

Strategic Environmental Assessment
(SEA) - Final Environmental Report

Shetland

Local Development Plan 2012



Shetland Islands Council



Shetland
Islands Council

**Strategic Environmental Assessment (SEA)
Shetland Islands Council Local Development Plan Final Environmental
Report**

3 October 2012

(Draft)

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Non-Technical Summary

This document is the final Environmental Report of the emerging Shetland Islands Council Development Plan. It has been produced following the implementation of the European Commission Directive 2001/42/EC (enacted under the Environmental Assessment of Plans and Programmes (Scotland) Regulations 2004), which require a 'Strategic Environmental Assessment' (SEA) of plans and programmes, including Development Plans.

This report has been informed by guidance from the Scottish Government on undertaking a SEA. The Directive provides a high level of protection of the environment and contributes towards the integration of environmental considerations into the preparation and adoption of plans and programmes in order to promote sustainable development. This assessment focuses on considering the effects of the Local Development Plan (LDP) policies on environmental objectives. Where those impacts on the environment are considered likely to be significant, mitigation measures are proposed. On occasions, these measures took the form of amendments to the plan policy wording or inserts into the contextual information around the policy. They also took the form of a new policy and in other instances there are other policies within the LDP that mitigate these adverse impacts.

The Final Environmental Report presents relevant baseline information, outlines key environmental issues and highlights future trends and targets and outlines proposals for monitoring the impacts of the subsequent implementation of LDP policies. There will always be significant tensions in the process of assessment. This report makes explicit the conflict between economic growth and environmental impacts. Whilst these cannot always be resolved, the assessment, in highlighting such tensions is able to provide this information to decision makers. Decisions can then be taken that are informed, based on evidence and that has sought to balance potentially competing interests.

Methodology

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|----------------|--|
| Stage 1 | Description of the baseline characteristics and the predicted future baseline |
| Stage 2 | Refine the SEA Objectives and agreeing methodology for appraising the Development Plan |
| Stage 3 | Assessing the Effect of the Plan by appraisal of the Development Plan policies, considering each policy against each sustainability objective or criteria recording the results in an appraisal matrix |
| Stage 4 | Provide views on implementation of the Development Plan and a commentary on monitoring |

This Environmental Report comprises of the following:

- Background to the purpose and objectives of the appraisal process;
- The methodology used to complete the appraisal
- A summary of the key problems/issues in Shetland (the baseline situation) and the key issues that need to be considered
- An assessment of the contribution of the plan policies to social, economic and environmental objectives within Shetland
- An outline of proposed mitigation measures;
- Proposed monitoring arrangements.

The report also contains a number of appendices, which contain additional information regarding the overall assessment. This includes the review of plans and programmes (necessary to inform the appraisal framework SEA objectives, more detailed information on the monitoring and baseline information gathered, assessment of alternatives to the plan, consideration of cumulative effects and an appraisal framework for each policy in the Draft LDP policy. Where appropriate and consistent with the assessment, for specific policies, recommendations and mitigations have been made. A proposed approach to future monitoring of the plan and its effects is also presented.

Conclusions on the Performance of the Development Plan

In broad terms the plan performs well against the environmental objectives and it provides a robust framework from which to progress sustainability within Shetland. Many individual LDP policies make a positive contribution towards the environmental objectives and the proposed changes refer predominately to improvements in the accompanying text. In particular the plan promotes:-

- Sustainable development and environmental protection
- Improved housing provision, facilities provision, economic prosperity, health and well being
- More emphasis on previously developed land and use of existing infrastructure and facilities;
- Mixed development land uses that seek to maintain and enhance Shetland's economic vitality, not only around Lerwick, but also in settlement hubs or Areas of Best Fit and Sites of Development Potential;
- Strengthening rural settlements and rural service centres;
- Protection of the natural and built environment of Shetland.
- Higher standards in design and sustainable construction methods
- Energy efficiency and the use of low carbon technologies or renewable energy technology
- A stronger commitment to developing sustainable modes of transport
- Adaptation or anticipation of the effects of climate change.

Introduction

Introduction to the Report

This Final Environmental Report is part of the Strategic Environmental Assessment (SEA) of the Shetland Islands Council Local Development Plan (LDP). SEA is a requirement of European and Scottish Legislation that place a responsibility on public agencies (responsible Authorities) to assess the environmental impacts of certain plans, programmes or strategies, of which the LDP is one.

The Council has already undertaken the Scoping stage and the produced a Draft Environmental Report, which accompanied the LDP Plan Main Issues Report (MIR). This report is the revised or Final Environmental Report, which will accompany the proposed LDP for Shetland. It is a key consultation document and major output of the SEA process; takes into consideration the MIR and identifies and evaluates the likely environmental effects of the LDP and reasonable alternatives. It also provides an early and effective opportunity for Consultation Authorities and the public to offer views on any aspect of the LDP and this report.

This Revised Environmental Report contains various changes associated with the baseline information, policy approach assessments, site assessments, consultation responses and general issues. These are integrated into the main report and supporting appendices. The Revised Environmental Report includes:

- A description of the current state of Shetland's Environment
- The environmental characteristics that could be affected if the LDP is not implemented
- Wider strategic environmental objectives
- An assessment of the MIR proposals, preferred options and alternatives
- An assessment of all the proposed development policies
- Consultation and engagement activities
- Comprehensive monitoring process

Statutory Context for Strategic Environmental Assessment (SEA)

The EU Directive 2001/42/EC on assessment of effects of certain plans and programmes on the environment (the SEA Directive) came into force in the UK on 20 July 2004 through the Environmental Assessment of Plans and Programmes Regulations 2004.

The Environmental Assessment (Scotland) Act 2005 (the Scottish SEA Act) is the statutory mechanism by which the requirements of the European Directive 2001/42/EC – *'On the assessment of the effects of certain plans and programmes on the environment'* (known as the Strategic Environmental

Assessment or SEA Directive) are now delivered in Scotland. The purpose of the SEA Directive is twofold. Firstly it aims to provide for a high level of protection of the environment and secondly ensure that environmental considerations are taken into account in the preparation and adoption of plans. Secondly, this should promote sustainable development as part of the planning process. The term 'Strategic Environmental Assessment' is not actually used in UK or European Legislation but is actively used and understood to mean environmental assessment, which complies with European Directive. The Directive applies to a variety of plans and programmes, including those for town and country planning and land use and applies to LDPs as they a) set the framework for future development consent and b) are likely to have a significant effect on the environment.

The overarching objective of the SEA Directive is:

“To provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans... with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans... which are likely to have significant effects on the environment.”
(Article 1)

SEA is an iterative assessment process that plans and programmes are required to undergo as they are being developed to ensure that potential significant environmental effects arising from the plan/ programme are identified and assessed, mitigation is proposed and findings communicated to plan-makers to enable improvements to be made to the LDP. SEA also requires the monitoring of significant effects once the plan/programme is implemented.

The SEA Directive states that the SEA must consider the following topic areas:

- Biodiversity
- Population
- Human Health
- Flora and Fauna
- Soil
- Water
- Air
- Climatic factors
- Material assets
- Cultural heritage, including archaeological and architectural heritage
- Landscape

Purpose of SEA

The SEA is the process of appraisal, not a product, through which strategic aspects of environmental protection may be considered, and factored into all levels of decisions regarding public agency's plans and programmes (including those of Shetland Islands Council). The SEA requires plan and policy makers to justify their choices made in formulating the LDP. The SEA process contributes to more transparent planning by involving the public and by clearly demonstrating how environmental considerations have been assessed and balanced against other factors and integrated into the planning process. The main objective of SEA is to incorporate environmental sustainability into strategic decision making. Through the evaluation of the environmental effects of the LDP the SEA process has improved the LDP through promoting effective and sustainable environmental practice. It also increases public participation in decision making through facilitating openness and transparency. The Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006, requires Councils to prepare a development plan for their respective area. These plans must be updated every five years. Supplementary Planning Guidance will provide more detailed advice to support development.

