specified number of wind farms which they are expected to accommodate in their areas, most authorities recognise that they do need to accommodate some wind farms. Therefore, while an 'open ended' landscape assessment could be undertaken, it should be recognised that this may lead to no potential being identified in landscape terms.

If the client needs the study to identify the 'best' areas to accommodate wind farms in landscape terms, even if within a wider, national context, these areas are not ideal, the brief should say so.

8.1.2 Development scenarios

Wind turbine developments vary considerably, from single, 26m high turbines adjacent to a farm building, to large areas of turbines over 130m high. For studies which are intended to define 'areas of search' or assess the ability of the landscape to accommodate development, development scenarios are required.

The most successful way of setting development scenarios appears to be to consider the height of the turbine as the crucial defining factor, not simply the number of turbines. This is because large turbines have a strong influence on the perception of landform or landscape scale, particularly where they are likely to be one of only a limited number of 'reference points' for assessing the scale of a landscape. Some studies use combinations of both height and number of turbines as a variable in defining development scenarios.

More recent studies have considered three or four development scenarios, really treating different sizes of turbines as different developments, just as when dealing with buildings, separate assessments would be required for housing and aircraft hangars.

Some studies also include 'extensions to existing wind farms' as a separate development scenario.

When choosing scenarios, much will depend on initiatives and technology current at the time of commissioning. Factors to consider include:

- Size of turbines available to the industry;
- Incentives available, for example for small scale renewables through the SRDP, or the 'feed in tariff' introduced in 2010; and
- Size of turbines already used in existing and consented wind farms.

8.1.3 Topic scope of study

As noted in Section 5, interviewees indicated a strong preference for landscape-focussed studies, so that there is 'no muddied water'. There was no support for other environmental issues – such as biodiversity or archaeology – to be considered in the same assessment. Interviewees preferred a 'pure' landscape-only assessment.

8.1.4 Geographic scope of study

For studies which focussed on the cumulative effects of specified wind farms, the area of search related to the location and extent of visibility of those wind farms, using established guidance.

For studies where the output was either to identify 'areas of search' or to assess the ability of the landscape to accommodate development, interviewees favoured a study area which embraced the whole of a council geographic area.

In addition, several interviewees stressed the importance of a 'buffer zone' into neighbouring council areas, as large turbines may be visible, or affect the character of landscapes beyond the boundary of the commissioning council – *'A buffer area was added subsequently, for example, to take into account concerns from neighbouring authorities.'*

Especially where budgets and timescales are tight, it may be possible to limit the geographic area of the study by sieving out areas where there are known physical constraints. Examples include areas constrained by aviation radar or Ministry of Defence interests or areas which have already been designated for nature conservation or other interests. The geographic scope of a study could also be limited by focussing on areas of most pressure for development, such as land adjacent to the necessary grid connections.

8.1.5 Steering group

The products are almost invariably used first by development plan planners, then subsequently by development management planners. However, often development management planners were not involved in the initial brief and steering group, which they found frustrating – *'Development management colleagues have required clarification, so the study is maybe not so understandable to others'*.

It makes sense to think about how to involve development management planners from the outset, perhaps in the commissioning process, on the steering group, involving them in a site visit, or as a fresh pair of eyes to read the output at a later stage.

Regardless of the composition of the steering group, if the output is to be used by development management planners, the study method and products should reflect this purpose. It is likely, for example, that design guidance would be required, which development management planners can use to advise potential applicants.

8.2 Method

There are broadly two areas of analysis included within the studies. These are:

- The identification of which **characteristics of landscapes are most likely to both readily accommodate or conversely, be compromised, by wind turbines**. This then leads to an assessment of the likely effects of wind farm/turbines on the landscape character areas or types, and recommendations for preferred areas then follow; and

- **An analysis of visual sensitivity.** This may be an analysis of visibility from either recognised sensitive viewpoints or ‘representative’ viewpoints. Alternatively, the visual analysis can focus on those aspects of the landscape which are visually prominent or contribute to visual quality.

Occasionally, a study will also take into account landscape value, as it relates to designated areas, for example, or other recognised valued viewpoints, such as scenic routes.

8.2.1 Use of existing Landscape Character Assessment (LCA)

For wind farm studies, the link to the existing Landscape Character Assessment (LCA) series published by SNH (commissioned by SNH often jointly with Local Authorities) was identified as a particular strength – *‘The descriptions are useful, and it is good that they are based on existing LCAs’*; *‘Used existing LCAs, because these have been used for other planning policies’*; *‘Landscape character assessment, based on LCAs, would have been a better approach.’*

However most studies, while they started with the known LCAs, refined the boundaries, subdivided the landscape character areas or amalgamated some areas or types, to create character areas which specifically took into account the key attributes of the development. Interviewees did not comment on this, but at the workshop it was pointed out that this was a helpful refinement if the rationale was clearly explained.

