



**Aberdeenshire**  
COUNCIL



## **The Aberdeen City and Shire Structure Plan**

### **Strategic Environment Assessment: Environmental Report**

June 2008

## SEA ENVIRONMENTAL REPORT – COVER NOTE PART 1

### PART 1

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### PART 2

An Environmental Report is attached for:

**Aberdeen City and Aberdeenshire (excluding the Cairngorms National Park) Structure Plan**

The Responsible Authority is:

**ABERDEENSHIRE COUNCIL**

### PART 3

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**Date**

June 2008

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## 1 Non-technical Summary

### Introduction

- 1.1 Consistent with paragraph 10 of Schedule 3 of the Environmental Assessment (Scotland) Act 2005, Aberdeenshire Council has prepared this non-technical summary for the Aberdeen City and Aberdeenshire (excluding Cairngorms National Park) Structure Plan. It covers the key issues, outcomes, topics and processes of the Strategic Environmental Assessment process listed at paragraph 1-9 of Schedule 3. The following sections summarise the appropriate headings.

### How to comment on the Environment Report

- 1.2 The Environment Report will be available for public comment for the period of ten weeks, from 27 June 2008 to 5 September 2008. All comments should clearly state to which part of the Environment Report they refer. Comments should be submitted within the consultation period to the joint Strategic Development Plan Team at the address below:

Aberdeen City and Shire Strategic Development Plan Team  
Archibald Simpson House  
27 – 29 King Street  
Aberdeen  
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### Summary of SEA

- 1.3 The structure plan includes a vision statement, 6 aims, 6 strategic objectives and a spatial strategy. The vision aims to deliver economic growth, address sustainable development and climate change, enhance the region's quality of life, protect the historic and natural environment, facilitate the creation of sustainable mixed communities, and promote sustainable travel.
- 1.4 The structure plan has a relationship with 11 international, 52 national and 27 regional and local qualifying plans and programmes and other environmental objectives.
- 1.5 Consideration of the current state of the environment in the northeast includes the possible impact of water abstraction on the River Dee which is an internationally designated site. If water levels fall due to climate change, these interests may become threatened. Other issues include the size of region's global footprint in terms of resource use and carbon emissions, as the region has one of the highest in Scotland. Were the structure plan not prepared, it is unlikely there would be a long-term plan to ensure the sustainable use of resources or investment in infrastructure and services. Important heritage features could also be threatened without the structure plan to ensure their protection and enhancement.
- 1.6 Areas likely to be significantly affected by existing environmental problems are likely to have the following environmental characteristics
- high phosphorus levels (from sewage) and other nutrients affecting the River Dee, an international nature conservation site;
  - a build-up of nitrates from diffuse pollution within the River Ythan catchment is adversely affecting species that live in the mud flats of the

river mouth (Ythan Estuary), an internationally designated nature conservation site;

- reduction in water flow of the River Dee due to water abstraction;
- poor air quality in Aberdeen City centre;
- fragmented habitats/open space networks/wildlife corridors affecting less mobile species from migrating or adapting to climate change;
- extensive use of land, and cumulative impact is resulting in the loss of biodiversity; and
- pockets of deprivation through low job opportunities and income could be adversely affecting people's mental health in Aberdeen and in northern Aberdeenshire.

1.7 The likely positive and negative significant effects on the environment arising from the implementation of the plan include:

- adverse impacts to protected species in the River Dee from increased water abstraction rates through reduced water flow levels;
- increase phosphate levels in the Ythan Estuary adversely affecting protected species;
- deteriorating air quality in Aberdeen;
- redevelopment of vacant and contaminated land in Aberdeen;
- increase in the mix and tenure of housing provision;
- lower carbon emissions; and
- efficient use of resources and infrastructure.

1.8 Some of the adverse effects will be cumulative, synergistic and long term. However, the 25-year time scale of the structure plan will allow investment in infrastructure in order to reduce impacts on the environment, and plan for equipment that would have been too expensive for short-term growth (e.g. upgrading waste water treatment plants to significantly reduce phosphate output levels).

1.9 The alternatives considered for the SEA were derived from a set of eight strategic options. These were technically appraised to identify the preferred spatial strategy for the plan. The plan itself and the alternatives were assessed against 28 SEA objectives. These objectives were used to describe, analyse and compare environmental effects. The SEA objectives are separate from the structure plan's objectives although they can influence each other and even overlap.

1.10 The structure plan will be replaced by a strategic development plan within 5 years and then reviewed on a 4-5 yearly cycle. A monitoring framework has been developed to identify who is to monitor what and when.

## 2 Introduction

- 2.1 In accordance with the Environmental Assessment (Scotland) Act 2005, the Planning Policy and Environment Service of Aberdeenshire Council have prepared this Environmental Report as part of the preparation of the Aberdeen City and Aberdeenshire (excluding Cairngorms National Park) Structure Plan. This report is based on the scoping report on which the consultation authorities (Scottish Environmental Protection Agency (SEPA), Scottish Natural Heritage (SNH) and Historic Scotland (HS) have already expressed their views. This report is being prepared to:
- provide information on the structure plan and the SEA process;
  - identify, describe and evaluate the likely significant environmental effects of the structure plan and reasonable alternatives; and
  - to provide an early and effective opportunity for the Consultation Authorities and the public to offer their views on any aspects of this report.
- 2.2 The EU Directive defines SEA as:
- preparing an Environmental Report on the likely significant effects of the draft structure plan;
  - carrying out consultation on the draft plan or programme and the accompanying Environmental Report;
  - taking into account the Environmental Report and the results of the consultation in decision-making; and
  - providing information when the draft plan or programmes is adopted showing how the results of the environmental assessment have been taken into account.
- 2.3 The Environmental Assessment (Scotland) Act 2005 requires the preparation of strategic environmental assessment for a wide range of plans and programmes including the structure plan. The objective of the Act is to:
- provide a high level of protection of the environment and to;
  - integrate environmental considerations into plan preparation and adoption;
  - promote sustainable development; and
  - increase public participation in environmental decision making.
- 2.4 The key SEA stages are provided in the Table 1 below:

**Table 1: Key SEA stages**

Stage	Description
<b>Screening</b>	Determining whether the structure plan is likely to have significant environmental effects and whether an SEA is required. It was viewed that the structure plan would require an SEA due to its nature and significance.
<b>Scoping</b>	Deciding on the scope and level of detail of the Environmental Report, and the consultation period.
<b>Environmental Report</b>	Publishing an Environmental Report on the draft structure plan and its environmental effects, and consulting on it.
<b>Approval</b>	Providing information on the approved plan; providing information on how the consultations have been taken into account and setting out the monitoring framework.
<b>Monitoring</b>	Monitoring significant environmental effects and taking appropriate remedial action for any which are unforeseen significant environmental effects.