Sustainable Development and Climate change

The concept of sustainable development is central to the planning system. The term "sustainable development" has been used since 1987 following the publication of the World Commission on Environment and Development (WCED) report "Our Common Future", commonly referred to as the Brundtland Report. It called for a strategy that united development and the environment – described by the now-common term "sustainable development", which is defined as:

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs
(Our Common Future, p42)

In essence the term "sustainable development" not only refers to the impact of development on the environment, but also to society and the economy. In order for a development to be considered "sustainable" it must result in a win-win-win situation for the environment, society and the economy. Sustainable development is not about balancing these issues, but rather ensuring that none are adversely affected and, preferably, that there is a positive impact on all three.

The UK Government has produced a Sustainable Development Strategy, "Securing the Future - delivering UK Sustainable Development Strategy" (March 2005). Priority areas for immediate action are outlined as:

- Sustainable consumption and production
- Climate change and energy
- Natural resource protection and environmental enhancement

- Sustainable communities.

The Climate Change (Scotland) Act 2009 introduces a new duty for all public bodies to exercise their functions in a way that is best calculated to contribute towards the greenhouse gas reduction targets and the Climate Change Adaptation Framework. This new duty came into effect on 1st January 2011. Scottish Planning Policy (SPP) has been amended to reflect the introduction of the Act. Paragraph 42 of SPP states that:

“the need to help mitigate the causes of climate change and the need to adapt to its short and long term impacts should be taken into account in all decisions throughout the planning system”.

Strategic Environmental Assessment Process

In Scotland, land use plans fall within the scope of the Environment Assessment (Scotland) Act 2005 and require SEA. In order to implement this legislation, the Scottish Government has published supporting guidance in the form of Planning Advice Note 1/2010. Also an SEA Toolkit and associated templates has been produced by the Scottish Government’s SEA Gateway. The SEA Toolkit sets out the stages of SEA. These stages are quite distinct, designed to create a robust assessment of potential significant environmental effects. The key stages provided in the legislation and Toolkit is outlined in Table 1 below.

Table 1. 5 Main SEA Stages

Stage 1. Screening	The Screening determines whether the plan is likely to have environmental effects and whether an SEA is required. Under regulation 9a, as a SEA is required for a town and country planning/ land use plan, no screening determination is required.
Stage 2. Scoping	Section 5 (3) of the SEA Act requires a Scoping exercise to be undertaken in advance of preparing the Environmental Report. The Scoping stage decides the scope and the appropriate level of detail of the accompanying Environmental Report, and the consultation period for the Report. This is done in consultation with Scottish Ministers, Scottish Natural Heritage, Historic Scotland and Scottish Environment Protection Agency.
Stage 3. Assessment and Environmental Report	Section 14 (3) of the Act requires an Environmental Report to include information outlined in Schedule 3 of the Act. The Assessment and Environmental Report stage identifies, describes and evaluates the likely significant effects on the environment of implementing the Plan and its reasonable alternatives. It also documents the appraisal process.
Stage 4. Consultation and	The Consultation and Adoption stage focuses on how the adopted Plan has taken into account

Adoption	consultation comments and methods for monitoring the significant environmental effects of the Plan implementation.
Stage 5. Monitoring	The Monitoring stage focuses on significant environmental effects and taking appropriate remedial action for any unforeseen or adverse environmental effects.

SEA timetable and activities to date

The Process of preparing the new Shetland LDP commenced in 2008.. In January 2010 a Scoping Report was completed and submitted to the Consultation Authorities (Scottish Natural Heritage, Scottish Environment Protection Agency and Historic Scotland) via the SEA Gateway.

In conjunction with the preparation of the Scoping Report the Council Planning Service wrote a Main Issues Report (MIR) and Monitoring Statement, which were formally completed in March 2010.

The MIR presented a number of options and alternatives for the direction of planning policy in Shetland. These were derived from two workshop sessions and public consultation. The Monitoring Statement was produced to accompany the Main Issues Report. It identified changes in the principal physical, economic, social and environmental characteristics of Shetland. It also examined changed and revised legislation impacting on the existing Local Plan policies and proposals.

In addition to the production of the MIR, the Council added an additional stage involving a Call for Proposed Allocated Sites. This stage was added as direct response to the Main Issues Report Consultation. The new LDP uses a land based allocation system never employed in Shetland before. The old system resulted in developers having aspirations, but not complete plans for the development of their sites. The call for sites was aimed at looking for 'sites of development potential' with a view to progress these sites towards allocation status within the lifetime of the LDP and beyond.

The Scoping Report, MIR and Monitoring Statement acted in unison to support a consultation exercise with the general public and agencies. They also provided a platform for the completion of a Draft Environmental Report in March 2010, which was sent to the SEA Gateway for scrutiny by the Consultation Authorities. The Draft Environmental Report identified and evaluated the likely effects on the environment of taking forward any of the various options presented in the MIR.

To ensure effectiveness of the SEA process, it is important that both the LDP and SEA are fully integrated and enable the SEA to influence, and can be influenced by, the LDP at different stages of its development. Full integration (as stipulated in the Act), aids decision making, raises awareness of potential environmental issues and ensures that environmental considerations are thoroughly taken into account in the development of the plan.

The key decision and output stages of both the LDP and SEA processes must coincide in order to be successful. More detailed information concerning the integration of the LDP and SEA development process is demonstrated in the Appendix 1. A detailed timetable of LDP and SEA activities to date are shown in Appendix 2.

Key facts about the Local Development Plan (LDP)

Key Facts	Details
Responsible Authority	Shetland Islands Council
Title of Plan	Shetland Local Development Plan
Plan Subject	Land Use Planning
Period Covered by Plan	2013 - 2018
Frequency of Updates	Every five years
Plan Area	The Shetland Islands are a group of islands in the North Atlantic Ocean, forming the northern most part of Scotland. The Islands lie some 125 miles northeast of mainland Scotland and cover an area of approximately 550 square miles (1425 km ²). Only 16 of the islands are inhabited with Mainland Shetland being the largest. The Islands have two main towns, these being Lerwick, which is the principal town with the largest population and Scalloway, which is the ancient capital of Shetland. The total population of Shetland is about 22,000 residents. Other concentrated population areas include Brae and Sandwick.
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Background to the LDP

The Shetland LDP is the first to be produced by the Council under the Planning etc. (Scotland) Act 2006. The foundations for the new LDP were in the Main Issues Report (MIR) as it involved an in-depth analysis of a range of information and a period of engagement with members of the public and other planning stakeholders covering a multitude of issues including housing needs and demand (assessing the long-term need for all types of housing in an area

and the likely demand), local economic growth, transport and the local environment.

The MIR was not a draft LDP, however the document did set out a series of options for the future direction of land use planning policy and development allocations across Shetland. The MIR options included a description of 'preferred options' and a number of 'alternative options'. The MIR provided members of the public the opportunity to express their opinions on the merits of the different options. The preferred options were selected by the Council through consideration of responses received as part of a consultation process. In support of the MIR was a Monitoring Statement presenting an analysis of all the information sources that were considered in identifying the main issues. This set out the evidence and justification for the inclusion of these issues, and explained why some of the policies in the existing Shetland Structure Plan (July 2000) required reviewing.

As part of the LDP development process an SEA process ran in parallel. This involved the preparation of the '*Shetland Islands Council Local Development Plan SEA Scoping Report*' (January 2010) and a draft Environmental Report that was titled '*Strategic Environmental Assessment (SEA): Environmental Report for Shetland Islands Council Local Development Plan – Main Issues Report*' (March 2010). The Main Issues Report and the Draft Environmental Report were published as separate documents at the same time in March 2010.

