

SEA Environmental Report Cover Note

To:	SEA.gateway@scotland.gsi.gov.uk or SEA Gateway, Scottish Executive, Area 1 H (Bridge), Victoria Quay, Edinburgh, EH6 6QQ.
An SEA Scoping Report is attached for the plan, programme or strategy (PPS) entitled: Supplementary Guidance Natural Environment.	
The Responsible Authority is: Orkney Islands Council.	
Contact name:	Eileen Summers.
Job Title:	Environment Officer (Policy).
Contact address:	Council Offices School Place Kirkwall Orkney KW15 1NY.
Contact telephone number:	01856 873535 ext. 2828.
Contact email:	eileen.summers@orkney.gov.uk
Signature (electronic signature is acceptable):	Eileen Summers.
Date:	11 May 2017

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Non-technical summary

Supplementary Guidance Natural Environment comprises the following six sections, along with a suite of Appendices.

Section 1 Introduction

Section 2 Natural Environment Considerations

Section 3 Site Appraisal and Ecological Surveys

Section 4 Good Design, Mitigation and Enhancement Section 5 Assessment of Planning Applications Affecting Natural Heritage Interests

Section 6 Species Licensing Arrangements

Appendix A How and When to Consult SNH

Appendix B How and When to Consult SEPA

Appendix C Initial Site Audit Checklist

Appendix D List of Relevant Legislation

The Supplementary Guidance also includes **Annex 1 Local Nature Conservation Sites** which contains a site statement for each LNCS and has been updated to take account of the boundary review that was undertaken between 2013 and 2016.

In November 2012, the Development and Infrastructure Committee of Orkney Islands Council had formally requested the Executive Director of Development and Infrastructure to complete a review of the Local Nature Conservation Site designation in light of the issues and comments that had been raised about this designation through the consultation of the Proposed Plan 2011, Modified Proposed Plan 2012 and the Natural Heritage Supplementary Guidance 2012.

It was considered that there had previously been insufficient contact with landowners in relation to the LNCS designation and its role in the Local Development Plan; also a number of landowners had queried the inclusion of agriculturally productive areas of land within certain sites.

Discussions were held with members of the group which had previously undertaken a wider review of the LNCS between 2008 and 2010, as well as the president of the local branch of National Farmers Union Scotland (NFUS), in order to agree a procedure and timescale for the boundary review. A programme of site visits was then undertaken by two members of the Development and Marine Planning team, the findings of which resulted in recommendations for boundary changes to a number of sites.

Summary of the assessment of Supplementary Guidance Natural Environment

Climatic factors

Effects are likely to be broadly neutral, with potential for moderate localised benefit, for example where measures may be undertaken to restore and protect damaged peatland, in line with guidance included in the SG.

The SG highlights some of the key benefits provided to society by the natural environment, for example the protection against coastal erosion and flood risk that is afforded by habitats such as coastal sand dunes and geomorphological features such as shingle ayres. Similarly, it emphasises the role played by peat and soils in storing carbon, regulating water storage and removing pollutants from water. The inclusion of this information in the SG will help raise awareness of these benefits and should ensure that, where there is potential for development proposals to impact on habitats and features that provide ecosystem services such as these, appropriate mitigative or enhancement measures are put in place.

Effects on environmental features and processes are important considerations when planning renewable energy developments, and implementation of the SG may lead to changes to the siting, scale and design of certain onshore wind energy proposals.

Changes recommended to the Local Nature Conservation Site boundaries are unlikely to impact upon climatic factors such as carbon sequestration or flood mitigation.

Biodiversity

Effects are likely to be broadly neutral, with potential for moderate localised benefit, for example where biodiversity enhancement projects are undertaken, in line with the guidance and suggestions included in the SG.

Throughout the document, information is provided on ways in which development can impact on the natural environment and biodiversity. For example Table 1 lists the range of protected species that can be found in Orkney and Table 2 highlights the vulnerability of these species to certain types of development. Emphasis is given to the importance of considering the effects of a development proposal on the natural environment at an early stage and providing the appropriate level of information to support a planning application

There is potential for ecological surveys to be undertaken at inappropriate times of the year, resulting in the submission of poorly informed environmental reports to support planning applications. This issue has been addressed in the SG through the inclusion of an ecological survey calendar which outlines the appropriate timing of surveys and takes account of local variations in seasonality. Links are also provided to websites which provide more detailed guidance on survey methods.

The issue of invasive non-native species is addressed in section 2.8 where the potential for INNS to impact on the natural environment is explained, along with information on the legislative requirements and the responsibilities of developers to

ensure that where INNS are found to be present on a site, they are dealt with appropriately and are not allowed to spread from the site. A link is provided to the Scottish Government's Non-Native Species Code of Practice and guidance on how to manage INNS on development sites is also included.