8.2.2 ‘Landscape Character’ based sensitivity criteria

Most studies identify criteria for the sensitivity assessment based on a list of landscape characteristics and landscape experience which are most likely to be affected by the presence of wind turbines. The criteria have some common elements – all refer to the scale of the landform or landscape, for example – but they are not all the same.

The many examples of wind farm-type studies all use criteria which relate to the effect that wind farms will have on the character and experience of the landscape, and its visual amenity. It is important that the list of criteria is succinct and relates to the specific effects of wind farms or single turbines.

The steering group should be encouraged to become familiar with selected examples of the lists of criteria used in other studies, and the way in which they are presented, so that they can feel confident about discussing the criteria selected by consultants.

The studies that explain the use of the sensitivity criteria by giving examples of what is ‘least’ sensitive and what is ‘most’ sensitive in relation to each of the criterion are the most helpful and easy to understand.

Studies which used a focussed list of key criteria which relate strongly to the effect that wind turbines will have on the character of the landscape were positively received by interviewees – *‘Criteria seem to relate well to the landscape of the study area’*; *‘ Comfortable with criteria which are easy to understand on site.’* In particular, those studies which clearly described, often by use of examples, what a ‘most’ sensitive landscape and ‘least’ sensitive landscape looked like in relation to each criterion, were more accessible.

At least one interviewee picked up on the way in which criteria were expressed – *‘We made ‘landscape character’ based criteria the heart of the assessment, and listed criteria which were ‘positive’ as well as negative – i.e. we aimed to identify characteristics which could accommodate wind farm development’.* This study was then expressed as one which took

an active approach to looking for areas most likely to be able to accommodate wind farm development.

As noted in Section 5, complex scoring systems – that is, where one layer of scores is then added to another, and aggregated scores then carried through and further aggregated within the next assessment – should be avoided. Interviewees did not find these approaches transparent or easy to interpret, and were much happier with more descriptive text explaining sensitivities concisely and clearly.

Interviewees were most comfortable with methods which clearly listed the reasons why a site had been identified as being preferred for wind turbines in landscape terms, and exactly what type of wind farm/turbine was appropriate to each landscape character area – *‘Gives the planners exactly what they need to make a decision. They can look and see what characteristics or visual sensitivities are being compromised, and make their own judgment about what the value of these factors actually are in each individual case/location’.*

Furthermore, knowing exactly what the potential sensitivities or constraints to wind turbines were in each area not allocated as having potential in landscape terms was important – *‘Sensitive areas were not identified in spatial policy, and this is now regretted – we only identified areas of search.’*

8.2.3 Visual assessment

Before commissioning a visual analysis, it is important to clarify, if necessary in consultation with the consultants, exactly what output is likely to be useful. This is one area where the available technology has the potential to seduce clients and contractors alike. Examples of different approaches to visibility analysis include:

- Some studies focus on how the **attributes of the landscape contribute to visual amenity or visual composition**. These studies identify the key qualities of the physical landscape which contribute to visual amenity – such as skylines, land mark features, vistas, prominent ridgelines – and assess these in terms of their sensitivity for each character area. Where these features are present, these are likely to be landscape character areas with higher sensitivity to wind farms;
- Some studies **use a simple ‘dead ground’ analysis of visibility from key viewpoints**. This approach maps those areas of land not visible from a specified number and location of viewpoints. The map is an aggregate of all the land not visible from a defined set of viewpoints – for example from all settlements, all recreation viewpoints, or all roads;
- Alternatively, a more complex analysis of visibility has been calculated in some studies, by **undertaking ‘whole area’ studies of landscape intervisibility**;
- Some studies have used **a form of ‘visual catchment’ to form the boundaries for the areas which have been then used to present the study conclusions** – effectively absorbing the character areas or types within areas of defined visual catchment; and
- Some studies **use ‘wirelines’ of different heights of turbine, creating simple visualisations of different heights of turbines from specified viewpoints**. These are simple tools, used in field work to help assess what the impact of the height of a turbine is on the scale of the visible landscape.