The MIR was the subject of a major public consultation in the spring of 2010 as mentioned above. Thereafter the Council launched a "Call for Proposed Development Sites." as part of an extension to the public consultation process. This asked landowners, developers and the public to submit details of land that is available for development over the next 20 years. The closing date for submissions was 4th April 2011. The Planning Service received 190 sites of varying sizes and proposed uses, including housing. From 6th June until 15th August 2011 a folder containing maps of all the submitted sites and the site information sheets was made available for public inspection and comment. Running concurrently with the public information sharing exercise the Planning Service consulted relevant stakeholders.

A function of the LDP is to meet the requirements of the Local Housing Strategy (LHS) in providing a generous and developable land supply for housing. The LDP was also required to identify land suitable for other uses such as industry. These objectives support the creation of sustainable mixed communities in Shetland. Normally this would be done through a system of allocations where developers come forward with complete plans to develop their land. This is common practice within Scottish mainland Local Authorities. The Shetland Islands Council decided to adopt an allocations based system, which was a completely new approach. This presented an unusual local situation in which many landowners came forward with their aspirations for development, but without firm plans. As a result of these circumstances, the Council decided to put forward those areas of land that had been assessed as suitable 'sites with development potential' with the aim

of working with developers through the Action Programme to progress these sites towards allocation status within the lifetime of the plan and beyond. This was to ensure that an adequate supply of land was identified in the LDP, as required by the development plan process.

This Final Environmental Report will support the proposed LDP towards adoption. It is the main consultation document in the SEA process. It provides a description of the Shetland Islands in terms of an environmental baseline and the assessment of potential significant environmental effects, alongside proposed measures to mitigate and monitor environmental effects during the lifetime on the Shetland LDP.

Shetland Spatial Strategy

The development of a Spatial Strategy and Land Allocations System resulted from a period of extensive consultation. The responses to the Main Issues report clearly identified a strong desire to ensure Shetland's rural communities thrived, with development distributed throughout the Isles. The Planning Service identified Areas of Best Fit to strengthen and enhance rural communities by providing hubs in each locality. This will provide a focus for growth within the largest community in each of the seven localities in Shetland. In the North Isles, Areas of Best Fit have been identified at both Baltasound and Mid Yell. This means in total there are eight Areas of Best Fit.

Within Areas of Best Fit amenities such as schools, shops, employment and essential infrastructure are readily available through a range of transport options. This would encourage new housing (specifically large scale, social and mixed tenure developments), employment and community development within these areas. It should be noted that this approach does not preclude development in other areas.

Format of the LDP

In common with other local plans, the current legislative context for the Shetland LDP derives from The Planning etc. (Scotland) Act 2006 and the Town and Country Planning (Development Planning) (Scotland) Regulations 2008. The principal purpose of the Plan is to set out the Council's detailed policies and proposals for the use, development, protection and improvement of land. The Plan period is for five years and this Plan will replace the Shetland Structure Plan, which was adopted in July 2000. The Plan provides a framework for the promotion of development opportunities and a basis for Development Management. It is required to comply and be consistent with National Planning Guidance, Scottish Planning Policies, National Policy guidelines and Policy Advice notes.

The Shetland LDP is based around a written statement and proposals maps. The written statement establishes the context and outlines policies and proposals, along with a reasoned justification for their inclusion. It contains an Executive Summary and Introduction Statement comprising of description of the main business of the plan including a spatial and settlement strategy;

development land supply proposals; actions to support the Plan; development control policies, Plan indicators and appendices.

A Policy refers to the Council's attitude towards the use, treatment or development of land. Policies indicate the way in which land and change is to be managed. There may be more than one policy relating to a topic area. A proposal represents a particular course of action (that is, development or change) planned for a specific location or area, which is likely to be implemented during the life of the LDP.

The policies in the plan cover the following topic areas: General Policies, Spatial Strategy, Areas of Best Fit, Sites with Development Potential, Housing, Business, Historic Environment, Natural Environment, Transport, Local Communities, Coastline, Water and Drainage, Energy, Waste, Minerals and Design.

Supporting the Plan is a series of proposals and constraints maps covering Shetland. They show settlement boundaries, areas of best fit, and sites with development potential.

One of the new provisions now available under the new development planning regime is Supplementary Guidance. Despite being called guidance, it actually has the weight of policy when assessing planning applications. It can be adopted and issued by a Planning Authority in connection with the LDP and any Guidance issued forms part of the LDP. The Planning Service intends to produce a number of Supplementary Guidance documents alongside the proposed plan and undertake consultation and adoption procedures at the same time. The Guidance is needed to have a rounded set of policies to meet government policy and local aspirations. It will contain additional material relating to specific topics in the Plan. There will however be a number of topics for which Supplementary Guidance will be prepared post plan adoption, details of these will be included in the Plan's Action Programme.

The Council has produced an Action Programme that sets out how it proposes to implement the LDP. It sets out a list of actions required to deliver each of the plan's policies and proposals; names the person(s) responsible for carrying out this action and a timescale for undertaking each action. Actions include the delivery of key infrastructure projects and preparation of supplementary guidance. Actions are not limited to those by the Planning Authority and may include actions by developers to facilitate progress on sites assigned in the plan as having development potential.

LDP Vision and Supporting Objectives

The principal, and statutory, objective of the Shetland LDP is to provide the land use policy framework and to designate and allocate land for planning purposes in the islands. The Plan has a five-year plan period and is to replace the previous Shetland Structure Plan (July 2000).

The overall vision of the Shetland LDP is to:

“Work together for a future that is better and brighter. In particular, we aim to create a secure livelihood, look after our stunning environment and care well for our people and our culture” (Shetland Resolution, 2004)

The above vision is consistent with the primary development goals of Scottish Government’s National Planning Framework for Scotland 2 (NPF2) and aligns closely with the objectives of the Council’s Single Outcome Agreement and the strategic vision for the Islands in the Council’s 2008 to 2011 Corporate Plan.

In order to achieve this vision land use planning is recognised as having an important role and consequently the following supporting objectives have been adopted in the Shetland Local Development Plan. The supporting objectives are outlined as follows:

- Enhancing existing communities throughout Shetland by encouraging sustainable economic development to create strong, healthy, vibrant communities where diversity is recognised and celebrated, ensuring they are attractive and inclusive places to live
- Supporting new and existing sustainable economic opportunities, including employment, housing, transport, communications and community facilities
- Promoting the efficient and sustainable use of natural resources and material assets such as land, soil, buildings and infrastructure whilst minimising waste
- Conserving and promoting Shetland’s historic environment and cultural traditions, recognising their contribution to Shetland’s sustainable economic growth, and the quality of life of its people
- Furthering the conservation of biodiversity and geodiversity throughout Shetland including landscapes and seascapes
- Protecting and enhancing areas for recreation
- Encouraging new development of good quality, that is environmentally sensitive, accessible to all, utilises sustainable design techniques and low carbon or renewable energy technologies
- Supporting better access across the Islands, in particular supporting sustainable and active transport solutions, such as by foot, cycle and public transport, and enabling people to access services, employment and other opportunities
- Ensuring policies reflect the Council’s commitment to the Climate Change (Scotland) Act 2009 through encouraging measures to maintain good air quality, reduce carbon emissions and mitigate against or anticipate the effects of global climate change

Relationship of LDP to other Plans, Programmes and Strategies

Schedule 3 of the Act requires the Environmental Report to include an outline of the relationships between the Draft LDP and other relevant programmes, plans and strategies. An extensive list of national policies and legislation relevant to the Plan is contained in Appendix 3. The LDP will be a key document that will provide a strategic framework for sustainable development across Shetland. Appendix 4 shows the position of the LDP in relation to other PPS.