Section 4 provides guidance and suggestions for biodiversity enhancement projects and a range of options for biodiversity are set out in table 6. These encourage the use of appropriate native species – again this will help avoid the introduction of non-native and potentially invasive species.

The LNCS boundary review resulted in the removal of 336.29 acres of semi-improved grassland from 43 sites, as well as a further 112.54 acres classified as improved grassland, arable land or tall ruderals. However due to the procedure followed when reviewing the LNCS, which includes checks to ensure no reduction to the overall scoring of individual sites, the removal of these areas is unlikely to lead to significant adverse effects on biodiversity, flora or fauna.

Water

Effects are likely to be broadly neutral, with potential for moderate localised benefit, for example where enhancement projects may be carried out in line with the guidance and suggestions included in Section 4 of the SG.

Section 2.6 sets out the Council's duties in relation to the Water Framework Directive and the Water Environment and Water Services Act 2003, to protect, improve and promote the sustainable use of the water environment, as well as its purpose in ensuring that new development supports the delivery of River Basin Management Planning objectives.

The establishment of development-free buffer zones alongside waterbodies is promoted, as well as the need to ensure that private waste water treatment systems are appropriately sited and designed.

Some of the areas visited during the LNCS review were associated with small lochs and ponds and represented drier areas beyond the marshy margins, many of which are likely to be grazed on a seasonal basis. Others had no association with water bodies.

The removal of areas of semi-improved grassland from Local Nature Conservation Sites is unlikely to impact significantly upon the water environment.

Soil

Effects are likely to be broadly neutral.

Section 2.7 outlines a number of soil-related issues which can arise during the construction phase of developments and which can impact on waterbodies, public amenity and biodiversity. It explains that these issues may need to be addressed through either a method statement or the preparation of a Construction

Environmental Management Plan (CEMP), dependent on the scale of the development.

Changes recommended to the Local Nature Conservation Sites as a result of the boundary review are unlikely to impact upon peat or soils. None of the areas recommended for removal are underlain by peat and the LNCS designation has no influence on how they are managed for agriculture.

Geology

Effects are likely to be broadly neutral.

The policy protection afforded to nationally or locally designated geodiversity sites or Geological Conservation Review sites is outlined in Sections 2.2 and 2.4. Section 2.5 addresses development which could affect the wider geodiversity. Section 5 explains the process that is followed when assessing planning applications affecting natural heritage interests.

Changes to the Local Nature Conservation Sites as a result of the boundary review are unlikely to impact upon geology or geomorphology.

Interrelationships

Moderate benefit is likely.

Implementation of the SG is likely to lead to an increased awareness of the extent to which there is interrelationship between environmental receptors. It also provides information on the benefits provided by certain habitats and geomorphological features, perhaps most notably in their contribution towards mitigating and adapting to the effects of a changing climate and rising sea levels.

By providing information on a range of ways in which development can impact on the natural environment the SG seeks to ensure that appropriate measures can be identified to avoid or at least minimise these impacts.

Mitigation

The purpose of Supplementary Guidance *Natural Environment* is to protect the environment; assessment found that no significant adverse environmental effects are unlikely as a result of its implementation. There was therefore no need to identify mitigative measures.

Monitoring

The proposed SEA monitoring programme is as follows:

SEA receptor	SEA Objective	Indicator	Data source	Monitored by & frequency:
Biodiversity.	Safeguard valuable habitat from loss and fragmentation through development.	Number of proposals approved where mitigative or compensatory measures have been incorporated to safeguard habitats from loss and fragmentation.	OIC Development & Marine Planning Section	Environmental Policy Officer Annually
	Conserve protected sites and species.	Number of proposals approved where it has not been possible to incorporate appropriate mitigative or compensatory measures to safeguard habitats from loss and fragmentation.	OIC Development & Marine Planning Section.	Environmental Policy Officer Annually
		Condition of internationally & nationally designated biological natural heritage sites.	SNH website - sitelink http://gateway.snh.gov.uk/sitelink/index.jsp	Environmental Policy Officer Annually
	Conserve protected sites and species.	Number of proposals approved where it has not been possible to incorporate appropriate mitigative or compensatory measures to safeguard protected species.	OIC Development & Marine Planning Section.	Environmental Policy Officer Annually
Water.	Promote the protection and improvement of the water environment,	Water quality and overall status of monitored watercourses.	Scotland's Environment Web http://www.environment.scotland.gov.uk/get -	Environmental Policy Officer. Annually

	including burns, lochs, estuaries, wetlands, coastal waters and groundwaters.		interactive/data/water-body-classification/	
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Next steps

Anticipated milestones in the SEA and planning processes related to Supplementary Guidance Natural Environment are set out below.