In considering which approach is most appropriate for a particular study, the steering group should consider:

- **Which approach is likely to be most appropriate for the overall landscape of the study area.** The diversity of methods developed so far tends to reflect the diversity of the study areas, with more complex visual challenges on islands where there is irregular topography and off shore viewpoints, for example, compared to relatively simple approaches in areas where the landscape of a whole region is readily intervisible;
- **How the method affects the outcomes** – for example, the viewpoints which are selected to undertake a visual assessment become an in-built assumption to the study, so must be selected with care;
- **The shelf life of the output** – turbine designs are increasing in size, and different sizes are available. ZTVs are often linked to a specific size of turbine, so may have a very limited shelf life. In addition, as new developments are approved and being built, the context for visualisations changes rapidly;
- **Transparency and robustness of the method** – how easy it is to understand and explain to others, or replicate elsewhere; and
- **How much ‘added value’ the visual analysis would add to the study.** While visibility is an important consideration, and is rated highly by councillors and the public, an analysis of ‘visibility’ per se is so dependant on the selected viewpoints, the digital terrain model and the height of the turbines, that care should be taken considering exactly how useful this potential output will be. Planning Authorities should bear in mind that potential developers are required to include ZTVs within their Environmental Statement (ES), and the landscape capacity assessment will not be a substitute for this.

Interviewees also expressed a preference that visibility studies (that is, ZTVs of what can be seen from where), should be recorded separately to the landscape based sensitivity assessments, so that the effects could be assessed separately if required.

Finally, several interviewees indicated that a list of key viewpoints (with grid references) would be a useful output, possibly as a basis for monitoring landscape change, or cumulative effects. Developers would be encouraged to use this list, in addition to development-specific viewpoints, for visualisations within Environmental Statements.

8.2.4 Landscape value

There were differing views as to the usefulness of taking into account designations and other forms of recognised landscape value within the studies.

Most interviewees did not want landscape designations to be incorporated as an extra layer of ‘landscape sensitivity’ over and above the character and visual analysis– *‘Keeping to landscape and visual has meant it has been easier to defend, adding values would have made it harder’*; *‘Sensitivity assessment moved away from scenic value towards criteria which had wider appeal’*; *‘Did not take into account values, which were considered best left to planning staff’*.

These interviewees felt that the importance and sensitivity of the designated areas was already recognised elsewhere in planning policy. One interviewee, however, pointed out that the planning policies related to designated areas might be general, and that it would be useful to have some information which would help formulate a policy line for wind farm development in designated areas.

Where designations, or other recognised values, were taken into account in a study, there was a strong preference for that assessment to be recognised as an independent and free standing layer of information, and not aggregated into the sensitivity assessment.

8.2.5 Geographic Information System (GIS)-based methods

Interviewees overall were uncomfortable with an over-reliance on GIS as part of the assessment process, as opposed to simply providing a vehicle to source or record mapped information and conclusions. Methods where too many layers of GIS-generated information were added together to create a composite scoring system were perceived as confusing – *‘Not sure about the reliance on GIS, as there are too many opportunities for errors to be built into the system’*; *‘Problems with GIS are magnified by assumptions built into programmes, which most users do not understand, and there is a very real danger of accumulating errors.’*

There was a real sense from interviewees that over-reliance on GIS for baseline information had potentially two negative impacts on method:

- The first was that if existing GIS datasets were used, the criteria for sensitivity assessment were then, by default, limited to the type of information available on GIS; and
- Secondly, that by its nature, because GIS databases are large, the information has to be processed and managed using assumptions, therefore the output is not as objective as it first appears, and the assumptions are largely unknown, or become lost in the process, limiting the transparency of the method.

8.3 Identifying additional outputs

8.3.1 Guidance

Several interviewees commented on the value of guidance provided by consultants on the detailed siting and design of wind farms within each of the defined landscape character areas – *‘The LCA descriptions are useful, and we do pick out bits of text and put them in our responses’*; *‘The guidance is particularly good’*; *‘Descriptive section (i.e. guidance relating to individual character areas) particularly useful now – it has lasted beyond the timescale of the project.’*

Identifying potential mitigating actions, including advice on siting, layout, turbine height, pattern, and size of development, was considered useful. In most studies the guidance is only offered for those areas identified as having some sort of potential to accommodate wind farm or turbine development.

Where guidance was not provided, several interviewees identified this as a weakness – *‘Might have included inviting the consultants to develop clearer guidance for each landscape character type’*; *‘More detail on mitigation would have been good – size, numbers, that type of thing would have been useful, although it might go out of date.’*

8.3.2 Cumulative guidance

Several studies were specifically commissioned to deal with potential cumulative effects generated by a number of largely simultaneous applications – *‘The Council had several applications all arrived at once and needed advice on cumulative effects’*; *‘Lots of applications coming in, needed to develop a spatial strategy, and look at cumulative effects’*; *‘Several applications were coming in at once and cumulative issues were looming’*.

In addition, studies commissioned to inform spatial policies, often also expect consultants to address 'cumulative issues' in their brief.