The LDP sits within a hierarchy of PPS. The wide range of international, European, national and local plans, programmes and strategies that influence the LDP and their environmental objectives require to be taken into account. Some of these objectives contained in higher levels of legislation have been transposed down to the UK and Scottish level and, where this is the case, the latter have been considered to be more pertinent to this locally based plan. The LDP will be a material consideration in development proposals and in the assessment of future planning applications.

At an international level the EU Habitats and Birds Directives set the basis for the establishment of the Natura 2000 network of European sites covering Special Protection Areas, Special Areas of Conservation and Ramsar sites.

The Scottish Government approved NPF2 as the strategy for Scotland's development and it should be taken into account in all development plan and development management decisions. NPF2 guides Scotland's development to 2030 supporting the central purpose of the Scottish Government of sustainable economic growth.

At national level, Scottish Planning Policy (SPP), National Planning Policy Guidelines (NPPG) and Planning Advice Notes (PAN) provide guidance for development of land on a wide spectrum of uses. A consolidated SPP was published in February 2010 that superseded the above and presented a statement of Scottish Government Policy on land use planning. It placed planning in the wider context of the Scottish Government's aims and policies, clarifying the government's expectations of the system and planning services.

Appendix 3 lists the plans, programmes and strategies that are relevant to the Shetland LDP. These were taken into account in the preparation of the Main Issues Report (MIR), the Scoping of environmental issues, the setting of the environmental objectives in the SEA Scoping Report, and the analysis of the issues and options considered in the Draft Environmental Report. On the basis of feedback from the Consultation Authorities and the development of the SEA process, the list of plans, programmes and strategies was revised where appropriate. Appendix 3 includes a summary of key environmental aims and objectives of each PPS and the way that these have been taken into account in the preparation of the LDP.

Current State of the Environment

Environmental Baseline Analysis and Limitations

The collection of baseline information is a key component of the SEA process and a legal requirement under the Act. Under Schedule 2 an Environmental Report must include a description of 'the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme', and 'the environmental characteristics of areas likely to be significantly affected'.

Baseline information helps to provide a basis for:

- Identification of environmental problems
- Assessing the Plan's environmental effects; and
- Assessing the baseline against which future monitoring data can be prepared.

Environmental baseline information is required for assessing the LDP's objectives, policies and allocations. In general the LDP itself will have no direct effects on the environment. Any actual effects that result will depend on the many thousands of decisions, in the future, made in respect of planning and related applications for development and land use change. This will be based on the application of the LDP's policies, including decisions to grant planning permission for development on sites allocated within the LDP. It should be kept in mind that an allocation does not necessarily mean that permission will be given, but it is a strong indication of acceptability. As a result of this some long-term, cumulative and synergistic effects of the LDP may not be predictable.

The Council and its partner organisations hold a large amount of environmental information forming a number of datasets. In an attempt to avoid duplication and take a more corporate approach to environmental baseline analysis, the Council has produced a general environmental baseline. This is not only for the LDP, but will also be used in future SEA's undertaken by the Council for other Plans, Programmes or Strategies (PPS) that may arise. This baseline information has the capacity to be adapted and will be updated when required depending on the PPS in question. This appraisal deals only with environmental issues, although for the purpose of the LDP preparation, social and economic issues are introduced as appropriate. An in-depth Environmental Baseline for Shetland can be found in Appendix 5. The Table below provides a summary of the key environmental issues affecting Shetland. Due to the large volume of environmental information held in a number of different datasets, it is not practical to reproduce these here or to describe the environmental characteristics in detail because it would make this report unworkable and unreadable. Similarly, it is not possible, or practical, to forecast every environmental change that may occur if the Plan is not implemented. This section attempts to identify those changes that would be the more significant and likely in the event of non-implementation of the Plan. In addition, the description of the environment and environmental changes focuses on those aspects of the environment that are

most likely be affected by the LDP, either positively or negatively, such as natural and cultural assets that are vulnerable to change by built development.

Gaps in Baseline Information

It was not always possible to identify indicators and data at both national and local levels, but where possible this was undertaken. Indicators at a local or site specific level could not always be identified either.

Current information on the level of impacts on designated sites and the net change in either priority or protected species is difficult to obtain at a local level. This is due to their mobility, evolving and dynamic nature, and infrequent and variable survey methods.

Areas of coastal flood risk are inherently difficult to predict due to unpredictable or extreme climatic conditions that affect Shetland. The Council has produced a Strategic Flood risk Assessment (SFRA) in accordance with SEPA guidance. This will assist future development planning. The SFRA is a supporting document that sits alongside the SEA.

Shetland is considered to have a good degree of archaeological potential, due to use of the land in the past. However, much of the land is undeveloped and, by its very nature, archaeology is often a concealed resource. Baseline information is provided from Historic Scotland Sources and local records held by the County archaeologist.

Key environmental issues highlighted by the baseline data included biodiversity (flora and fauna), climate change, health, hydrology and flooding, material assets and waste management, landscape and visual effects and cultural heritage. Environmental baseline data took account of various issues and options including: existing landscape, ecological, cultural heritage, and water features and statutory and local designations. This helped ensure that environmental considerations played a key role in ensuring that all issues and associated alternative options were considered.

To establish the Shetland environmental baseline of current conditions existing environmental and sustainability data were reviewed from a range of sources that included the following:

- Scottish Environment Statistics On-line
- Shetland Islands Council (internal documents and reports)
- SEPA reports and data, including water quality
- Historic Scotland data, including information from PASTMAP
- Scottish Natural Heritage reports and data, including information from SNH
- Shetland Biological Records Centre
- County archaeologist – Shetland Sites and Monuments Record (SMR)

Current Environmental Issues

In order to assess how policies and proposals in the LDP will affect the local environment a baseline analysis was undertaken in order to gain an understanding of the current state of the environment. The main purpose is to explain how existing problems would affect or be affected by the LDP and whether it is likely to aggravate, reduce or otherwise affect existing environmental issues and problems.

Appendix 6 of this report presents a detailed analysis of Shetland's environment and current environmental issues. This analysis was a further update on earlier work associated with the Main Issues Report (MIR) options and SEA Scoping Report, which contained preliminary baseline environmental information.

The review of environmental problems, issues and opportunities across Shetland, both strategically and in the context of the MIR and the SEA Scoping exercise was conducted through a process that involved:

- 2 workshops with the Council and relevant stakeholders designed to inform the first stages in the preparation of the MIR
- A SEA-specific workshop held with Shetland Islands Council Officers to compliment the LDP process and the preparation of the MIR
- Reviews of issues from relevant strategies, plans and programmes;
- Review of baseline environmental data
- Team knowledge of environmental conditions in Shetland
- Team knowledge of contemporary national (and regional) environmental issues relevant to general development
- Comments received from the Consultation Authorities at the SEA Scoping Report stage

Schedule 2 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report include a description of existing environmental problems, especially those relating to any areas of particular environmental importance.

Evolution of the Environment without the LDP

Future of the Environment in the absence of the LDP

The principal purpose of carrying out an SEA is to anticipate and understand the impact the plan before the preferred set of options were finalised and set out in the LDP. A series of options was analysed as part of the Main Issues Report. These were examined in light of the above environmental issues. Below examines how the environment of Shetland is likely to evolve without the adoption and implementation of the LDP.

The SEA process is required to consider an assessment of the evolution of the environment in the absence of the LDP. The effect of not preparing and adopting the LDP would mean that the existing Shetland Structure Plan (July 2000) would provide the local planning context. As it becomes increasingly dated, environmental trends and planning pressures would continue and would become increasingly difficult to resist. The likely effects of not adopting the new LDP are discussed below.