Expected date	Milestone
13 th September 2016	Supplementary Guidance Natural Environment and associated Environmental Report considered at a meeting of the Council's Development & Infrastructure Committee.
11 th October 2016	Supplementary Guidance Natural Environment and associated Environmental Report considered at a meeting of the Council's Development & Infrastructure Committee.
20 th October 2016	Public consultation
1 st December 2016	Deadline for Consultation Authorities' responses to SG Natural Environment and the Environmental Report.
December - January	Consultation responses taken into account in the final SG Natural Environment
March 2017	Revised Supplementary Guidance Natural Environment and associated Environmental Report considered at a meeting of the Council's Development & Infrastructure Committee.
April 2017	Final adoption date for Supplementary Guidance Natural Environment and Environmental Report.
April 2017	Supplementary Guidance Natural Environment reported to the Scottish Government
May 2017	Post adoption statement published.

Introduction

As part of the preparation of Supplementary Guidance Natural Heritage, Orkney Islands Council is carrying out a Strategic Environmental Assessment (SEA). SEA is a systematic method for considering the likely environmental effects of certain PPS. SEA aims to:

- integrate environmental factors into PPS preparation and decision-making;
- improve PPS and enhance environmental protection;
- increase public participation in decision making; and
- facilitate openness and transparency of decision-making.

SEA is required by the Environmental Assessment (Scotland) Act 2005. The key SEA stages are:

Screening - determining whether the PPS is likely to have significant environmental effects and whether an SEA is required.

Scoping - deciding on the scope and level of detail of the Environmental Report, and the consultation period for the report – this is done in consultation with Scottish Natural Heritage, the Scottish Environment Protection Agency and Historic Environment Scotland.

Environmental Report - publishing an Environmental Report on the PPS and its environmental effects, and consulting on that report.

Adoption - providing information on: the adopted PPS; how consultation comments have been taken into account; and methods for monitoring the significant environmental effects of the implementation of the PPS.

Monitoring - monitoring significant environmental effects in such a manner so as to also enable the Responsible Authority to identify any unforeseen adverse effects at an early stage and undertake appropriate remedial action.

The purpose of this Environmental Report is to:

- provide information on Supplementary Guidance Natural Heritage;
- identify, describe and evaluate the likely significant effects of the PPS and its reasonable alternatives; and
- provide an early and effective opportunity for the Consultation Authorities and the public to offer views on any aspect of this Environmental Report.

The key facts relating to Supplementary Guidance Natural Environment are set out in **Table 1** below.

Table 1: Key facts relating to Supplementary Guidance Natural Environment

Name of Responsible Authority:	Orkney Islands Council.
Title of plan, programme or strategy (PPS):	Supplementary Guidance Natural Environment.
What prompted the PPS:	The Planning etc. (Scotland) Act 2006. The Council is required by law to prepare and keep under review a Development Plan which sets out the Council's planning policies on the use and development of land in the County. This Supplementary Guidance document provides the detail for Policies 9A-E of Natural Heritage and Landscape.
Subject:	Town and Country Planning and Land Use.
Period covered by the PPS:	2017-2022.
Frequency of updates:	Following adoption, the Supplementary Guidance will be monitored and reviewed every five years and updated if required.
Area covered by the PPS:	The administrative area of the Orkney Islands.
Purpose of the PPS:	The document provides additional policy guidance on the range of natural heritage considerations which must be considered during the determination of planning applications.
Contact point:	Eileen Summers Tel. 01856 873535 ext. 2828.

SEA activities to date

Table 2 summarises SEA activities to date in relation to Supplementary Guidance Natural Environment.

Table 2: SEA activities to date

SEA Action / Activity	When carried out
Screening to determine whether the PPS is likely to have significant environmental effects	Screening was deemed unnecessary as the SG was

SEA Action / Activity	When carried out
	considered to qualify for SEA.
Scoping the consultation periods and the level of detail to be included in the Environmental Report	May – July 2016.
Outline and objectives of the PPS	June 2016.
Relationship with other PPS and environmental objectives	This information was extracted from the Proposed Plan Environmental Report .
Environmental baseline established	
Environmental problems identified	May – June 2016.
Assessment of future of area without the PPS	August 2016.
Alternatives considered	It was not considered appropriate to consider alternatives.
Environmental assessment methods established	June 2016.
Identification of environmental problems that may persist after implementation and measures envisaged to prevent, reduce and offset any significant adverse effects	No residual environmental problems are envisaged.
Monitoring methods proposed	August 2016.
Consultation timescales	12 October – 16 November 2016.
Notification/publicity action	October 2016.