2.5 In this report, the non-technical summary is covered in Chapter 1 while Chapter 2 introduces the main report. Chapter 3 provides some key facts about the structure plan including the overview, name of authority, plan title, the reason why the plan is being drawn, plan subject, period covered, area coverage and frequency of future plan updates. Chapter 4 discusses the plan context including other relevant plans and programmes; environmental problems relevant to the plan; environmental baseline. Chapter 5 looks at alternatives considered, assessment methods, the assessment of the plan and the alternatives as well as the mitigation framework for the plan. The need for an appropriate assessment is provided in chapter 6. The Monitoring framework is addressed in Chapter 7 while the next steps are discussed in Chapter 8. The last section contains the appendices.



### 3 Key facts about the Aberdeen City and Shire Structure Plan

3.1 The key facts relating to the plan are set out in Table 2 below.

**Table 2: Key facts relating to the Structure Plan**

Name of Responsible Authority	Aberdeenshire Council
Title of PPS	Aberdeen City and Aberdeenshire Structure Plan
What prompted the PPS	Town and Country Planning (Scotland) Act 1997
Subject	Land Use
Period covered by PPS	2007 - 2030
Frequency of updates	Every five years
Area covered by PPS	The whole of Aberdeen and Aberdeenshire excluding the Cairngorms National Park
Purpose and/objectives of PPS	The purpose of the plan is to provide a framework for the strategic development and use of land in Aberdeen City and part of Aberdeenshire. It does not provide a framework for all development, only actions defined as “development” in legislation, and for which planning permission is a legal requirement.
Contact Point	SDP Team Archibald Simpson House 27-29 King Street Aberdeen AB24 5AA  Email: DJennings@aberdeencity.gov.uk Phone: 01224 628214 Fax: 01224 640517

#### **The SEA activities to date in relation to the structure plan**

3.2 Table 3 summarises the SEA activities to date in relation to the structure plan

**Table 3: SEA actions to date**

	SEA Activity	When carried out	Notes
1	Screening	June 2006	SEA was deemed necessary due to the nature and scale of the plan. As a result, no screening report was submitted to the SEA Gateway.
2	Scoping	March 2007	The scoping report was submitted to the SEA Gateway for comment by the three consultation authorities on 17 April 2007. Comments were received on 21 May 2007. The consultation authorities approved the methodology proposed with very little amendments or

			additions.
3	Relationship with other plans, programmes & environmental objectives	August 2007	Updated following comments from the consultation authorities on 21 May 2007.
4	Environmental baseline	February 2007	Updated following comments from the consultation authorities on 21 May 2007.
5	Environmental issues		Updated following comments from the consultation authorities on 21 May 2007.
6	Evolution of the likely future environment without the plan	July 2007	
7	Alternative/options	February 2007 and July 2007	Alternatives were known in February, and were assessed against the SEA objectives, as part of the plan's technical appraisal of the eight options.
8	Assessment method established	June 2007	Following the comments received from the consultation authorities on 21 May 2007, the assessment methodology was formally approved by ACSSPC on 25 June 2007
9	Assessment of the vision, scale, phasing, and provisional strategy.	September 2007	Agreed by members of the Aberdeen City and Shire Strategic Planning Committee (ACSSPC) on 28 September 2007.
10	Selection of plan alternatives	September 2007	Alternatives were formally identified following the agreement of the spatial option by members of ACSSPC on 28 September 2007
11	Likely problems after implementation & mitigation identified	February 2007	Method/framework was agreed by the consultation authorities with minor amendments on 21 May 2007
12	Monitoring method established	February 2007	Agreed by the consultation authorities on 21 May 2007
13	Consultation timescale with	17 April 2007	Comments were received from the consultation authorities on 21

	consultative – authorities		May 2007. Few alterations or amendments were proposed. Members of the ACSSPC approved the changes to the scoping report on 25 June 2007
14	Consultation timescale with the public	16 August 2007	The period of six weeks was agreed by the Scottish Ministers 16 August 2007
15	Development of strategic objectives	January 2008	Were drafted in November 2007 and agreed by ACSSPC on
16	Notification & publicity	March to May 2008	The notice is to be published

## 4 Context of the Structure Plan

4.1 Schedule 3 of the Environmental Assessment (Scotland) Act 2005 requires that the Environmental Report should include “an outline of the contents and main objectives of the plan or programme.” It should also include the relationship with other plans and programmes and environmental objectives; relevant aspects of the current state of the environment; and environmental problems. The purpose of this section is to explain the above issues that set the context for the structure plan.

### **Outline of vision, aim, and objectives**

4.2 The key elements of the plan include a vision statement, spatial strategy, objectives, targets and delivery mechanisms. The plan covers the whole of Aberdeen and Aberdeenshire but excludes the Cairngorms National Park. The vision statement is set out in Box 1.

#### **Box 1: Vision statement**

“By 2030, Aberdeen City and Shire will be an even more exciting, modern and sustainable European city region and an excellent place to live, visit and do business.

We will be recognised for:

- our enterprise and inventiveness, particularly in the knowledge economy and in high-value markets;
- the unique qualities of our environment; and
- our high quality of life.

We will have acted confidently and taken the courageous decisions necessary to further develop a robust and resilient economy and to lead the way towards development being sustainable, including dealing with climate change and our society being more inclusive.”

4.3 In order to realise this vision a series of aims have been developed. These provide a useful guide, which both interprets the vision and focuses explicitly on the role the plan will play in delivering the vision in partnership with stakeholders and the public.

4.4 The main aims of the plan are to:

- provide a strong framework for investment decisions which help to grow and diversify the regional economy, supported by promoting the need to use resources more efficiently and effectively;
- take on the urgent challenges of sustainable development and climate change.

4.5 To support these main aims, the plan also aims to:

- make sure the area has enough people, homes and jobs to support the level of services and facilities needed to maintain and improve the quality of life;
- protect and improve our valued assets and resources, including the built and natural environment and our cultural heritage;

- help create sustainable mixed communities, and the associated infrastructure, which meet the highest standards of urban and rural design and cater for the needs of the whole population; and
  - make the most efficient use of the transport network, reducing the need for people to travel and making sure that walking, cycling and public transport are attractive choices.
- 4.6 To deliver the plan’s vision and aims, six strategic objectives have been identified. These are:
1. economic growth;
  2. sustainable development and climate change;
  3. population growth;
  4. environmental quality;
  5. sustainable mixed communities; and
  6. accessibility.
- 4.7 The spatial strategy proposes:
- three strategic growth areas:
    - Aberdeen City
    - Huntly to Laurencekirk
    - Aberdeen to Peterhead (via Hatton);
  - local growth and diversification outwith the three strategic growth areas; and
  - Regeneration Priority Areas (in Aberdeen and Aberdeenshire)
- 4.8 The structure plan also sets out how it will be implemented during its lifetime through other plans and strategies (e.g. to deliver infrastructure and internal and external proposals and projects) and how it will be monitored and reviewed.
- 4.9 Housing and employment land allowances are also set out in the plan. The housing allowance totals 72,000 dwellings over the lifetime of the plan, with a preferred housing allowance and two further alternatives. 36,000 dwellings are proposed in both Aberdeen City and Aberdeenshire. The Aberdeenshire figure includes the allocation required for local growth (around 17,100 dwellings).
- 4.10 The structure plan proposes a marketable supply of at least 60ha of employment land in the strategic growth areas.