- The Plan would fail to take into consideration new guidance and legislation at European and national level.
- There would not be a spatial strategy for settlements and land allocations. This would have the potential for inappropriate and unsympathetic development in Shetland.
- There would be potential for lower quality development outcomes, especially in regard to siting, character/ setting, building design and materials used.
- There would be potential incremental and cumulative development that could lead to adverse environmental effects.
- There would be potential for undesirable coalescence of settlements that could result in the deterioration of community identity and local distinctiveness.
- There would be potential for lack of effective strategic proposal sites that could result in uncoordinated development or concentration of development within areas of demand, which could lead to decline in more rural or remote areas.
- There could be development that could impact on existing infrastructure resources leading to an inability to provide an effective approach to service delivery.
- There would be ineffective development guidance and management resulting in detrimental impacts on the landscape, natural heritage interests, and cultural and historic assets.
- There would be potential for loss of recreational green spaces and lack of open space provision for new development.
- There would be potential inappropriate development in flood risk areas.
- There would be potential for air pollution in the absence of effective land use and transport planning
- There would be potential for increased water pollution in the absence of effective approaches and guidance relating to control of discharges or the use of Sustainable Drainage Systems (SUDS)

A more detailed analysis is provided in Appendix 7.

Developing SEA Objectives, Criteria and Indicators

SEA guidance advises

“The objectives of any plan or programme will need to be tested against SEA objectives to identify both potential synergies and

inconsistencies. This information may help in developing alternatives during development of the plan or programme, and may in some cases help to refine the objectives of the plan or programme itself. Where a plan or programme has several objectives it may also be helpful to test them against each other, as inconsistencies may give rise to adverse environmental effects.” (DfT 2004, p 14).

A key purpose of reviewing relevant plans, programmes and strategies is to ensure that the SEA environmental objectives of the LDP align with those of other related strategies or policy statements. The SEA objectives establish environmental markers, which are used to benchmark all aspects of the LDP. These objectives are overarching in terms of their influence on the LDP and they set the context for development. They have been used throughout the development of the LDP to ensure the LDP’s aims and objectives, which provide the context for development of plan policies or proposals, are consistent with the environmental objectives of the SEA. A top down approach ensures consistency at the highest tier of the Plan. This ensures consistency at all subsequent levels of plan making.

At an earlier stage of the SEA process during scoping the Council recommended a list of 10 SEA environmental objectives and associated criteria. These were supported by a series of indicators. Together they provide a robust set of environmental tests against which to assess the LDP policies and proposals. The objectives listed below in Table 2 derive from an iterative consultation process between the Council and the Consultation Authorities.

Table 2 SEA Objectives, Criteria and Indicators

SEA Topic	SEA Objectives	SEA Checklist of Appraisal Criteria Each of these sub-criteria forms a question: 'Is the policy or proposal likely to?'
Biodiversity (Flora and Fauna)	<ul style="list-style-type: none"> To further the conservation of biodiversity 	<p>Does the policy or proposal have a beneficial or adverse effect on:</p> <ul style="list-style-type: none"> The integrity of any SPAs and SACs? The favourable conservation status of any wild bird species? The Scottish status of a UKBAP priority habitat or species? The status of a threatened Scottish Biodiversity list habitat or species? The favourable conservation status of a habitat or species listed in Annexes I, II IV or V of the Habitats Directive? A Marine Consultation Area? <p>Does the policy or proposal protect biodiversity, wildlife or natural habitats from disturbance or impacts associated with micro or large scale renewable energy development?</p>
Population	<ul style="list-style-type: none"> To improve the quality of life for people and communities across Shetland 	<ul style="list-style-type: none"> Contribute towards improving quality of life for people and communities across Shetland? Promotes community integration and social inclusion? Provides access to local health, social and recreational facilities and services? Promotes safe and secure environment? Supports affordable housing? Promotes good building design practice and settlement patterns that contribute to sustainable development? Contributes towards improving access to facilities and services? Promotes measures to improve community and road safety? Contribute towards improving the community environment or supports sustainable development? Maintains the quality of the local environment (air, land and water)?
Human Health	<ul style="list-style-type: none"> To improve the quality of health in Shetland 	<ul style="list-style-type: none"> Contribute towards improving the quality of health associated with the environment (air quality, water quality, noise and vibration)? Contribute to the goal of creating active, healthy lifestyles for Shetland islanders? Contribute towards improving access to health, recreation and care services for all Shetland islanders?

SEA Topic	SEA Objectives	SEA Checklist of Appraisal Criteria Each of these sub-criteria forms a question: 'Is the policy or proposal likely to?'
Water	<ul style="list-style-type: none"> To protect and enhance freshwater and marine water quality 	<ul style="list-style-type: none"> Protect and enhance freshwater and marine water quality? Ensure that Shetland's water resources are used effectively and sustainably? Protect the integrity of the physical aspect of the water environment? Promote a sustainable drainage infrastructure? Have a physical impact on a watercourse or the coastline?
	<ul style="list-style-type: none"> To reduce or manage flood risk with and from any new developments 	<ul style="list-style-type: none"> Reduce and manage flood risk through appropriate siting of development? Consider the implications of climate change and the risk of flooding? Promotes the incorporation of increased resilience to the effects of climate change in the design and siting of developments?
	<ul style="list-style-type: none"> To ensure that Shetland's water resources are used effectively and sustainably 	<ul style="list-style-type: none"> Ensure connection to public sewerage infrastructure? Ensure the provision of adequate drainage infrastructure to support new development? Ensure no point source pollution from septic tanks and small treatment works? Encourage sustainable water use or reduction in water use?
Air	<ul style="list-style-type: none"> To protect Shetland's air quality 	<ul style="list-style-type: none"> Pose any risks to air quality? Encourage activities that could contribute to maintaining or improving good air quality? Contribute towards enabling a reduction in CO₂ emissions e.g. through the appropriate siting and design of development or a reduction in energy usage? Promote the reduction of emissions of CO₂ and other greenhouse gases, e.g. by promoting the increased use of public transport or active travel?
Climatic Factors	<ul style="list-style-type: none"> To reduce greenhouse gas emissions and to contribute to Scotland's 80% CO₂ reduction target 	<ul style="list-style-type: none"> Help in reducing greenhouse gas emissions? Increase the potential for public transport or promote active transport options? Take account of the predicted effects of climate change, and adapt appropriately? Promote the use of renewable energy technologies? Promote the use of non fossil fuels? Promote energy efficiency and low carbon emissions?
	<ul style="list-style-type: none"> To adapt to the predicted effects of climate change such as flood risk 	<ul style="list-style-type: none"> Increase the risk or likelihood of flooding of any property, planned or existing? Put other assets at risk from flooding? Ensure that people and property are protected from flooding? Avoid the risks of flooding?

SEA Topic	SEA Objectives	SEA Checklist of Appraisal Criteria Each of these sub-criteria forms a question: 'Is the policy or proposal likely to?'
	<ul style="list-style-type: none"> Facilitate the development and use of energy generated from renewable energy technologies and contribute to meeting climate change greenhouse gas reduction 	<ul style="list-style-type: none"> Facilitate the development and/or use of energy that is generated from renewable energy using natural resources e.g. wind, wave, tidal etc.
Material Assets	<ul style="list-style-type: none"> To promote the sustainable use of Shetland's natural resources 	<ul style="list-style-type: none"> Encourage the sustainable use of natural resources? Lead to a reduction in the use of natural resources? Encourage the use of local or imported materials?
	<ul style="list-style-type: none"> To provide opportunities for sustainable waste management 	<ul style="list-style-type: none"> Promote the waste hierarchy of reduce, re-use and recovery through recycling, composting or energy recovery, in line with 2020 national targets?
Cultural Heritage	<ul style="list-style-type: none"> To conserve and protect the historic environment including buildings, archaeological sites and other culturally important features 	<ul style="list-style-type: none"> Impact on the historic environment? Conserve and protect the historic environment? Safeguard archaeological sites? Help in raising public awareness and understanding of cultural heritage and how the public influence the continuing development of cultural heritage? Conserve and enhance cherished aspects of local cultural heritage? Contribute to local character, customs and traditions? Affect the setting of any listed buildings, historic sites or culturally important sites?
	<ul style="list-style-type: none"> To safeguard distinctive cultural heritage features and their settings through the responsible design and siting of development 	<ul style="list-style-type: none"> Safeguard cultural heritage features and their settings through the promotion of responsible design and siting of development?