Supplementary Guidance *Natural Environment* and its context

Supplementary Guidance Natural Environment comprises six sections, along with a suite of Appendices.

Section 1 Introduction explains the purpose of the SG and how it should be used; it also describes the roles of Scottish Natural Heritage, the Scottish Environment Protection Agency and Marine Scotland in protecting and conserving the environment.

Section 2 Natural Environment Considerations provides additional detail relating to the component parts of Local Development Plan Policy 9 Natural Environment (Designated Sites, Protected Species, Wider Biodiversity and Geodiversity, The

Water Environment and Peat and Soils. It includes a sub-section which addresses the issue of Invasive Non-Native Species (INNS), explaining the current legislative requirements, as well as providing a link to the Scottish Government's Non-Native Species Code of Practice. Guidance on how to deal with INNS on development sites is also included.

Section 3 Site Appraisal and Ecological Surveys provides information on the level of detail that may require to be submitted to support an application, depending on the scale, nature and location of the proposal. This section also includes an ecological survey calendar which takes account of local variations in seasonality.

Section 4 Good Design, Mitigation and Enhancement includes guidance on potential mitigation and enhancement, as well as a number of links to other, more detailed sources of guidance on these topics. Importantly, it includes the mitigation hierarchy of avoid impact, reduce impact, compensate for impact.

Section 5 Assessment of Planning Applications Affecting Natural Heritage Interests explains how planning applications for new development will be assessed by Orkney Islands Council and confirms that when making planning decisions the Council will consider biodiversity and geodiversity in accordance with the following hierarchy of importance:

1. International Sites and Protected Species.
2. National Sites and Protected Species.
3. Local Sites.
4. Other wider biodiversity and geodiversity interests.

Section 6 Species Licensing Arrangements provides guidance on the situations where protected species licensing may be required, as well as information on the licensing authorities. It stresses the importance of ensuring that adequate survey work is carried out in good time to understand the development site and determine the presence or absence of European Protected Species.

The suite of appendices consists of:

Appendix A How and When to Consult SNH

Appendix B How and When to Consult SEPA

Appendix C Initial Site Audit Checklist

Appendix D List of Relevant Legislation

The Supplementary Guidance also includes **Annex 1 Local Nature Conservation Sites** which contains a site statement for each LNCS and has been updated to take account of the boundary review that was undertaken between 2013 and 2016.

In November 2012, the Development and Infrastructure Committee of Orkney Islands Council had formally requested the Executive Director of Development and Infrastructure to complete a review of the Local Nature Conservation Site designation in light of the issues and comments that had been raised about this designation through the consultation of the Proposed Plan 2011, Modified Proposed Plan 2012 and the Natural Heritage Supplementary Guidance in 2012.

It was considered that there had previously been insufficient contact with landowners in relation to the LNCS designation and its role in the Local Development Plan; also a number of landowners had queried the inclusion of agriculturally productive areas of land within certain sites.

During 2013 discussions were held with members of the group which had previously undertaken a wider review of the LNCS between 2008 and 2010, as well as representatives of the National Farmers Union Scotland (NFUS), in order to agree a protocol and timescale for the boundary review. A programme of site visits was then undertaken by two members of the Development and Marine Planning team, the findings of which resulted in recommendations for boundary changes to a number of sites.

Relationship with other Plans, Programmes and Strategies and their environmental protection objectives

The Supplementary Guidance will have a significant influence on, and will draw from, other plans produced by Orkney Islands Council. It will also be guided by a range of relevant plans, programmes and strategies (PPS) produced at international, national and local level. PPS which are relevant to the SG Natural Environment are included within the wider list of plans, programmes and strategies which helped shape the Orkney Local Development Plan Main Issues Report and Proposed Plan; these are extracted and summarised in **Appendix A** of this report.

Relevant aspects of the current state of the environment

An environmental baseline was prepared as part of the SEA which was undertaken of the Orkney Local Development Plan Main Issues Report and Proposed Plan. The relevant sections have been extracted and summarised in **Appendix B** of this report.

Environmental problems

A range of environmental problems that are relevant to development planning in Orkney were identified in the Proposed Plan Environmental Report. These have generally been addressed through the Proposed Plan policies. However, there is scope for the SG to provide additional guidance to address a number of issues which are summarised in **Table 3** below.