Relationship with other plans and programmes and Environmental Objectives

- 4.3 Table 4 below lists other plans, programmes and environmental objectives relevant to the Aberdeen City Council and Aberdeenshire Council Structure Plan to be analysed in the Environmental Report for their relationship with the structure plan.
- 4.4 Detailed analysis of how they apply to the structure plan and SEA issues are shown at Appendix 1. It should be noted that the modernisation of the planning system; the gradual replacement of National Planning Policy Guidelines with

Scottish Planning Policies is resulting in many planning guidance updates. Changes in legislation, regulations, policies and guidelines continue to influence land use planning. Consequently, any changes in policies will be tracked throughout the SEA process, keeping the process iterative and current. However, those changes occurring after the plan has been submitted through legislative process for approval cannot be considered.

- 4.5 Planning Advice Notes have been excluded as they are only good practice guides which would be more appropriately reflected in the local development plan or other lower tier plans/strategies.

**Table 4: Other Plans, Programmes and Environmental Protection Objectives**

	<b>Name of plan, programme, strategy or environmental protection objective</b>
	<b>International Level</b>
1	Council Directive 92/43/EEC <i>on the Conservation of natural habitats and of wild fauna and flora (known as the Habitats Directive)</i>
2	Council Directive 79/409/EEC <i>on the conservation of wild birds (known as the Wild Birds Directive)</i>
3	Council Directive 2000/60/EC <i>Water Framework Directive - integrated river basin management for Europe</i>
4	Council Directive 91/676/EEC <i>on nitrates from agricultural sources (known as the Nitrates Directive)</i>
5	Council Directive 99/31/EC <i>on the landfill of waste (known as the Landfill Directive)</i>
6	Proposed Council Directive: <i>Soil Framework Directive</i>
7	The National Emission Ceilings Directive 2001/81/EC (NECD)
8	Council Directive 2006/12/EC <i>on waste (the Waste Framework Directive)</i>
9	Council Directive 2005/0183/EC <i>Ambient air quality and cleaner air for Europe</i>
10	Council Directive 2002/96/EC <i>on waste electrical and electronic equipment</i>
11	European Landscape Convention (2000)
	<b>National Level</b>
1	National Planning Framework for Scotland (2004)
2	DTI (2007) Energy white paper: meeting the energy challenge
3	Securing the future – UK Government sustainability development strategy (2005) (implemented in Scotland through the <i>Choosing Our Future: Scotland's Sustainable Development Strategy</i> )
4	Meeting the Needs, Priorities, Actions and Targets for Sustainable Development in Scotland (2002)
5	Climate Change: The UK programme (implemented in Scotland through the <i>Changing Our Ways: Scottish Climate Change Programme</i> )
6	Scottish Climate Change Impacts Partnership ( <a href="http://www.sccip.org.uk/default.aspx?pid=1">http://www.sccip.org.uk/default.aspx?pid=1</a> )
7	BREEAM/ EcoHomes
8	Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2000)
9	Scotland's Transport Future: The Transport White Paper (2004)
10	Wildlife and Countryside Act 1981 (as amended)
11	The Nature Conservation (Scotland) Act 2004
12	UK Biodiversity Action Plan (1994)

	<b>Name of plan, programme, strategy or environmental protection objective</b>
13	Water Environment (Controlled Activities) (Scotland) Regulations 2005
14	SEPA (2006) Indicative Flood Map
15	SEPA (2003) Groundwater Protection Policy for Scotland: Environmental Policy Number 19
16	The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) – to be updated
17	The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2007
18	Scottish Executive (2001) A Policy Statement for Scotland Designing Places
19	Scottish Executive (2006) People and Place: Regeneration Policy Statement
20	British Standards Institute (2006) Planning to halt the loss of biodiversity – Biodiversity conservation standards for planning in the United Kingdom – Code of Practice
21	Scottish Executive (2004) Scottish Biodiversity Strategy: <i>Scotland's Biodiversity: It's in Your Hands. A strategy for the conservation and enhancement of biodiversity in Scotland</i>
22	Scottish Executive Marine & Coastal Strategy (2005) – <i>Seas the Opportunity – A Strategy for the Long Term Sustainability of Scotland's Coasts and Seas</i>
23	The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997
24	Ancient Monuments and Archaeological Areas Act 1979
25	Land Reform (Scotland) Act 2003
26	National Waste Strategy
27	Scottish Executive (2007) <i>Reaching Higher – Building on the Success of Sport 21</i>
28	Scottish Executive (2002) Scottish Planning Policy (SPP) 1: The Planning System
29	Scottish Executive (2002) SPP2: Economic Development
30	Scottish Executive (2003) SPP3: Planning for Housing
31	Scottish Executive (2006) SPP4: Planning for Minerals
32	Scottish Executive (1998) National Planning Policy Guidelines (NPPG) 5: Archaeology and Planning
33	Scottish Executive (2007) SPP6: Renewable Energy
34	Scottish Executive (2004) SPP7: Planning and Flooding
35	Scottish Executive (2006) SPP8: Town Centres and Retailing
36	Scottish Executive (1996) SPP10: Planning for Waste Management
37	Scottish Executive (1996) SPP 11: Open Space and Physical Activity
38	Scottish Executive (1997) NPPG12: Skiing Developments
39	Scottish Executive (1997) NPPG13: Coastal Planning
40	Scottish Executive (1999) NPPG: 14 Natural Heritage
41	Scottish Executive (2005) SPP15: Planning for Rural Development
42	Scottish Executive (2005) SPP 17: Planning for Transport
43	Scottish Executive (1999) NPPG18: Planning and the Historic Environment
44	Scottish Executive (2005) NPPG19: Radio Telecommunications
45	Scottish Executive (2006) SPP 21: Green Belts
46	Scottish Executive (2007) SPP22 Planning for Fish Farming