It was generally recognised by interviewees that this topic was one of the most difficult to handle within a landscape capacity study – *'Cumulative impact assessment is perhaps not as well defined as it could be, it does not differentiate between new developments and extensions to existing ones, for example'*.

Studies commissioned to assess the cumulative effects of identified, known proposals, were more able to develop methods which could provide recommendations as to the combined effects of the wind farms on landscape and visual sensitivities. It was recognised, however, that these studies were largely 'single issue focussed' and, although some are being used as the basis for wider policy development, this was not their primary objective.

Methods for assessing cumulative effects on landscape and visual sensitivities within other capacity studies are still evolving, with more recent studies continuing to build on past practice. It was recognised by interviewees, however, that proactively trying to identify cumulative issues was fraught with potential problems – *'The playing field keeps changing – especially as consents are issued – and information can become quickly out of date'*; *'Easier to do cumulative if a wind farm is already existing than in advance of any applications –i.e. we can discuss what to do now that one is in place'*; *'If there is an existing wind farm, does it make the surrounding area more or less sensitive to other development? – The consultant has to spell out clearly how they will approach this.'*

Three issues have become clear with more recent studies however:

- The first is that **assessing the landscape and visual sensitivities associated with extending built and consented wind farms** could be usefully handled as a discrete exercise within a landscape capacity study;
- Secondly, that **capacity studies do seem to be able to identify the areas which are most able to accommodate larger areas of wind farms**, in terms of landscape and visual sensitivity; and
- Thirdly, that **the inter-visibility between landscape character areas, and the consequential effects of wind farms sited in one character area but affecting the character of another, neighbouring area, has been tackled in a number of capacity studies**, and Planning Authorities can refer to these.

This is an area of very rapidly developing thinking, which is made harder by continuing changes to the size of turbines, expanding scale of developments, and constantly changing context as developments receive consents.

In addition, future landscape capacity assessments will need to take into account Scottish Planning Policy (SPP). This document currently indicates that the required spatial framework for wind farms will need to identify *'areas where the cumulative impact of existing and consented wind farms limits further development'*⁷. These have been identified as *'areas requiring significant protection'*. The development of methods and practice to address this requirement is an area where the on-line toolkit may need to be revised and updated regularly.

⁷ Scottish Government. February 2010. *Scottish Planning Policy, paragraph 189*

8.4 Product

Most of these studies are used at a PLI, usually for the development plan but often also at appeals for individual applications. A concise report, with a simple, clear method, a clear link between analysis, sensitivity assessment and the expression of the rationale behind conclusions is required.

Clients invariably expected the contractors to defend the studies at PLIs, but may not always be able to rely on this, especially as funds may be limited. It is very important that a client has confidence in the study, and can defend it.

8.4.1 Mapping

Maps, at an appropriate scale, were considered crucial to the successful presentation of conclusions. As with other landscape capacity studies, the mapped information was most useful if it could be used to underpin spatial development policies.

The most successful studies mapped areas and listed the specific constraints or sensitivities clearly against each area – *‘Useful to have a study which allows strengths and weaknesses or constraints and opportunities to be analysed by area. This allows councillors to identify what aspects of landscape they want to conserve, and which aspects they can forego –i.e. what aspects of landscape quality or character do you sacrifice if you have to accommodate development’*. This allowed Planning Authorities to consider if the sensitivities could be mitigated, and also gave text which could be used in responding to future development applications on these sites.

Several interviewees commented that the findings from older reports are only available on paper maps. Interviewees would now expect the mapped conclusions to be placed on a GIS base, which would make it more accessible. Maps should be compatible with the technology used by the Planning Authority.

8.5 Summary of key elements to consider when commissioning wind farm studies

- **Clarify purpose, especially in relation to planning needs**, and consider how the outputs will fit within existing Scottish Planning Policy and associated advice;
- **Define the project objectives clearly** – they can be very varied, ranging from identifying ‘areas of search’, to assessing cumulative effects of a small number of specified proposals;
- **Think about the implications of the likely shelf life of the output** and how that might affect the focus of the study. Shelf life might be limited due to changes in size of turbines, changing emphasis of incentives and the changing context of decision making as proposals receive consent;
- **Establish development scenarios which reflect the diversity of likely developments**. The diversity is now so great, however, that it makes some sense to think of these as separate developments, and may even be handled separately within some studies;