Landscape and Built Environment	<ul style="list-style-type: none"> • To protect the special qualities and characteristics of Shetland's landscapes and seascapes • To improve those landscapes and seascapes that are degraded 	<ul style="list-style-type: none"> • Consider all landscape and seascape implications? • Contribute to landscape and seascape protection? • Enhance degraded landscapes and seascapes? • Generate adverse effects on the integrity and/or special qualities of the National Scenic Area? • Strengthen the integrity and/or special qualities of National Scenic Areas?
	<ul style="list-style-type: none"> • To respect urban form, settlement pattern or identity 	<ul style="list-style-type: none"> • Promote respect for urban form, pattern or identity?
	<ul style="list-style-type: none"> • Improve the quality and design of the built environment 	<ul style="list-style-type: none"> • Promote improvements to the quality and design of Shetland's built environment?

Compatibility and Inter-relationship of SEA Objectives

The SEA Directive requires that the interrelationship between the SEA environmental objectives must be taken into account to demonstrate their internal compatibility. There is likely to be tensions between some of the objectives due to the range of topics identified as part of the SEA process.

Between the ten identified environmental objectives no incompatibilities or conflicts were found, although the analysis demonstrated that there were uncertainties between some objectives or some had no clear relationship to each other.

For example:

- The Biodiversity objective is fully compatible with the Soil, Water, Air and Landscape objectives. It is partly compatible with the Material assets objective while the Population, Health and Cultural Heritage have no clear relationship
- The objective to improve Water objective is partly consistent with Biodiversity, Soil, Material Assets and Landscape objectives
- In some cases, the relationship between more 'environmental' objectives and those that were socio-economic and cultural demonstrated there is no obvious relationship between the objectives, for example Cultural Heritage had few direct links or clear relationships

Appendix 8 demonstrates the clear trade-offs that exist within the assessment of the LDP. The last example demonstrated a need to understand or resolve potential conflicts. This focused the LDP on its ability to accommodate economic growth and development with safeguarding the environment through the concept of Sustainable Development. The synergies and inconsistencies were carried forward from the internal compatibility assessment into the development of the LDP alternatives, policies and mitigations. Despite the inherent tensions, it was considered that the suite of SEA Objectives was suitable to carry out an SEA. The LDP is a high level strategic document and any uncertainties or potential incompatibilities would be more likely to be realised at the project implementation level.

Testing the LDP Objectives against the SEA Objectives

The appraisal of the LDP objectives seeks to test their compatibility with the SEA objectives by identifying any potential conflict or omission between both sets of objectives. The appraisal matrix shown in Appendix 9 revealed that the objectives are broadly consistent with the SEA objectives. In some instances, however, the appraisal indicated a level of uncertainty in relation to outcomes, as these were dependent on the nature and scale of development. The matrix indicates that the majority of SEA objectives are compatible with the objectives of the LDP; the achievement of one will not undermine the potential to achieve the other. There is some uncertainty regarding whether some of

the more environmental SEA objectives are fully compatible with the LDP's development-based objectives.

Conflict could potentially occur between the objectives to promote economic growth and regeneration and the SEA environmental protection objectives. Potential conflicts have been identified between the SEA environmental protection objectives and the LDP objectives to meet local housing needs; to encourage appropriate forms of commerce and develop rural enterprise; and to promote opportunities for the rural areas to create job opportunities and maintain local facilities. This is due to the potential for land take, and the construction of the associated infrastructure that is often required to support economic growth. All could have an adverse effect on the environment e.g. habitat loss, species displacement, changes in landscape character, reductions in air quality (more greenhouse gas emissions) from increased vehicle usage or new buildings, increased flood risk. However, by incorporating the need to protect the environment and incorporating sustainability principles within the LDP objectives relating to economic growth, sustainable transport options and the development of Lerwick as a centre for employment, shopping, leisure and services, these potential conflicts will be offset. Furthermore a strong emphasis on protecting the natural environment and adapting to, or anticipating, the effects of climate change will provide further mitigation of conflict between objectives.

In reality all of the objectives are considered potentially compatible, as long as appropriate mitigation measures and conditions are imposed alongside planning permissions. The location and specifics of each development are unknown; however, all development will also be tested against other policies in the LDP, which will ensure greater protection for the environment. Therefore, no objectives are considered to be incompatible with each other.

Assessment of Alternatives

The SEA process requires that reasonable alternatives be considered. The preparation of the LDP required a Main Issues Report (MIR). This presented a series of Strategic Policy options – both Preferred Options and Alternatives that after assessment would help shape future policies contained within the LDP. As part of the interim Environmental Report produced in March 2010 an assessment of the MIR policy options and their alternatives was undertaken against the SEA objectives. This was contained in Annex E. The assessment utilised the environmental baseline and current environmental issues to guide the assessment process. The methodology for assessment included identification of the type of effect, their significance, spatial issues and duration. Appendix 10 of this Environmental Report contains an Assessment of Alternatives concentrates on the Council's final policy option preferences taken forward in the proposed LDP.

Assessment of the LDP Policies

The objectives, criteria and indicators are set out in Table 2 above. All SEA objectives and Plan policies were assessed against all the criteria listed.

It should be emphasised that the assessment concentrates on the likely significant effects as a result of the Plan and relevant to planning control. It is not possible, or necessary, for the assessment to try to assess every conceivable effect. While all potential effects should at least be considered, it is only significant (important) effects that are fully assessed and recorded within the context of development. Furthermore the assessment only considered likely effects that could reasonably be predicted. The actual effect of policies cannot be assessed because any effects will depend on how a policy is applied in relation to planning applications made. The assessment is predictive in nature and uses case-by-case judgement to assess the likelihood of significant effects. This was determined through using the SEA objectives and their associated criteria questions. Many policies assessed have no environmental effects or they are benign, trivial or neutral. In certain instances there can be uncertainty about effects due to lack of information or understanding about the likely effects, or about the environmental resource, or because the effects depend on how a policy is implemented. When the LDP's policies are consistent and compatible with the SEA objectives, the assessment shows compatibility or convergence.

The Council has adopted an assessment matrix that is structured and systematic to appraise the LDP's policies. The Council has been mindful to ensure that the assessment is not misrepresented as being overly sophisticated. It is based on informed professional judgements about the likely significant effects of a policy through consensus opinion using best available information. The effects considered include those stipulated in the EU Directive and The Environmental Assessment (Scotland) Act 2005. These include factors such as; likely significant secondary, cumulative, synergistic, short, medium and long term and permanent or temporary and positive and negative effects. The scoring system employed uses symbols and colour codes to keep the assessment transparent and credible.

Policy Assessment Scoring System

The assessment has been undertaken comprising of an assessment of the Plan's development policies. The assessment technique adopted is a departure from that used in the Scoping Report. In order to make scoring simple to understand and to analyse, a system of categories of effect was chosen for assessment purposes. A system of symbols and colour codes with categorised descriptions was employed. This is shown in Table 3 below.