	<b>Name of plan, programme, strategy or environmental protection objective</b>
47	Scottish Landscape Forum' (2007) <i>Scotland's living landscapes – places for people</i>
48	Scottish Historic Environment Policies (SHEP) No 1 <i>The Historic Environment</i> [CON 728] (2006)
49	SHEP No 2 <i>Scheduled Ancient Monuments</i> (2006)
50	SHEP No 3. <i>Gardens and Designed Landscape</i> [CON 731] (2006)
51	Passed to the Future (Historic Scotland Policy)
52	Historic Scotland (1998) Memorandum of Guidance on Listed Buildings and Conservation Areas
	<b>Regional level</b>
1	North East Scotland Biodiversity (2001) North East Scotland Biodiversity Action Plan
2	Aberdeen and Aberdeenshire Councils (2005) Forest and Woodland Strategy for Aberdeenshire and Aberdeen, Aberdeenshire Council
3	River Dee Catchment Management Plan – Consultative Draft (Oct 2006)
4	Modern Transport System (MTS), its revision to be known as the Regional Transport Strategy (RTS), NESTRANS, and Nestrans Annual Report 2005
5	North East Scotland Area Waste Plan (2003)
6	Economic Growth Strategy for North East Scotland (Local Economic Development Strategy 2003-2010)
7	Cobham Resource Consultants (1997) National programme of landscape character assessment: Banff and Buchan, Scottish Natural Heritage Review No 37
8	Environmental Resources Management (1998) South and Central Aberdeenshire: landscape character assessment, Scottish Natural Heritage Review No 102
9	Turnbull Jeffrey Partnership (1996) Cairngorms landscape assessment, Scottish Natural Heritage Review No 75.
10	Historic Scotland (2005) Historic Land Use Assessments
	<b>Local level</b>
1	Aberdeen futures - Aberdeen City Community Plan
2	Aberdeenshire Community Plan
3	Aberdeen City Joint Health Improvement Plan
4	Aberdeenshire Joint Health Improvement Plan
5	Aberdeen City Local Housing Strategy 2004-2009
6	Aberdeenshire Local Housing Strategy 2004-2009
7	Aberdeen Contaminated Land Strategy
8	Aberdeenshire Contaminated Land Strategy
9	Aberdeen City Local Transport Strategy (Under review)
10	Aberdeenshire Local Transport Strategy (2007-2010)
11	Aberdeen City Council Air Quality Action Plan 2006
12	Aberdeen City (2006) Air Quality Action Plan
13	Aberdeen City Nature Conservation Strategy (Under review)
14	Cairngorms National Park National Plan
15	Aberdeen City Council (2007) North East Global Footprint Reduction Report, Aberdeen City Council, Aberdeenshire Council and WWF.
16	Core Path Plans, Aberdeen City Council and Aberdeenshire Council
17	Aberdeen City Council (2005) Aberdeen's Parks and Greenspace Strategy



- 4.6 Appendix 1 summarises the key points of the relevant plans, programmes and environmental protection objectives.
- 4.7 From the analysis of the relevant plans, programmes and environmental protection objectives (listed in column 2 of Appendix 1), we observe that the strategic land use plan should consider emphasising the following:
- the protection, maintenance and enhancement of biodiversity, the landscape character, and built and cultural heritage;
  - sustainable use of water and mitigate the effects of floods and droughts;
  - reducing water pollution and enhancing water quality;
  - protecting and improving the water environment;
  - promoting sustainable waste management;
  - creating sustainable communities with a focus on the sustainable use of natural resources;
  - to limit or reduce the emissions of greenhouse gases;
  - encourage the increased use of renewable energy resources and the more efficient use of energy and water in housing;
  - limit or reduce the emissions of pollutants;
  - promoting quality of life issues;
  - ensuring more coherence and cost effectiveness in policy-making;
  - supporting economic sustainability consistent with social progress and the environment;
  - dealing with housing shortage, low demand, abandonment and liveability;
  - promoting good design, safe environments, clean environments and good quality services;
  - promoting sustainable alternatives to car use and reducing congestion and traffic pollution through the allocation of land uses;
  - promoting non-motorised transport, access to outdoor recreation and greenspace;
  - promoting economic growth, social inclusion, environmental improvement, health and safety;
  - addressing climate change;
  - avoiding further degradation of the coastal and marine environment;
  - promoting the economy, supporting the community and the public service; and
  - setting the planning policy framework for development consents for major residential, commercial, retail, and employment developments.
- 4.9 Were the structure plan not implemented there would be no plan-led system to direct development to the most appropriate locations. This is likely to lead to unplanned and piecemeal development being built in inappropriate locations. The likely changes to the environment could be as follows:
- deterioration in air quality;
  - deterioration of water quality from phosphate and nutrient discharge from water treatment plants;
  - increase in water abstraction from the River Dee to unsustainable levels, resulting in irreversible harm to the qualifying interests in the River Dee;
  - increase in water abstraction and wasted water as policies would not exist to reduce water use and support water improvement technologies;
  - likelihood of inappropriate developments on flood plains, affecting their function and increase the risk of flooding downstream;

- contaminated, derelict and vacant land (commonly known as brownfield land) would remain undeveloped;
- slow uptake of measures to counter the effects of climate change, risking peoples lives and damage to property from flooding and storm damage;
- continued use and possible increase in fossil fuels;
- rise in the regions global footprint;
- deterioration of wildlife corridors from development or due to their being isolated and not linked with one another;
- loss of biodiversity from development and pollution;
- ad hoc access or no access to open spaces, employment, education and services thus leading to social exclusion;
- little or no development of recreation facilities;
- inappropriate design styles which pay little respect to local vernacular styles and the needs of society (e.g. family housing and affordable homes);
- lack of services for special needs;
- destruction or deterioration of valued natural and historical assets;
- deterioration of the landscape and townscape from inappropriately located, sited and designed developments;
- no strategic investment in infrastructure and services for the long term growth of the region; and
- developments built not using sustainable materials.

Relevant aspects of the current state of the environment (baseline data)

- 4.10 The existing environmental baseline data have been collected from a wide range of sources, including national government/agency websites, consultation authorities, North East Scotland Biological Records Centre (NESBReC), the 2001 census. Environmental issues such as air, water, soil, climatic factors, landscape, cultural heritage, biodiversity and material asset set the context for the collection of the baseline data. The data is then presented in a table covering:
- the latest data for Aberdeen and Aberdeenshire;
  - comparators: regional or national data against which Aberdeen and Aberdeenshire's status are compared;
  - targets where they exist;
  - trends where they exists;
  - environmental problems/issues – where Aberdeen and Aberdeenshire are performing badly compared with the comparators or targets; and
  - referencing the sources of data used.
- 4.11 The detailed analysis of the baseline data is presented in Appendices 2 and 3. The linkages between the SEA Topics are presented in Table 5 below.

**Table 5: Linkages between SEA topics**

SEA Topic	Link	SEA Topic
Water: Increasing water abstraction from the River Dee by Scottish Water is likely to have an affect on water quality and associated fauna and flora.(e.g. Fresh water pearl mussels and Atlantic Salmon)		Climatic Factors: changes predicted in precipitation (e.g. drier summers and increased water temperature).
Water abstraction from underground water supplies (e.g. boreholes) may dry up and increase the level of demand for mains water supply.		Climatic Factors: changes predicted in precipitation (e.g. drier summers).
Soil: Rise in river and coastal erosion (as rainfall is predicted to increase in the future) will reduce areas of prime agricultural land.		Climatic Factors: changes predicted in weather patterns (e.g. more and heavier flash floods).
Human Health: over crowding, centralisation of services (e.g. training).		Population
Climatic Factors: Habitat changes due to climate change, which will result in invasion of new alien species living in the North East. Protection of the River Dee, which is designated as a Special Area of Conservation under the Habitats Directive, is important		Biodiversity
Climatic Factors: Peatslides / soil erosion from flash floods / increased rainfall.		Soil: degrading of soil quality and reduction in quantity (e.g. from water run-off).
Material assets: Roads		Air and Human health
Material assets: Flood defences.		Climatic factors: increase in storms.
Material assets: second/holiday homes.		Population: increasing number of households
Biodiversity: non-native/invasive species.		Climatic factors: migration of alien species as temperatures rise.
Biodiversity: encourage native plants (robustness of biodiversity).		Climatic factors