- **Make sure that the geographic scope of the study takes into account landscape sensitivities beyond the Planning Authority area** – this is often now being done, so there will be ‘overlapping’ study areas, which may form a further complication;
- **It is likely that both an assessment of landscape sensitivity and visual sensitivity will need to be commissioned.** It may be that these are better handled as separate, complementary topics in terms of analysis, even if at some point in the study, their conclusions are combined to inform recommendations;
- Studies seem to **be most accessible where character areas are largely based on known LCA landscape character areas or types**, perhaps with some additional refinement of boundaries or merging of areas to create areas which take into account the development attributes;
- **Develop criteria which relate very specifically to the likely effects of the development scenarios** on the landscape and visual amenity. Studies which demonstrated these likely effects, showing how the individual criteria were affected by developments to create landscapes of ‘High’ and ‘Low’ sensitivity, were more clearly understood by interviewees;
- Steering groups **should be encouraged to interrogate and test the criteria**, making sure that they are relevant to the landscape of the area, and that the criteria make sense in the field;
- Consultants should be **encouraged to clarify the difference between ‘visual amenity’ and ‘visibility’ in the capacity assessments.** Being visible does not automatically make an area of landscape ‘sensitive’, although it is recognised that visibility is a key issue for councillors and the public. Methods should make it clear, however, exactly how visual issues have influenced the study conclusions;
- If the contractor is going to use a more complicated method than a three or five scale assessment of landscape sensitivity or potential, **be confident that this gives added value**;
- Ensure that the consultants **provide a justification or rationale for areas where landscapes are considered to be too sensitive for development**, not just the areas where potential is identified;
- If possible, **methods should avoid ‘weighting’ of criteria or complex layering and aggregation of sensitivities** which build additional assumptions into the method;
- In discussion with the successful tenderer, **Planning Authorities should agree how to address landscape designations, and other recognised landscape values**, such as SNH’s ‘Wild Land Search Areas’, within the study method. Most studies choose to ignore the designations at this stage, leaving Planning Authorities to bring in the value of the landscape as a separate layer of information when selecting Broad Areas of Search;
- Methods which used **GIS to process information, as opposed to simply being used to map the outcome, were regarded with suspicion by interviewees**, who felt that there was a real danger of accumulated assumptions being built into the process and not being easily identified in retrospect;
- Expect the consultant to **back up the sensitivity assessment with a short written analysis** of the issues identified in the assessment for each landscape area assessed,

which can then be used by development managers when responding to planning applications;

- Interviewees **were particularly complementary about guidance produced on the siting and design of wind farms or turbines** as an output to these studies. The guidance should be presented in a form which relates to the landscape character areas or types used for the assessment; and
- The way in which **cumulative issues are addressed in the studies continues to evolve**, although there are now studies which assess the potential to extend existing developments, tackle the identification of areas where landscape and visual cumulative effects might be reaching a 'tipping point', identify where extensive areas of wind farms might be appropriately sited and how inter-visibility affects adjacent character areas.

9 REFERENCES

Swanick, Carys and Land Use Consultants (2002). *Landscape Character Assessment Guidance for England and Scotland*. Countryside Agency and Scottish Natural Heritage

Swanick, Carys and Land Use Consultants (2002). *Landscape Character Assessment Guidance for England and Scotland Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity*. Countryside Agency and Scottish Natural Heritage.

Scottish Government (February 2010) *Scottish Planning Policy*. Accessed from the Scottish Government website.

A list of landscape capacity studies reviewed for this report is included at Annex 1.

SNH Landscape Character assessments can be found at www.snh.gov.uk/publications.

10 GLOSSARY

This definition of terms draws heavily from the current Landscape Character Assessment Guidance for England and Scotland and associated Topic Papers.

Landscape capacity – ‘Landscape capacity refers to the degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character, or overall change of landscape character type. Capacity is likely to vary according to the type and nature of change being proposed.’⁸

Landscape sensitivity – In the context of this report, landscape sensitivity relates to change brought about by a specified development. Landscape sensitivity is a professional assessment of the relative effects of changes to landscape character likely to be brought about by introducing a specified new development into the landscape.

Visual sensitivity – In the context of this report, visual sensitivity relates to change brought about by a specified development. Visual sensitivity is a professional assessment of the relative effects of changes to visual amenity or visibility likely to be brought about by introducing a specified new development into the landscape.

Visual amenity – Characteristics or qualities of the landscape which contribute to visual appreciation of the landscape. Examples will be specific to the specified development, but may include prominent skylines, landmark features, or the settings of settlements.

Visibility assessment – An assessment of the potential visibility of a development or area of land from an identified viewpoint or viewpoints. It is often accompanied by an analysis of the number of people of different types who are likely to see it and the scope to modify visual impacts of the specified development by appropriate mitigation.

Landscape – ‘An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.’ (Article 1, European Landscape Convention Council of Europe, 2002).

Landscape character - The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape.