Table 3: Environmental Problems Relevant to Supplementary Guidance Natural Environment

Problem	Implications for Supplementary Guidance Natural Environment
CLIMATIC FACTORS	
<p>Certain habitats and geomorphological features help protect against coastal erosion and flood risk (coastal, fluvial and drainage) and have an ongoing role in helping communities to adapt to future changes to the climate.</p> <p>These habitats/features are vulnerable to development.</p>	<p>SG Natural Environment should explain how certain habitats and geomorphological features help protect against coastal erosion and flood risk (coastal, fluvial and drainage) and should point out the ongoing role they will play in helping communities to adapt to future changes to its climate.</p> <p>It should also highlight the vulnerability of these habitats/features to development.</p>
<p>Loss of, or disturbance to, peatland can cause the release of stored carbon to the atmosphere.</p> <p>Inappropriate development and site drainage may lead to increased soil erosion.</p> <p>Clarification that planning approval is required to dispose of topsoil from development sites would be useful.</p>	<p>The SG should highlight the role played by peat and soils in storing carbon.</p> <p>It should explain the need for all development to avoid or minimise the loss of or disturbance to peat and carbon rich soils.</p> <p>It should list the range of information that the planning authority would expect to be included in a peatland or soil management plan.</p>
BIODIVERSITY, FLORA AND FAUNA	
<p>Development can lead to loss and fragmentation of natural habitat with further impacts on protected and priority species and habitats.</p>	<p>The SG should explain that certain habitats are identified by the UK BAP and/or the Scottish Biodiversity List as priorities for conservation and should seek to ensure that future development avoids or minimises further loss or fragmentation of natural habitat.</p>
<p>Inappropriately designed and sited projects to enhance biodiversity can lead to adverse environmental effects, e.g. through the introduction of non-native species which may have potential to be invasive.</p>	<p>The SG should provide brief guidance on enhancement projects, e.g. by recommending the use of species of local origin. It should also provide links to other publications, e.g. on the SNH and SEPA website, which provide more in-depth guidance.</p> <p>It should also highlight the provisions of the Wildlife and Natural Environment</p>

Problem	Implications for Supplementary Guidance Natural Environment
CLIMATIC FACTORS	
	(Scotland) Act 2011 in relation to INNS.
There is potential for ecological surveys to be undertaken at inappropriate times of the year, resulting in the submission of poorly informed environmental reports to support planning applications.	The SG should provide guidance on the timing of ecological surveys.
WATER	
Inappropriately designed and/or sited development can lead to negative impact upon water quality.	The SG should provide a brief explanation of River Basin Management Planning and the role of the planning authority in contributing to RBMP objectives. It should highlight ways in which new development can avoid adverse impact on the water environment, e.g. in the siting and design of septic tanks and by establishing development-free buffer zones adjacent to water bodies.

Likely evolution of the environment without Supplementary Guidance Natural Environment

In the absence of Supplementary Guidance Natural Environment, the existing draft Planning Policy Advice Natural Heritage would continue to be used in the determination of planning applications. Although the PPA provides guidance on many development-related issues affecting natural heritage it includes limited guidance on water or peat and soils and does not address the issue of invasive non-native species. With further emphasis on incorporating biodiversity enhancement in new developments there is also a risk that, without adequate guidance and links to further information, inappropriately designed enhancement projects may be undertaken which could result in the introduction of non-native and potentially invasive species.

SEA objectives

A set of environmental objectives was identified within the Environmental Report which was prepared alongside the Orkney Local Development Plan Main Issues Report. These objectives represented the criteria against which the policies and proposals of the Main Issues Report and the Proposed Plan were assessed. The relevant SEA objectives have again been used as criteria against which to assess the environmental effects of Supplementary Guidance Natural Environment and these are reproduced in **Table 4** below.

Table 4: The SEA Objectives

CLIMATIC FACTORS
Promote a precautionary approach to flood risk from all sources.
Address vulnerability in the County to the likely effects of climate change.
BIODIVERSITY, FLORA AND FAUNA
Conserve protected sites and species.
Safeguard valuable habitat from loss and fragmentation through development.
Protect biodiversity, enabling and encouraging habitat enhancement or restoration where appropriate, and contribute towards achievement of Orkney LBAP actions and targets.
WATER
Promote the protection and improvement of the water environment, including burns, lochs, estuaries, wetlands, coastal waters and groundwater.
Maintain water abstraction, run-off and recharge within carrying capacity.
SOILS (including peat and carbon-rich soils)
Reduce the threat of contamination and seek to protect soils from damage such as erosion or compaction.
Recognise the environmental benefits provided by soils and protect their quality and quantity.
GEOLOGY
Protect designated and undesignated sites which are recognised and valued for their geological or geomorphological importance.

Assessment of environmental effects and measures envisaged for mitigation of significant adverse effects

This chapter sets out the method used for the environmental assessment of Supplementary Guidance *Natural Environment*.

Alternatives to which SEA was applied

The current version of Supplementary Guidance Natural Environment replaces the draft Planning Policy Advice Natural Heritage which was adopted in July 2012, pending a boundary review of the Local Nature Conservation Sites.