SEA Topic	Link	SEA Topic
Population: increase in household numbers will require a need for more housing.		Material assets: there are a high number of vacant properties, which are not being retrofitted/redeveloped.
Climatic factors: rising CO <sub>2</sub> levels.		Material assets: use of sustainable materials.
Material assets: affordable housing		Human health (e.g. reducing the number of people living in deprived conditions)
Biodiversity: Habitats and communities at the local level – issue of quality, variety and migration of species (e.g. wildlife corridors).		Human health (e.g. recreation corridors)

#### Environmental problems

- 4.12 Environmental problems affecting the plan were identified through:
- the information collected from the environmental baseline data/trends/comparators, as presented in Appendix 2; and
  - discussions with internal consultees within Aberdeen and Aberdeenshire councils (including environmental health, planning policy, natural and built heritage, and the flood prevention teams);
- 4.13 The significant environmental problems categorised under each SEA topic are summarised in the tables 6 to 15. Details of the supporting data, key indicators and mitigation/policy measures to address these environmental problems are provided in Appendix 4.

**Table 6: Significant environmental problems: air quality**

SEA Topic	Significant environmental problems
Air	No significant effects near waste management facilities or quarries, but there is an issue of odour from sewerage works near development in Inverurie, Nigg and Torry.
	High traffic volumes is seriously affecting the air quality of Aberdeen city centre (principally nitrogen dioxide NO <sub>2</sub> ), which has resulted in it being designated an Air Quality Management Area (AQMA).
	High NO <sub>2</sub> levels (although not quite exceeding the annual mean NO <sub>2</sub> objective for 2005) along some peripheral routes: Victoria Rd (Torry), North and South Anderson Drive and Anderson Drive, Great Northern Road, Auchmill Rd, and King St (north of Roselin Terrace).
	New developments within the AQMA, and in areas with high NO <sub>2</sub> levels, should not exceed the 2005 NO <sub>2</sub> objective of 40 µg/m <sup>-3</sup> (likewise for the PM <sub>10</sub> requirements).

**Table 7: Significant environmental problems: water quality**

SEA Topic	Significant environmental problems
Water	A decline and mortalities in the number of species of international importance if water levels fall (for example Salmon deaths in the river Dee during low flows in 2004),
	High nitrate levels adversely affecting the water quality of internationally important rivers (e.g. Ythan Estuary).
	High phosphorus and other nutrients are an issue affecting the River Dee.
	Need to reduce water abstraction by incorporating water efficient technologies into new development (e.g. industrial and domestic) in light of the predicted decrease in summer rainfall.
	A decrease in summer precipitation may lead to a decline in ground water levels in upland areas and reduce the likelihood of new development proposals in these areas.
	The need to maintain water levels may put a constraint on development
	Bathing water quality not continuously meeting EC Guideline Standards in Stonehaven, Cruden Bay and Aberdeen (although in 2006, all bathing waters passed).
	53.1km of watercourses in the North East are classified as poor or seriously polluted as a result of poor chemistry and biology quality.
	A build-up of nitrates from diffuse pollution within the River Ythan catchment, which is an internationally designated natural heritage site, is adversely affecting species that live in the mud flats of the river mouth.
	Peterhead Power Station is likely to be contributing to poor water quality along the coast.
	In the North East, the main cause of poor quality coastline is the result of sewage effluent being released untreated.
	Major impact both on sand dune erosion, wildlife and the enjoyment of other beach users from motorised vehicles.

**Table 8: Significant environmental problems: soil quality**

SEA Topic	Significant environmental problems
Soil quality	There are 5,900 potentially contaminated sites recorded in North East. These include several hundred high-risk sites such as landfill and gasworks.
	Contaminated land places financial and technological constraints on development. These constraints may dictate the type of development which is appropriate.
	Contaminated land impacts water courses, coastal waters and local ecology.
	Potential loss of prime agricultural land from climate change where a precautionary approach may need to be applied in certain areas (e.g. on prime agricultural land near flood plains, along the coast and on land of the highest quality).
	Not enough sites for recycling or composting biodegradable municipal waste (large, medium or small scale) to help the local authorities achieve their recycling and landfill targets.
	Coastal erosion mostly where there is no protection or coastal defence systems in place.
	Increase silting of rivers from fluvial flooding.
	Increase in soil erosion from wind and water. This is exacerbated by bad land use practices such as locating tracks/access roads on steep/upland ground.

**Table 9: Significant environmental problems: biodiversity**

SEA Topic	Significant environmental problems
Biodiversity	UK priority species and habitats are still declining and require rigorous protection and enhancement.
	Implementation of the NE BAPs is the key issue in enhancing biodiversity.
	Threat of alien species effecting water quality and ecological status of rivers and habitats. Native species and habitats are increasing and the NE BAP is meeting the UK BAP targets.
	The significance and purpose of Special Areas of Conservation (SACs) mean that development in or adjacent to them, such as the River Dee SAC, may cumulatively prevent the objectives of these designations being met and may prevent new development.
	Indirect impact of development on designated sites that are affecting their water table and therefore the quality of wetland habitats.
	Impact from large-scale leisure and recreation uses.
	Increase of access to designated sites could be damaging to some sites.
	Indirect impacts of development on non-designated sites.
	Large-scale schemes around edge of towns are placing significant development pressure on unprotected open spaces.
	There is significant development pressure for new houses along the coast.
	Fragmented habitats/open space networks/wildlife corridors may affect less mobile species from migrating and/or adapting to climate change.
	Need to enhance and augment habitats to avoid their decline within settlements.
	Risk of increasing population near sensitive natural heritage areas.
Cumulative impact is resulting in the loss of biodiversity.	

**Table 10: Significant environmental problems: climatic factors**

SEA Topic	Significant environmental problems
Climatic factors	High energy dependence on fossil fuels to provide heat and electricity.
	High energy dependence on fossil fuels for transportation.
	Lack of appropriate locations identified for renewable energy technologies.
	The current layout of low-density housing does not reduce energy dependence in housing (e.g. reducing wind chill, maximising solar gain).
	Few properties incorporate in their design resilience to extreme climate and weather conditions.
	Materials with high CO <sub>2</sub> levels are still popular (e.g. concrete and tarmac).
	Possible need for a managed retreat from settlements below the 5m Ordnance Datum mark.
	Sea defensive walls may be inadequate as sea levels rise.
	Rise in soil erosion from storm events which will create a greater need for SUDS and an increase their water holding capacity.
	Rising precipitation and storms will increase fluvial flooding and restrict where new development can be located.
	The number of properties at risk from inland fluvial flooding may require local flood defense schemes.
	Rise in precipitation during the winter months and increase in storms may result in the need for improved SUD systems in urban areas.
	Aberdeen consumes more natural resources per person than any other Scottish city and has the largest global footprint in Scotland. This cannot be sustained in the long-term.
	Fragmented habitats resulting from development and changes in the climate may affect less mobile species from migrating and/or adapting to changes in the environment.
	Need to promote appropriate native species in new development schemes to enhance existing biodiversity and prevent the spread of non-native species.
Increasing need for service provision throughout the year (e.g. as flood events are predicted to increase during winter seasons).	