Landscape character type – Areas of landscape which are relatively homogeneous in character. They are generic in nature, sharing broadly similar combinations of natural and cultural characteristics. A character type is usually named after the broad geographic features which are common to the landscape character type, such as ‘open moorland plateaux’.

Landscape issues - In this context this refers to issues associated with understanding landscape character, experience, perception and values.

Landscape character area – A single, unique and discrete geographical area of a particular landscape character type, identified as an area with its own individual identity. Landscape character areas are usually named according to place names, rather than names describing generic characteristics, to reflect their distinct identity.

⁸ Swanick, Carys and Land Use Consultants (2002). *Landscape Character Assessment Guidance for England and Scotland*. Countryside Agency and Scottish Natural Heritage.

11 ACRONYMS USED IN THIS REPORT

SNH – Scottish Natural Heritage

PLI – Public Local Inquiry

LCA(s) – Landscape Character Assessment(s) – this refers to the suite of LCAs commissioned and published by SNH and available within their commissioned reports series.

ZTV – Zone of Theoretical Visibility, a map indicating land from where a development might theoretically be visible

SPP – Scottish Planning Policy, issued by the Scottish Government

SRDP – Scottish Rural Development Programme, which includes incentives for specified management actions and infrastructure

LP – Local Plan (now the Development Plan)

SP – Structure Plan

GIS – Geographic Information System

12 ANNEX 1: LIST OF KNOWN LANDSCAPE CAPACITY ASSESSMENTS

Studies are listed chronologically by topic.

Table 2: List of settlement or housing related landscape capacity studies

<i>Title of study</i>	<i>Date of publication</i>	<i>Commissioning body</i>	<i>Consultancy</i>
St Andrews strategic study – landscape assessment study and related documents	1996	Fife Council	David Tyldesley Associates
Perth landscape capacity and green belt study	2000	Perth and Kinross Council	David Tyldesley Associates
Landscape study of the heart of Neolithic Orkney World Heritage Site	2001	Scottish Natural Heritage Historic Scotland	David Tyldesley Associates
East Ross settlement landscape capacity study	2001	The Highland Council	Turnbull Jeffrey and Mike Wood
Wester Ross settlement capacity study	2003	Scottish Natural Heritage The Highland Council	Alison Grant in association with Carol Anderson
Fife development and landscape capacity study (studies carried out for individual named settlements)	2003/2004	Fife Council	Alison Grant in association with Carol Anderson
Moray Council integration of new developments into the landscape (studies carried out for individual named settlements)	2005	Moray Council	Alison Grant in association with Carol Anderson
Sutherland housing capacity study	2006	Scottish Natural Heritage The Highland Council	Horner + Maclennan
Coll landscape capacity for housing. Tiree landscape capacity for housing. Isle of Mull NSA landscape capacity	2006/2007	Argyll and Bute Council	Alison Grant in association with Carol Anderson

for housing. Jura landscape capacity for housing.			
Scottish Borders development and landscape capacity study (studies carried out for individual named settlements)	2007	Scottish Borders Council	Alison Grant in association with Carol Anderson
Scottish Borders new settlement capacity study	2008	Scottish Borders Council	Alison Grant in association with Carol Anderson
Edinburgh green belt study	2008	City of Edinburgh Council East Lothian Council Midlothian Council Scottish Natural heritage West Lothian Council	Land Use Consultants

Table 3: List of wind farm related landscape capacity studies

<i>Title of study</i>	<i>Date of publication</i>	<i>Commissioning body</i>	<i>Consultancy</i>
Landscape strategy and assessment guidance for wind energy development within Caithness and Sutherland	1995 (reprinted 2005)	Scottish Natural Heritage	Caroline Stanton
Assessment of the sensitivity of landscapes to windfarm development in Argyll and Bute	2002	Scottish Natural Heritage Argyll and Bute Council	Land Use Consultants
North Ayrshire 'Ordering Hypothetical Wind farm developments'	2003	North Ayrshire Council	MLURI
Study into landscape potential for wind turbine development in East and North Highland and Moray	2003	Scottish Natural Heritage	MLURI and Edinburgh College of Art
Ayrshire and Clyde Valley	2003	Scottish Natural Heritage Ayrshire Joint Structure Plan and	Land Use Consultants