No further alternatives were considered.

The boundary review of the Local Nature Conservation Sites has focused on areas classified in the relevant Phase 1 Habitat Survey maps as Semi-improved Grassland. The aim of the review was to assess these areas in order to ensure that only areas with significant value for biodiversity are retained within the sites. The procedure followed is included as **Appendix D Local Nature Conservation Site review procedure**.

An initial desk-based analysis of the Phase 1 habitat data revealed that 138 LNCS included areas of semi-improved grassland. Of these, most were found to be relatively small, forming part of a wider mosaic of habitats and were not considered further.

Eighty sites were identified where the semi-improved grassland was found to occur over larger areas, often on the edge of sites, and these were identified for site visits to enable us to assess their biodiversity value. Where possible, the relevant landowner was contacted in order to arrange the site visit. For a very small number of sites we were unable to ascertain who the landowner was; however in all of these instances we were able to view the area in question from the road or from a Core Path.

Meeting with the landowners was an important element in the review as it enabled us to explain the background to the LNCS designation and its purpose in the Local Development Plan. The landowner was generally invited to take part in the walkover visits and a small number accepted this offer. The president of the local branch of the National Union of Farmers Scotland (NFUS) also attended a number of site visits.

All site visits were undertaken by the same members of the Development and Marine Planning team, ensuring consistency of approach.

The findings of these visits informed recommendations for boundary changes to a number of sites. These recommendations were discussed with representatives of the group which had undertaken the original LNCS review between 2008 and 2010, as well as the president of the NFUS.

As a result, it was agreed that semi-improved grassland covering a total area of 336.29 acres would be removed from 43 sites. In line with the review procedure, a further 112.54 acres classified as improved grassland, arable land or tall ruderals had already been removed from a number of sites.

Adherence to the methods outlined in Appendix D ensured that careful consideration was given to the biodiversity value of the areas under consideration and where any area was recommended for removal checks were undertaken to ensure that its removal would not result in any downgrading of the site in terms of how it scores according to the criteria that were used to identify the suite of Local Nature Conservation Sites.

Assessment Summary

Climatic factors

Effects are likely to be broadly neutral, with potential for moderate localised benefit, for example where measures may be undertaken to restore and protect damaged peatland, in line with guidance included in the SG.

The SG highlights some of the key benefits provided to society by the natural environment, for example the protection against coastal erosion and flood risk that is afforded by habitats such as coastal sand dunes and geomorphological features such as shingle ayres. Similarly, it emphasises the role played by peat and soils in storing carbon, regulating water storage and removing pollutants from water. The inclusion of this information in the SG will help raise awareness of these benefits and should ensure that, where there is potential for development proposals to impact on habitats and features that provide ecosystem services such as these, appropriate mitigative or enhancement measures are put in place.

Effects on environmental features and processes are important considerations when planning renewable energy developments, and implementation of the SG may lead to changes to the siting, scale and design of certain onshore wind energy proposals.

Changes recommended to the Local Nature Conservation Site boundaries are unlikely to impact upon climatic factors such as carbon sequestration or flood mitigation.

Biodiversity

Effects are likely to be broadly neutral, with potential for moderate localised benefit, for example where biodiversity enhancement projects are undertaken, in line with the guidance and suggestions included in the SG.

Throughout the document, information is provided on ways in which development can impact on the natural environment and biodiversity. For example Table 1 lists the range of protected species that can be found in Orkney and Table 2 highlights the vulnerability of these species to certain types of development. Emphasis is given to the importance of considering the effects of a development proposal on the natural environment at an early stage and providing the appropriate level of information to support a planning application

There is potential for ecological surveys to be undertaken at inappropriate times of the year, resulting in the submission of poorly informed environmental reports to support planning applications. This issue has been addressed in the SG through the inclusion of an ecological survey calendar which outlines the appropriate timing of surveys and takes account of local variations in seasonality. Links are also provided to websites which provide more detailed guidance on survey methods.

The issue of invasive non-native species is addressed in section 2.8 where the potential for INNS to impact on the natural environment is explained, along with information on the legislative requirements and the responsibilities of developers to ensure that where INNS are found to be present on a site, they are dealt with

appropriately and are not allowed to spread from the site. A link is provided to the Scottish Government's Non-Native Species Code of Practice and guidance on how to manage INNS on development sites is also included.

Section 4 provides guidance and suggestions for biodiversity enhancement projects and a range of options for biodiversity are set out in table 6. These encourage the use of appropriate native species – again this will help avoid the introduction of non-native and potentially invasive species.