**Table 11: Significant environmental problems: human health**

SEA Topic	Significant environmental problems
Human health	Significant development pressure for urban open spaces.
	There is pressure to reduce the size of open spaces in residential developments.
	Need for larger areas of open spaces, including civic or town parks.
	Poor access to services in rural areas.
	Centralisation of service provision may continue to affect marginalised areas.
	Deprivation may affect people's health in certain areas.
	Overcrowding in Aberdeen is higher than the Scottish average and it could be affecting people's health.
	Lack of variety in new housing developments.
	The need to provide a balanced housing stock throughout the region
	The slow progress made in delivering recreational facilities

**Table 12: Significant environmental problems: population**

SEA Topic	Significant environmental problems
Population	Increasing number of households is creating more demand for land and housing.
	The need for more development land is placing pressure on or near sensitive natural heritage areas and general pressure on the wider countryside.
	An ageing population may require a variety of housing needs
	In-migration will create greater demand for homes and services.

**Table 13: Significant environmental problems: cultural heritage**

SEA Topic	Significant environmental problems
Cultural heritage	Although only a small percentage of the listed buildings in the North East are on the Buildings at Risk Register, the area has a high number of properties at risk.
	Only a small number of buildings at risk are undergoing restoration.
	The majority of the buildings at risk are in rural areas.
	Poorly designed buildings.
	Lack of appropriate design guidance
	Development adversely impacting on a community's or settlement's 'sense of place' (e.g. historical perspective).
	Poor design when incorporating modern materials.
	Cumulative impact of poorly designed development proposals.
	Loss of archaeological sites and artefacts due to development, poor practices, vandalism and coastal erosion.

**Table 14 Significant environmental problems: landscape**

SEA Topic	Significant environmental problems
Landscape	The insensitive location, siting and design (e.g. dwellings, wind farms or quarries) of new development may affect landscape character types, designated landscapes and sensitive townscape.
	New development not fitting in with the landscape's capacity to absorb further developments (e.g. design, layout and sense of place) – need to promote suitable development capacity.

**Table 15: Significant environmental problems: material assets**

SEA Topic	Significant environmental problems
Material assets	The number of vacant dwellings in Aberdeen is increasing, while in Aberdeenshire the figure is falling.
	More than two-thirds of Aberdeen’s housing stock is identified as suffering some form of disrepair with 43% (higher than the Scottish average) classified as “urgent”.
	More than half of the housing stock in the North East is failing to meet the Scottish Housing Quality Standard.
	Aberdeen has a high level of derelict and urban vacant land – need to reduce the under utilisation of these sites through regeneration schemes.
	More retrofitting of dwellings is required to bring them back into habitable use.
	20% of vacant and derelict sites in Aberdeen are greater than 5ha.
	The need to identify works in the North East to ensure that properties are safeguarded from flooding.
	Need to ensure that: <ul style="list-style-type: none"> <li>○ new development will not increase the probability of flooding elsewhere;</li> <li>○ development is not sited in an area at risk from fluvial or coastal flooding; and</li> <li>○ existing and new urban drainage systems will not flood properties (given that storm events are predicted to increase).</li> </ul>
	Predicted rise in sea level may result in existing flood defences being inadequate.
	The predicted rise in storm events and winter precipitation is likely to increase soil/sand erosion and this may prevent existing flood defence schemes functioning properly.
	There is a significant wastewater capacity issue in most of Aberdeenshire.
	There is a significant water issue throughout the North East.
	There is a significant shortfall of affordable housing in both Aberdeen and Aberdeenshire.
	The lack of holiday/second homes will increase house prices as dwellings that would normally have been bought to live in are bought for the purpose of being used as a second/ holiday home.
A shortage of holiday/second homes will adversely affect the tourist trade in Aberdeenshire’s most popular areas.	
Very few new developments (e.g. dwellings, schools, offices etc) maximise sustainable construction opportunities.	

## 5 Strategic environmental assessment

### Assessment framework – SEA objectives and indicators

- 5.2 Neither the SEA Directive nor Scottish legislation specifically requires the use of objectives or indicators in the SEA but they are very useful in describing, analysing and comparing environmental effects. SEA objectives state the broad intention while the indicators become a benchmark against which the structure plan's performance is measured.
- 5.3 The SEA objectives are separate from the structure plan's objectives although they can influence each other and even overlap. To fulfil the requirements of the SEA Directive, they must cover environmental issues including biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and their interrelationship.
- 5.4 Table 17 lists a set of SEA objectives against which the vision, aims, spatial strategy and strategic objectives of the Aberdeen and Aberdeenshire structure plan have been assessed. Alternative spatial strategies, known as strategic options will also be assessed against the 28 SEA objectives.
- 5.5 In order to finalise the SEA objectives and indicators Aberdeen City and Aberdeenshire's environmental problems, baseline data and other relevant plans, programmes and environmental protection objectives were thoroughly analysed. This, together with consultation exercises, informed the choice of SEA Objectives which are in this report. While all objectives will be used in the assessment it is likely that those highlighted in Table 17 are unlikely to feature prominently in the assessment.

**Table 17: SEA objectives & indicators (Objectives highlighted are unlikely to feature prominently in the SEA assessment)**