windfarm landscape capacity study		Transportation Committee The Glasgow and Clyde Valley Joint Structure Plan Committee	
Landscape study of windfarm development in the Ochil Hills and Southern Highlands, Perthshire	2004	Perth and Kinross Council	David Tyldesley Associates
Landscape capacity study for onshore wind energy development in the Western Isles	2004	Scottish Natural Heritage Comhairle nan Eilean Siar (Western Isles Council) Western Isles Enterprise	Landscape Research Group, University of Newcastle
An assessment of the sensitivity and capacity of the Scottish seascape in relation to windfarms	2005	Scottish Natural Heritage	Landscape Research Group, University of Newcastle
Landscape capacity study for wind turbine development in Midlothian	2007	Midlothian Council	Carol Anderson in association with Alison Grant
Stirling landscape sensitivity and capacity study for wind energy development	2007/2008	Stirling Council Loch Lomond and the Trossachs National Park	Horner + MacLennan
Identifying areas of search for groupings of wind turbines in North Lanarkshire	2008	North Lanarkshire Council	ASH
Angus windfarms – Landscape capacity and cumulative impacts study	2008	Angus Council	Ironside Farrar
Landscape capacity study for wind turbine development in East Lothian	2008	East Lothian Council	Carol Anderson in association with Alison Grant
Landscape capacity study for wind turbine development in North Ayrshire	2009	North Ayrshire Council	Carol Anderson in association with Alison Grant
Landscape	2009	Shetland Isles Council	Land Use

sensitivity and capacity for wind farm development in the Shetland Isles			Consultants
South Lanarkshire landscape capacity for wind farms study	2009	South Lanarkshire Council	Ironside Farrar

Table 4: List of aquaculture related landscape capacity studies

<i>Title of study</i>	<i>Date of publication</i>	<i>Commissioning body</i>	<i>Consultancy</i>
Landscape capacity study for marine aquaculture developments in the Orkney Islands	2001	Scottish Natural Heritage Historic Scotland Orkney Isles Council	David Tyldesley Associates
Coastal capacity study for marine aquaculture developments in Shetland	2002	Scottish Natural Heritage	Landscape Design Associates
Landscape/seascape carrying capacity for aquaculture	2007	Scottish Natural Heritage	Alison Grant in association with Carol Anderson
Landscape/seascape capacity for aquaculture and coastal infrastructure: Sound of Mull SSMEI⁹	2008	Argyll and Bute Council	Alison Grant in association with Carol Anderson

Table 5: List of open cast coal related landscape capacity studies

<i>Title of study</i>	<i>Date of publication</i>	<i>Commissioning body</i>	<i>Consultancy</i>
Clackmannanshire Council open cast coal mining capacity study	1998	Clackmannanshire Council	David Tyldesley Associates

⁹ Scottish Sustainable Marine Environment Initiative

13 ANNEX 2: INTERVIEW APPROACH

13.1 Method

'Qualitative market research'-based telephone interviews were carried out with those who had commissioned and used landscape capacity assessments. This type of research differs from 'quantitative' based research, in that we aimed to identify the experiences and suggestions of the target group. The consultants did not undertake a numerical, 'quantitative' assessment or analysis of the perceived success of landscape capacity assessments.

To prepare for this, a long list of landscape capacity assessments (available as Annex 1), contact details and other background information was drawn up.

Alison Grant and Sinéad Lynch carried out the interviews. They aimed to cover the largest range of different types of method and approach used for landscape capacity studies when selecting interviewees. Sinéad Lynch carried out all the interviews which related to capacity assessments undertaken by Alison Grant.

Interviews lasted at least one hour, and potential interviewees were contacted in advance to agree an appropriate time for the interview. Interviewees received a summary of the purpose of the interview and a list of the issues likely to be discussed in advance of the interview. 23 interviews were carried out.

A workshop was held with those individuals who have had an experience of more than one landscape capacity assessments. Steering group members were also invited to the workshop.

13.2 Preparation

The consultants:

- Identified the key person(s) within the Planning Authority/commissioning body to interview, and arrange a mutually acceptable time to conduct a telephone based interview;
- Obtained a copy of the brief where possible;
- Obtained a copy of the relevant capacity study/samples of studies;
- Obtained copies of any other additional references where possible – for example, references in development plans or associated guidance, mentions in PLI, development control;
- Sent a summary of the objectives of this review and an outline of the topics which would be covered in the interview to the interviewee; and
- Ensured that the interviewee understood how the results of the interview would be used.

13.3 Conducting the interview

The interviews were based on a 'qualitative research' approach, using a questionnaire to structure interviews, but not intended to be a 'straight jacket' in terms of discussion. This

approach allowed discussion to 'wander' off topic if a relevant avenue opened up, but the questionnaire also allowed the interviewer to make sure that one way or another all topics were covered.