The LNCS boundary review resulted in the removal of 336.29 acres of semi-improved grassland from 43 sites, as well as a further 112.54 acres of improved grassland, arable land or tall ruderals. However due to the procedure followed when reviewing the LNCS, which includes checks to ensure no reduction to the overall scoring of individual sites, the removal of these areas is unlikely to lead to significant adverse effects on biodiversity, flora or fauna.

Water

Effects are likely to be broadly neutral, with potential for moderate localised benefit, for example where enhancement projects may be carried out in line with the guidance and suggestions included in Section 4 of the SG.

Section 2.6 sets out the Council's duties in relation to the Water Framework Directive and the Water Environment and Water Services Act 2003, to protect, improve and promote the sustainable use of the water environment, as well as its purpose in ensuring that new development supports the delivery of River Basin Management Planning objectives.

The establishment of development-free buffer zones alongside waterbodies is promoted, as well as the need to ensure that private waste water treatment systems are appropriately sited and designed.

Some of the areas visited during the LNCS review were associated with small lochs and ponds and represented drier areas beyond the marshy margins, many of which are likely to be grazed on a seasonal basis. Others had no association with water bodies.

The removal of areas of semi-improved grassland from Local Nature Conservation Sites is unlikely to impact significantly upon the water environment.

Soil

Effects are likely to be broadly neutral.

Section 2.7 outlines a number of soil-related issues which can arise during the construction phase of developments and which can impact on waterbodies, public amenity and biodiversity. It explains that these issues may need to be addressed through either a method statement or the preparation of a Construction Environmental Management Plan (CEMP), dependent on the scale of the development.

Changes recommended to the Local Nature Conservation Sites as a result of the boundary review are unlikely to impact upon peat or soils. None of the areas recommended for removal are underlain by peat and the LNCS designation has no influence on how they are managed for agriculture.

Geology

Effects are likely to be broadly neutral.

The policy protection afforded to nationally or locally designated geodiversity sites or Geological Conservation Review sites is outlined in Sections 2.2 and 2.4. Section 2.5 addresses development which could affect the wider geodiversity. Section 5 explains the process that is followed when assessing planning applications affecting natural heritage interests.

Changes to the Local Nature Conservation Sites as a result of the boundary review are unlikely to impact upon geology or geomorphology.

Interrelationships

Moderate benefit is likely.

Implementation of the SG is likely to lead to an increased awareness of the extent to which there is interrelationship between environmental receptors. It also provides information on the benefits provided by certain habitats and geomorphological features, perhaps most notably in their contribution towards mitigating and adapting to the effects of a changing climate and rising sea levels.

By providing information on a range of ways in which development can impact on the natural environment the SG seeks to ensure that appropriate measures can be identified to avoid or at least minimise these impacts.

Mitigation measures

Schedule 3 paragraph 7 of the Environmental Assessment (Scotland) Act 2005 requires an explanation of “the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.”

The purpose of Supplementary Guidance *Natural Environment* is to protect the environment; assessment found that no significant adverse environmental effects are unlikely as a result of its implementation. There was therefore no need to identify mitigative measures.

Monitoring

The purpose of monitoring is to ensure that the proposed mitigation is effective and that any unexpected effects can be detected at an early stage so that appropriate remedial action can be put in place. Monitoring will be used to provide essential information on which to base future development. The proposed SEA monitoring programme is set out in **Table 5** below.

Table 5: Proposed SEA Monitoring Programme

SEA receptor	SEA Objective	Indicator	Data source	Monitored by & frequency:
Biodiversity.	Safeguard valuable habitat from loss and fragmentation through development.	Number of proposals approved where mitigative or compensatory measures have been incorporated to safeguard habitats from loss and fragmentation.	OIC Development & Marine Planning Section	Environmental Policy Officer Annually
		Number of proposals approved where it has not been possible to incorporate appropriate mitigative or compensatory measures to safeguard habitats from loss and fragmentation.	OIC Development & Marine Planning Section.	Environmental Policy Officer Annually
	Conserve protected sites and species.	Condition of internationally & nationally designated biological natural heritage sites.	SNH website - sitelink http://gateway.snh.gov.uk/sitelink/index.jsp	Environmental Policy Officer Annually
	Conserve protected sites and species.	Number of proposals approved where it has not been possible to incorporate appropriate mitigative or compensatory measures to safeguard protected species.	OIC Development & Marine Planning Section.	Environmental Policy Officer Annually
Water.	Promote the protection and improvement of the water	Water quality and overall status of monitored watercourses.	Scotland's Environment Web http://www.environment	Environmental Policy Officer. Annually

	environment, including burns, lochs, estuaries, wetlands, coastal waters and groundwaters.		nt.scotland.gov.uk/get-interactive/data/water-body-classification/	
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Next steps

Proposed consultation timescales

In line with section 15(3) of the Act, the Environmental Report will be presented for public consultation during the same period as that proposed for the draft Supplementary Guidance. This consultation period is likely to commence on 12 October 2016, and a period of at least six weeks will be allowed for representations to be made in respect of the Environmental Report.