Table 3 Policy Assessment Scoring System

Score	Description	Symbol
Significant Positive Effect	The proposed policy contributes significantly to the achievement of the objective.	++
Minor Positive Effect	The proposed policy partially contributes to the achievement of the objective but not completely.	+
Negligible/ Neutral Effect	The proposed policy does not have any effect on the achievement of the objective, or any effect is negligible.	0
Minor Negative Effect	The proposed policy detracts from the achievement of the objective but not significantly.	-
Significant Positive Effect	The policy detracts significantly from the achievement of the objective.	--
Uncertain Effect	The proposed policy has an uncertain relationship to the objective or the relationship is dependent on the way in which the aspect or distinct element is managed. In addition, insufficient information may be available to enable an assessment to be made.	?

The evaluation of predicted effects allows a judgement to be made on whether the effects are significant or not. The significance of effects is related to the scale and nature of the effect and to the importance or sensitivity of the environment that the effect acts on.

The above scoring system is applied to all policies in the Plan as they were formulated. Any policies that detracted from the achievement of an environmental objective or were uncertain required mitigation measures or a revision of the policy in order to reduce potential adverse effects or to enhance beneficial effects.

The scoring of the LDP policies against the SEA Objectives and criteria is shown in Appendix 11.

Cumulative Effects Assessment and Mitigation

A cumulative impacts assessment is shown in Appendix 12. Under the Environmental Assessment Act 2005, there is a requirement to consider the cumulative impacts of the LDP. These impacts arise from a number of smaller local environmental effects which, when combined, have the potential to have a wider more significant impact. Potential for cumulative impacts can also develop where the combined effects of a number of policies on a particular receptor are of greater significance than the individual policies.

Cumulative effects comprise the combined effects of reasonably foreseeable human induced changes within a specific geographical area and over a certain period of time and can be both direct and indirect. Assessment of the significance of cumulative effects needs to be undertaken in the context of

characteristics of the existing environment. This is to ensure that all of the developments:

- Are mutually compatible
- Are consistent with guidance on sustainable development and associated good practice
- Remain within the environmental capacity of Shetland

The Department of Communities and Local Government (DCLG) published a consultation draft of '*Environmental Impact Assessment: A Guide to Good Practice and Procedures*' in June 2006, which identified two types of cumulative effects that require consideration within project specific Environmental Impact Assessment (EIA). This guidance is applicable within an SEA context and is outlined below:

- **Cumulative Impacts of the Proposed Development and Other Schemes:** The interaction and combination of environmental effects of the Proposed Development with other committed projects and activities affecting the same receptor. Committed development is defined as development for which consent has been granted. Examples include residents along a road experiencing changes in local air quality and noise levels due to a cumulative increase in road traffic from new developments in the area
- **Impact Interactions:** The interaction and combination of environmental impacts and indirect effects of the Proposed Development affecting the same receptor either within the Site or in the local area. Examples include increased recreational access; noise disturbance and light spill into a woodland area

In Shetland it is likely that there will be some environmental implications arising from any new developments that ultimately will come on stream as a consequence of the Plan. Some issues are almost inevitable, and would arise as a result of any new type of development and these include:

- Emissions of greenhouse gases from energy and fossil fuel use used in the design, construction and operation of new builds as well as from traffic and transport both during construction and operational activities
- Embodied energy and carbon in building and construction materials used for housing, commercial buildings and other forms of development
- Increased pressure on Shetland's good air quality status from emissions generated by plant and equipment as well as traffic associated with any developments
- Threats to the water and soil environment from utilities and construction activities and changes to on-site drainage as a result of the development
- Waste generation including its collection and disposal

- Other issues are highly dependent on the nature, scale and location of particular developments. It is not inconceivable that some future developments might have implications for biodiversity (for example damage to habitats, disturbance of species and loss or damage to particular flora and fauna), landscape and historic character (including visual impact, effects on landscape and historic features) and wider transport impacts during construction, operation and maintenance

Although the Council can and does influence developers to adopt sustainable development principles and best practice in avoiding and /or mitigating any of these effects, it has no direct control over operations. The LDP contains various policies to mitigate the effects of developments or proposals. These policies were also analysed as part of the Policy Assessment exercise against the SEA objectives discussed earlier in Section 1.20 of this report.

In analysing the cumulative impact, no development projects of significant scale are proposed in the LDP and on that basis alone there would be no negative impacts on Shetland's environment. Any future projects during the life span of the Plan have the potential for environmental impacts, however these can be managed through phasing and implementation mechanisms, and development can be mitigated for on a site-by-site basis. Furthermore any impacts need to be balanced against the positive effects on factors such as human health, cultural heritage and material assets.

The LDP policies were also assessed as they have the potential to contribute to the cumulative impact of development in Shetland. Policies have been carefully developed and are designed to promote sustainable development in line with the LDP vision and supporting objectives. During the course of developing policies it was evident that there was potential for impacts on the environment, and as a result some policies were re-examined and amended to take into account environmental considerations. Mitigation measures have also been incorporated into the Local Plan through amended policies.

The SEA process has identified environmental assets and the environmental issues associated with Shetland. It will be through the Council's development management process guided by the LDP that site level environmental impacts of development will be identified. Site level analysis and monitoring will also lead to the production of more specific mitigation measures to ensure that the receiving environment is protected and, where possible, enhanced. As a result of the SEA process environmental mitigation and enhancement has been considered in the policy development process and been incorporated directly into the LDP to ensure that the environment is protected and improved.

Monitoring Framework for the LDP

As part of the SEA process, a monitoring framework should be established to assess potential effects due to implementation of the LDP. As it contains a number of policies that will influence land use planning in Shetland in the future, it is important to monitor the effects of this Plan, particularly in relation

to the key environmental objectives. Monitoring will allow the Plan to be reviewed as necessary to ensure that it remains up-to-date and relevant to the needs of the people and Shetland's environment.

Monitoring is important for identifying whether the LDP is having an adverse effect on the environment. In the event that adverse effects are identified then these need to be addressed. It is also important to monitor the predicted positive effects to check whether the predicted effect is actually occurring. Future reviews of the LDP and other related plans will also need to take into account any adverse effects or trends identified during monitoring so that future policies, proposals or strategies can either be modified or rejected accordingly. In addition to the identification of any adverse effects of the LDP following its implementation, monitoring is also important for obtaining information to fill any gaps in the baseline; reducing uncertainties; and testing the accuracy of the predictions. Information on positive effects can also be used to enhance the performance of future plans, policies and strategies.

Monitoring usually involves the use of indicators or targets. An 'indicator' is a measure of how the 'baseline' has changed. Given that SEA indicators are used to monitor whether the LDP's policies are performing as predicted they are usually based upon information that will be directly affected by the implementation of the LDP. The methods used for monitoring vary according to the type of indicators that are being used. The SEA indicators selected for monitoring the Shetland LDP comprise both quantitative (facts and figures) and qualitative (descriptive) information. Changes in quantitative information can be measured through the use of data capture, interrogation and management systems. However, it is important that the interpretation of the quantitative 'data' accurately represents what is happening on the ground, as 'numbers' can sometimes be misleading. Qualitative data is generally harder to measure as it relies upon 'expert judgement' to determine whether there has been a change in the baseline situation, what that change is and whether it is as predicted. Given that monitoring is undertaken over a long period of time there is potential that the individuals involved in the monitoring process will change during that time period. It is therefore important that the individuals responsible for measuring changes in a qualitative dataset e.g. landscape quality record the criteria used to form any 'judgement' that is made. This will ensure that the 'evidence' to support the judgement is recorded and will help add consistency to the monitoring process. Monitoring should be measurable over the time period for which the LDP is to be adopted and should relate to the significant effects that have been identified as part of the assessment. However it is worth monitoring the baseline situation for other non-significant effects to ensure that these have not been predicted incorrectly. The indicators developed during the earlier Scoping stage of the SEA process have been developed further for the purpose of monitoring. These indicators relate to the environmental baseline and to the SEA objectives against which the Local Plan has been assessed.