The consultants:

- Made sure that interviewee had adequate time and felt comfortable/ able to respond/ had enough time to look at the briefing paper(s);
- Checked the actual involvement of the interviewee in the landscape capacity study;
- Made sure that the interviewee was aware that the consultant is taking written notes which could be included in a review document, but not attributed to the interviewee or a particular capacity study;
- Assured the interviewees that all comments to be confidential and non-attributable;
- Stressed that in the final on-line toolkit, only examples of good practice would be identified. For the review document, anecdotal references to useful practices as well as un successful practices would be used, but they would be non attributable and generically applied in the text;
- Conducted the interview as an informal but informative discussion;
- Made sure that feedback would be given to the interviewee through providing an electronic copy of the review report, or more likely a link to the report on the SNH website; and
- Requested whether or not interviewees might be willing to test the on-line toolkit.

14 ANNEX 3: BRIEFING INFORMATION FOR INTERVIEWS

Thank you very much for agreeing to be interviewed as part of this study. We realise that you are giving up valuable time, and we will try to make sure that it is well used. This interview will be carried out using a 'qualitative' market research approach, which encourages discursive comment, rather than 'yes/no' answers. We will ask questions, to structure our discussion, but we are looking for your experiences, so please feel free to raise issues which we may not have considered.

14.1 Background

Scottish Natural Heritage has commissioned Alison Grant and Sinéad Lynch to undertake a review of Landscape Capacity Studies carried out in Scotland, with a view to informing an on-line toolkit which will offer advice and examples of best practice.

Part of this project involves interviewing those who have commissioned and used these studies, to identify why some of these studies have been successful, and why some have not.

Alison and Sinéad will be carrying out telephone interviews in January 2010. The interviews will take about an hour and will explore your experience of commissioning and using a landscape capacity study. It is important that you are familiar with the landscape capacity study we will be discussing with you, either as someone who was involved in its preparation, or as some one who is expected to use the product.

We would be very grateful, therefore, if you would put some time aside to looking at the landscape capacity study, and if necessary speaking to colleagues about their experiences, before we undertake the interview. The second part of this briefing note describes the scope of the interview, and should help you prepare.

14.2 Attribution/Confidentiality

The interviews will be carried out in confidence. We will be taking written notes of our conversation and issues which you raise. However, any views you express will not be directly attributed to you, and your name will not be mentioned in the Review report or in the on-line toolkit.

Nevertheless, we would like to record both negative as well as positive experiences, and while we will aim as far as possible to make sure that these are not traceable solely to one particular study, it may be that specific examples are difficult to disguise.

14.3 Interview topics

Preparation

If possible, it would be helpful for us to have copies of:

- The brief for the capacity study/studies we are going to discuss
- Any guidance or other documents which have been prepared following the landscape capacity study (this could simply be a link to an electronic version of the relevant Local Plan, Supplementary Planning Guidance or other reference document)

Brief/commissioning

Purpose of study/background/need

Involvement of other partnership organisations

Timescale – any pressures?

Budget

Clarify content of the brief

Method

Is the method clearly stated, transparent, easy to understand?

Where did the method used to carry out the capacity assessment come from?

Was the method/approach discussed at any stage as the study developed?

What were the key elements or stages in the method?

How successful/understandable was the sensitivity assessment, if there was one?

Are the criteria, the sensitivity assessments, etc, easy to understand?

Pick up on specific issues – such as scoring systems, explanations, criteria, etc..

Non-landscape issues - Did the landscape capacity assessment have to take into account other, 'non-landscape' issues?

Process

Was there a steering group/ Who was involved?

How did the consultants and client liaise during the process – was there adequate liaison, and did the project evolve in any way as the study progressed?

Product/Presentation

What is the product?

What is the product/output – on-line, paper document, a workshop, etc..

How useable and accessible is the product?

Is it clear and easy to read/follow? Please consider the text, graphics and whether the key stages in the method have been well articulated.

Use of Product

How has the product been used?

Has the study been used in any of the following?:

- Development Plan preparation
- Supplementary Planning Guidance
- Local Plan Public inquiry

- Development control case work
- Development control PLI

- In the preparation of landscape frameworks or masterplans?
- Or in any other way?

For all of the above, we will be looking for examples, and some feedback on what has worked and what has been difficult to implement.

- How robust has it been under scrutiny or challenge?
- Has it been subject to cross- examination in an inquiry
- Has it contributed to an appeal process?

If the capacity study recommendations have now been tested, please explain your experience and assessment of how helpful you think the study has been. If a reporter has recorded a view, please let us have a reference which we can follow up.

Has the product been presented to anyone else?

Was the output presented to the elected members of the Council?

Has it been presented to the public?

Has it been discussed with developers?

General

On reflection, what are the strengths and weaknesses of the capacity study, and how could you improve on what you have?

MOST IMPORTANT – has it achieved its objectives, met with your expectations? How would you, the client, measure success?

What advice would you offer others who were going to commission a piece of work like this?

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Scottish Natural Heritage
Dualchas Nàdair na h-Alba

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