Anticipated milestones in the SEA and planning processes related to Supplementary Guidance Natural Environment are set out in **Table 6** below.

Table 6: Anticipated plan-making and SEA milestones

Expected date	Milestone
13 th September 2016	Supplementary Guidance Natural Environment and associated Environmental Report considered at a meeting of the Council's Development & Infrastructure Committee.
11 th October 2016	Supplementary Guidance Natural Environment and associated Environmental Report considered at a meeting of the Council's Development & Infrastructure Committee.
20 th October 2016	Public consultation
1 st December 2016	Deadline for Consultation Authorities' responses to SG Natural Environment and the Environmental Report.
December - January	Consultation responses taken into account in the final SG Natural Environment
March 2017	Revised Supplementary Guidance Natural Environment and associated Environmental Report considered at a meeting of the Council's Development & Infrastructure Committee.
April 2017	Final adoption date for Supplementary Guidance Natural Environment and Environmental Report.
April 2017	Supplementary Guidance Natural Environment reported to the Scottish Government
May 2017	Post adoption statement published.

Table 7: Summary of Responses to Consultation on the Scoping Report and Action Taken

Consultee	Section of Environmental Report	Summary of comments	How the comment was taken into account in preparing the draft Supplementary Guidance Natural Environment
Scottish Natural Heritage	General comment	We are content with the proposed scope of the assessment and with the suggested approach.	Noted.
	Consultation period	We note that a period of at least six weeks is proposed for consultation on the Environmental Report and we are content with this proposed period.	Noted.
Scottish Environment Protection Agency	Baseline information	Please refer to section 3.1 of the baseline information which describes Groundwater Dependent Terrestrial Ecosystems. The correct acronym should be amended to <i>GWDTE</i> and not <i>GDTE</i> as currently stated.	Noted – Section 3.1 has been amended accordingly.
	Alternatives	We note that no alternatives have been considered when preparing the supplementary guidance. We appreciate that there may be no reasonable alternative to preparing guidance on this topic but suggest that if you are considering different ways of delivering the guidance (e.g. different priorities, different structure etc.) then these should be assessed as reasonable alternatives.	Noted.
	Scoping in / out of environmental	We are satisfied with the environmental topics scoped into this assessment in this instance. Impacts to the natural environment could	Noted.

	topics	positively affect local air quality and population and human health; however based on the plan subject areas we are satisfied that these affects will not be significant in the context of this assessment.	
	Procedure for assessing environmental effects	We support the use of SEA objectives as assessment tools as they allow a systematic, rigorous and consistent framework with which to assess environmental effects. We are content with the proposed assessment matrix and particularly welcome the commentary box labelled 'Notes'. This should fully explain the rationale behind the assessment results. It is helpful that the assessment matrix directly links the assessment result with proposed mitigation measures.	Noted.
	Mitigation and enhancement	We would encourage you to use the assessment as a way to improve the environmental performance of individual aspects of the final option; hence we support proposals for enhancement of positive effects as well as mitigation of negative effects. We would encourage you to be very clear in the Environmental Report about mitigation measures which are proposed as a result of the assessment. These should follow the mitigation hierarchy (avoid, reduce, remedy or compensate).	Noted.
	Monitoring	Although not specifically required at this stage, monitoring is a requirement of the Act and early	Noted – a table indicating proposed monitoring measures has been

		consideration should be given to a monitoring approach particularly in the choice of indicators. It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.	included in the Environmental Report.
	Consultation period	We are satisfied with the proposal for a minimum 6 week consultation period for the Environmental Report.	Noted.
Historic Environment Scotland	Scope and level of detail	It is my understanding that the Supplementary Guidance: Natural Environment (the SG) will provide further detail to support Policy 9 of the Local Development Plan, and will help developers consider the way in which their proposals will affect the natural environment. Whilst you consider that there will be significant environmental effects on some SEA topics, you have scoped cultural heritage out of the assessment on the basis that significant effects are unlikely. I am content with this approach as I agree that significant effects for the historic environment are unlikely. I have no further comments to make on the scoping report.	Noted.
	Consultation period for the Environmental Report	I am content with the proposed minimum six week period for consultation on the draft SG and the Environmental Report. Please note that, for administrative purposes, Historic Environment Scotland consider that the consultation period commences on receipt of the relevant documents by the SEA Gateway.	Noted.