Whilst there is a vast range of information available for use as SEA indicators, a large proportion of this information e.g. the condition of Sites of Special Scientific Interest (SSSIs) may potentially be subject to change from 'external'

factors that are unrelated to the LDP e.g. farming practices. Also, National, European or Internationally designated sites, by virtue of their status, are already protected against development (land use planning related or not) that would have significant adverse effects on their condition or integrity. For this LDP, indicators have been proposed on the basis that they can be used to measure and monitor general environmental change. This can be achieved by undertaking an annual or biennial review of the overall baseline within Shetland. Any changes in the overall 'baseline' situation (e.g. deterioration in the condition of a SSSI) can then be reviewed to determine if those changes occurred as a result of the implementation of the LDP policies or were due to external influences that are beyond the control of the planning system e.g. agricultural land practices. Appendix 13 provides details of the proposed monitoring framework developed for Shetland Islands Council. In Shetland there is very little in the way of a formalised approach to collecting environmental baseline data through indicators. No attempt has previously been undertaken to produce a State of Shetland's Environment Report. For the purposes of monitoring the effects of the LDP the Council will utilise existing local data sets where they exist and national statistics from statutory agencies including SNH, SEPA and Historic Scotland. The approach to collecting data using indicators will be an evolving process and is outlined below.

Management and Responsibilities

The monitoring data will be collated in a structured manner so that patterns and trends can be identified and remedial action implemented. It is recommended that the data be collated in a tabular format and records the following:

- The SEA Objective.
- The indicator being used.
- The data recorded.
- The trend i.e. is the situation improving or deteriorating.
- The need for remedial action.
- The remedial action to be taken.
- The date for the implementation of remedial action.

However, it is currently anticipated that remedial action will not be needed as there are no significant adverse effects anticipated as a result of the LDP strategic policies and development policies.

Habitats Regulations Assessment (HRA)

The requirements of the Directive have been transposed into Scottish domestic legislation by The Conservation (Habitats, &c.) Regulations 1994, as amended. Articles 6 (3) and 6 (4) of the Habitats Directive require 'appropriate assessment' (AA) to be undertaken on proposed plans or projects which are not necessary for the management of the site but which are likely to have a significant effect on one or more European sites either individually, or

in combination with other plans and projects. An AA of the LDP is required under the terms of Regulation 48 of the Habitats Regulations 1994. The assessment must be made of any plan or programme likely to have a significant effect on the conservation objectives of sites designated under the EU Habitats Directive 92/43/EEC (SACs) or the Wild Birds Directive 79/409/EEC (SPAs.) SNH guidance requires that Ramsar sites are included within HRA/AA and that candidate SACs and proposed SPAs are treated as 'designated' sites in the context of HRA.

The purpose of HRA/AA is to assess the impacts of a land-use plan, in combination with the effects of other plans and projects, against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site. Where significant negative effects are identified, alternative options or mitigation measures should be examined to avoid any potential damaging effects. The scope of the HRA/AA is dependent on the location, size and significance of the proposed plan or project and the sensitivities and nature of the interest features of the European sites under consideration. Broader environmental/ habitats issues that are related to, but are not directly implicated in HRA requirements, are referred to earlier in this SEA Environmental Report. The Council has produced a HRA Screening Report in consultation with SNH Shetland Office. An AA was deemed unnecessary since the LDP was assessed as unlikely to have significant environmental effects on the integrity and conservation objectives on Shetland's European Sites.

Strategic Flood Risk Assessment (SFRA)

A SFRA is designed for the purposes of specifically informing the Development Planning Process, i.e. LDPs. A SFRA involves the collection, analysis and presentation of all existing and readily available flood risk information (from any source) for the area of interest. It constitutes a strategic overview of flood risk and would generally be executed as a desk top study. However, in some instances, greater detail may be required (if appropriate) to inform the relevant development plan. This could involve the identification of priority areas for more detailed analysis. The Council has produced a SFRA as a separate supporting document to the LDP.

Final Environmental Report and Incorporation of Consultation Authority Comments

Natural Capital Ltd produced the interim LDP Environmental Report. The same consultancy also produced the LDP Scoping Report. The Council, through the SEA Gateway, received comments from the SEA Consultation Authorities (CA). In Scotland these are Historic Scotland, SEPA and Scottish Natural Heritage. They have a range of environmental expertise and assist Responsible Authorities (SIC) in the SEA stages by giving advice and comments.

Under the SEA Directive (2001/42/EC) and the Environmental Assessment (Scotland) Act 2005 the above agencies have a statutory duty to input to plans and programmes prepared by others. Responsible Authorities' representatives can seek advice on the preparation of their SEA through the Scottish Government's SEA Gateway or directly from the CA. The incorporation of comments into this final Environmental Report are outlined in Appendix 14

Conclusions

The SEA of the LDP has appraised the effects of individual policies, as well as the overall effect of the plan, including cumulative and incremental effects. The SEA has found that the emerging Shetland LDP will make a significant contribution to sustainability, with a particularly strong focus on meeting housing and community needs, enhancing accessibility and protecting the Shetland's natural environment. The key negative effects identified relate to increased housing and employment development and the potential cumulative effects of development arising in key settlement areas. The SEA has sought to make further recommendations to mitigate negative effects and enhance the positive opportunities of this future development within Shetland. This SEA Final Environmental Report, alongside consultation responses received, has been used to inform the preparation of policies in the LDP Document.

Modifications made to the interim environmental report were associated with updating, clarification and making more explicit policy delivery. The modifications to the LDP were not considered to be significant with regard to the SEA and there is no requirement to carry out further appraisals. However, overall it is considered that the modifications will generally improve the sustainability of the Shetland LDP. The policies within the Draft LDP generally support the range of sustainability objectives identified in the SEA Framework. Recommendations that have arisen throughout the SEA process have been incorporated into the proposed LDP policies. The policies are considered to offer significant positive effects on environmental and socio-economic SEA objectives. In addition, the HRA Screening Assessment on the potential for likely significant effects on Shetland's European Sites (Natura 2000) concluded that there will not be any significant adverse effects on the integrity of these international sites alone or in-combination from the Shetland LDP.

Next Steps

The development of the LDP is part of an iterative process with amendments made as a result of advice provided through consultation to date through the SEA process.

The final Environmental Report will be presented for public and statutory consultation and be subject to a 6 week consultation period from...X..to..X.., where expressions of opinions or comments on the report will be received. The Revised Environmental Report will be available to view online and at the Development Service Reception.

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The documents will also be available on the Council’s website at:

<http://www.shetland.gov.uk/planning/LocalDevelopmentPlan.asp>

Section 17 of the Environmental Assessment Act (Scotland) Act 2005 requires the Council to take account of the findings of the Environmental Report in the preparation of the LDP. It also stipulates that a period of consultation is undertaken to finalise the LDP prior to adoption. After adoption of the LDP, the Act requires the Council to provide the public and the Consultation Authorities (via the SEA Gateway) with information on how environmental considerations and the consultation responses have been reflected in the Plan. Following the consultation period all views will be collated and, where appropriate, alterations will be made. Furthermore future monitoring arrangements for the Plan’s implementation have to be outlined.

In order to meet the above requirements the Council will prepare a Strategic Environmental Statement to accompany the completed LDP. This document, known as a ‘Post Adoption Statement’, will outline how the Environmental Report influenced the development of the LDP and will include the framework for monitoring the effects of the LDP.

Expected Date	Milestone
	Public and Statutory Consultation Period Publication of proposed LDP and Environmental Report with a period of X weeks for representations
	Period for consideration of representations and potential modifications
	Submission and examination by Scottish Government
	Receipt and consideration of the Scottish Government Reporter’s recommendations
	Adoption of the LDP
	Prepare and publish Post Adoption Statement
	Monitor and review of the LDP