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
Air	1. Protect and improve local air quality.	<ul style="list-style-type: none"> <li>• Reduction in nitrogen dioxide (NO<sub>2</sub>) emissions.</li> <li>• Reduction in the number of days that exceed the National Air Quality Strategy (NAQS) objectives for NO<sub>2</sub> and PM<sub>10</sub>.</li> <li>• Achievement or de-designation of Aberdeen as an Air Quality Management Area.</li> </ul>	<ul style="list-style-type: none"> <li>• Improving air quality (odour and dust).</li> <li>• Achievement of Air Quality Management Area (AQMA).</li> </ul>	<ul style="list-style-type: none"> <li>• Promote sustainable alternatives to car and reducing congestion traffic pollution through the allocation of land uses.</li> <li>• Improvement of green spaces, such as more tree planting to combat air quality.</li> </ul>
Water	<p>2. Avoid adverse impacts on the integrity of the marine environment (including marine, coastal and river systems, wetlands, lochs, estuaries and flood plains), and protect and enhance water bodies to good ecological status.</p> <p>3. Maintain water</p>	<ul style="list-style-type: none"> <li>• Improvement to water quality and maintain the ecological status of fresh water bodies in rivers and the coastline.</li> <li>• Increase in the number of freshwater pearl mussels, salmon and otter in favourable condition and/or meeting conservation objectives.</li> <li>• Increase in the number and duration of bathing water areas passing Bathing water quality EC Guideline Standards.</li> <li>• Reduction in diffuse pollution (e.g. nitrates) and phosphates within river catchment areas.</li> <li>• Reduction in point source pollution in watercourses.</li> <li>• Reduction in water abstraction in</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancing water quality in Special Areas of Conservation and Special Protection Areas.</li> <li>• Safeguarding and improving water quality (biology and chemistry).</li> <li>• Reducing adverse impacts on the coast.</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable use of water and mitigate the effects of floods and droughts.</li> <li>• Sustainable populations of protected species.</li> <li>• Reduce water pollution and enhance water quality.</li> <li>• Prevent water pollution caused or induced by nitrates from point source pollution sources.</li> <li>• Avoid further degradation of the coastal environment.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
	<p>abstraction, run-off and recharge within carrying capacity (including future capacity).</p> <p>4. Only development supported in SPP7: (Planning and Flooding) will be allowed within functional flood plains.</p> <p>5. Support water efficient technologies.</p>	<p>designated natural heritage sites.</p> <ul style="list-style-type: none"> <li>• Closure of the Water of Dye abstraction plant in the River Dee catchment area.</li> <li>• Reduction in the number of planning applications granted planning permission in functional floodplains.</li> <li>• Number of connections to mains sewers rather than septic tanks.</li> <li>• Increase in the number of development schemes that incorporate water efficient technologies.</li> <li>• Encourage and increase the number of SuDS retrofitted for existing water systems.</li> <li>• Number of developments in upland areas that use water taken from underground water sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintaining ground water and river levels.</li> <li>• Reducing the likelihood of flooding from new development.</li> </ul>	
Soil	<p>6. Reduce area of land contamination in the region.</p> <p>7. Improve and</p>	<ul style="list-style-type: none"> <li>• Remediation of contaminated land</li> <li>• Reduction of soil/water pollution from landfill waste disposal schemes.</li> <li>• Reduction in the area of Prime</li> </ul>	<ul style="list-style-type: none"> <li>• Remediation of contaminated land.</li> </ul>	<ul style="list-style-type: none"> <li>• Create sustainable communities with a focus on the sustainable use of natural resources.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
	safeguard the efficiency and effectiveness of land use and soil quality and quantity (e.g. controlling soil erosion and sedimentation).	agricultural land developed. <ul style="list-style-type: none"> <li>• Increase in the number of recycling schemes.</li> <li>• Meeting Landfill Allowance Targets.</li> <li>• Reduction in the number of proposals granted planning permission on sites at risk from coastal erosion.</li> <li>• Reduction in the number of proposals granted consent that may increase soil erosion (e.g. increase erosion from water runoff).</li> </ul>	<ul style="list-style-type: none"> <li>• Safeguarding prime agricultural land (Grades 1 to 3.1).</li> <li>• Reducing waste disposal in landfill.</li> <li>• Reducing soil erosion.</li> </ul>	
Biodiversity, fauna and flora	8. Conserve, protect, maintain and enhance biodiversity (including ecosystems, habitats, species and genetic).	<ul style="list-style-type: none"> <li>• The number of notified or qualitative interests (e.g. protected habitats and species) adversely affected by new development.</li> <li>• (Achievement) Implementation of Local Biodiversity Action Plan (LBAP) actions.</li> <li>• Percentages of BAP species and habitats, which are identified as stable or increasing (although this is not measurable locally for all BAP species – may be possible to link with existing monitoring schemes such as breeding bird census and butterfly monitoring and possible local squirrel survey).</li> </ul>	<ul style="list-style-type: none"> <li>• Achieving North East Biodiversity Action Plan (NE BAP) targets.</li> <li>• Safeguarding designated areas.</li> <li>• Safeguarding non-designated areas and enhancing biodiversity (reducing loss of habitat and species).</li> </ul>	<ul style="list-style-type: none"> <li>• Protect, maintain and enhance biodiversity.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
		<ul style="list-style-type: none"> <li>• Proportion of required open space being natural/wild areas.</li> <li>• Increase in the number of wildlife corridors / augmentation of wildlife habitats (however a method of monitoring this would have to be developed).</li> </ul>		
Climatic factors	<p>9. Reduce the causes of adverse climate change (e.g. reduction in CO<sub>2</sub> levels through carbon accounting and North East global footprint).</p> <p>10. Decrease the use of non renewable energy.</p>	<ul style="list-style-type: none"> <li>• Reduction in carbon dioxide (CO<sub>2</sub>) levels through carbon accounting.</li> <li>• Reduction in the North East's global (energy) footprint.</li> <li>• Decrease in the proportion of people travelling to work or study by car.</li> <li>• Increase in the proportion of people travelling to work or study by walking or cycling.</li> <li>• Increase in electricity and heat generated from renewable energy sources (including micro-renewables) and CHP located in the area.</li> <li>• Increase in the use of energy efficient technologies.</li> <li>• Increase in the development of alternative transport fuels, including hydrogen.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in carbon dioxide levels.</li> <li>• Minimising impact on natural resources.</li> <li>• Increasing in proportion of heat and electricity generated from renewable energy sources (including micro-renewables) and Combined Heat and Power (CHP) schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• Limit or reduce the emissions of greenhouse gases.</li> <li>• Encourage the increase use of renewable energy resources and more efficient use energy and water in housing.</li> <li>• Limit or reduce the emissions of pollutants.</li> <li>• Address climate change</li> </ul>



SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
	11. Reduce vulnerability to the effects of climate change e.g. flooding, public service provision, and habitats.	<ul style="list-style-type: none"> <li>• Reduction in the number of properties at risk from flooding (either pluvial, fluvial or tidal).</li> <li>• Reduction in those vulnerable to rising sea levels through the improvement and building of new sea defences.</li> <li>• Decrease in the number of new developments NOT incorporating SuDS.</li> <li>• Increase in the number of retrofitted SuDS for existing drainage systems.</li> <li>• Increase in augmented habitats.</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing areas affected by flooding (sea, fluvial or pluvial).</li> <li>• Safeguarding biodiversity.</li> <li>• Impact on year-round services.</li> </ul>	
Human health	<p>12. Improve accessibility to good quality open green space and countryside.</p> <p>13. Improve accessibility to open spaces, jobs/ employment, education, public services, and decrease deprivation/social</p>	<ul style="list-style-type: none"> <li>• Increase in the proportion of the population within 200m of parks and open spaces.</li> <li>• Increase in the number of town/civic parks created.</li> <li>• Improvement to the issues highlighted in the <i>Scottish Index of Multiple Deprivation</i> affecting Aberdeen and Aberdeenshire.</li> <li>• Percentage of households within 6 minutes walk of a bus stop</li> <li>• Decrease in the number of those</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing/maintaining quality and availability of public open space in urban and rural areas.</li> <li>• Improvements to quality of life in currently deprived areas. Increasing sport and recreation facilities in areas of identified need.</li> </ul>	<ul style="list-style-type: none"> <li>• Promote quality of life issues.</li> <li>• Promote good design, safe environments, clean environments and good quality services.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
	<p>exclusion.</p> <p>14. Increase opportunities for indoor recreation and exercise.</p> <p>15. Protect and improve health.</p> <p>16. Increase the mix of housing types and tenure.</p>	<p>overcrowded (as identified in the Census).</p> <ul style="list-style-type: none"> <li>• The number of sports facilities built (as identified in Aberdeen’s and Aberdeenshire’s sports strategies/studies).</li> <li>• Reduction in the number of letters of complaint to Environmental Health on noise, odours or air quality.</li> <li>• Increase in the number of regeneration schemes re-developed.</li> <li>• Increase in the number of planning permissions granted for the different housing types and the variation between Aberdeen and Aberdeenshire.</li> </ul>	<ul style="list-style-type: none"> <li>• Improving those suffering from adverse health (especially of poorer communities) as a result of overcrowding.</li> <li>• Reducing excessive noise disturbance from aircraft.</li> </ul>	
Population	<p>17. Improve the supply of housing land to accommodate in-migration and the predicted increase households.</p> <p>18. Improve the supply of dwellings for the</p>	<ul style="list-style-type: none"> <li>• Improvement in the general resident perception surveys.</li> <li>• Increase in the number and tenure of dwellings built.</li> </ul>	<ul style="list-style-type: none"> <li>• Changing trends in household size.</li> <li>• Size of population.</li> <li>• Migration change.</li> </ul>	<ul style="list-style-type: none"> <li>• Set the planning policy framework for development consents for major residential, commercial, retail, and employment developments.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
	<p>aging population and those with special needs.</p> <p>19. Improve the provision of land for care homes.</p> <p>20. Improve services to cater for in-migrants.</p>	<ul style="list-style-type: none"> <li>• Increase in the number of care homes built.</li> <li>• Increase in provision of services for in-migrants</li> </ul>	<ul style="list-style-type: none"> <li>• Years of healthy life expectancy.</li> </ul>	
Cultural heritage	<p>21. To protect, and where appropriate, enhance the historic environment.</p> <p>22. Promote the understanding and enjoyment of the historic environment.</p>	<ul style="list-style-type: none"> <li>• Decline in the number of listed buildings and archaeological sites at risk from human (e.g. neglect or vandalism) or natural (e.g. coastal erosion) impacts.</li> <li>• Increase in the number of buildings renovated/regeneration schemes in urban and rural areas.</li> <li>• Reduce conflict with building impact: form and materials, internal environment, urban and social integration, character, innovation and accessibility (e.g. works required for the disabled).</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing numbers of buildings at risk.</li> <li>• Safeguarding building functionality (e.g. use and access).</li> <li>• Safeguarding listed buildings, designed landscape etc, and conservation areas.</li> <li>• Safeguarding archaeological sites.</li> <li>• Ensuring that the impact from new build reflects: form &amp; materials, environment, urban and social integration,</li> </ul>	<ul style="list-style-type: none"> <li>• Protect, maintain and enhance the built and cultural heritage.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
			character & innovation of existing historic buildings.	
Landscape	23. Protect and enhance and where appropriate restore the quality and distinctiveness of the area's landscape character and townscapes.	<ul style="list-style-type: none"> <li>• Decline in the quality of Aberdeen's and Aberdeenshire's landscapes (non/designated) and townscapes, (including conservation areas), including negative visual impacts on landscape character types and visual amenity.</li> <li>• Reduction in the number of planning applications granted planning permission either as departures or against officers' recommendation. For example where: <ul style="list-style-type: none"> <li>• new developments individually or cumulatively adversely affect designated landscapes; and</li> <li>• the insensitive siting and design of new developments adversely affect the landscape and townscape setting.</li> </ul> </li> <li>• The number of planning applications adversely affecting landscape characters as outlined in the Landscape Character Assessments of Aberdeen and Aberdeenshire.</li> </ul>	<ul style="list-style-type: none"> <li>• Enhancing designated areas – National Scenic Areas (NSA).</li> <li>• Enhancing designated areas – Areas of Landscape Significance (ALS).</li> <li>• Enhancing townscape quality</li>   <li>• Safeguarding landscape character.</li> </ul>	<ul style="list-style-type: none"> <li>• Protect, maintain and enhance the landscape character.</li> </ul>

SEA Topics	SEA Objectives	SEA Indicators	Indicators from baseline data and environmental problems sections in Appendices 2 and 4	Outcomes from the analysis of other plans etc, which the strategic plan should emphasise on (Appendix 2)
Material assets	<p>24. Promote the creation of fixed assets, including affordable housing and water and waste management facilities.</p> <p>25. Enhance and promote commercial and industrial assets.</p> <p>26. Regenerate derelict, vacant or contaminated land.</p> <p>27. Protect residential, commercial and industrial properties from flooding.</p> <p>28. Promote the use of sustainable materials and the adoption of Lifetime standards.</p>	<ul style="list-style-type: none"> <li>• Increase and enhancement in the number of wastewater treatment works and water works built.</li> <li>• Increase in the number of waste management facilities built that addresses the need identified in the Area Waste Plan.</li> <li>• Decrease in waiting list figures for affordable housing.</li> <li>• Increase in the number of vacant buildings reused.</li> <li>• Increase in the number of holiday homes built to meet predicted demand.</li> <li>• Decrease in the number of derelict and vacant land.</li> <li>• Increase in the number of flood defences developed or upgraded.</li> <li>• Increase in the number of residential, industrial, and commercial properties protected by flood defences.</li> <li>• Increase in the use of sustainable materials in new build and retrofit in planning applications.</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing number of vacant dwellings.</li> <li>• Reducing number of degraded buildings.</li> <li>• Reducing derelict and vacant land (and buildings).</li> <li>• Safeguarding properties protected from flooding.</li> <li>• Enhancing existing flood defences.</li> <li>• Enhancing existing pumping stations and sewage works.</li> <li>• Enhancing water treatment works.</li> <li>• Ensuring sufficient supply of affordable housing.</li> <li>• Ensuring sufficient supply of second homes.</li> <li>• Increasing proportion of building materials from sustainable sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Promote economic growth, social inclusion, environmental improvement, health and safety.</li> <li>• Support economic sustainability consistent with social progress and the environment.</li> <li>• Dealing with housing shortage, low demand, abandonment and liveability.</li> <li>• Promote the economy, and support the community and public services.</li> </ul>

## **Strategic Environmental Assessment of alternatives**

- 5.6 The following explains how alternatives were identified and preferred alternatives chosen in the development of the structure plan.

### Plan objectives

- 5.7 A draft vision for the plan was developed from workshops with elected members and a “key stakeholder reference group”. This draft vision is a statement of the political aspirations for development in the area. It was developed through an iterative process where 6 working draft visions were constructed and dismissed before the draft vision presented in the “Structure Plan Issues report” was finalised and agreed by Members. Alternative vision statements centred around issues of presentation and the weight to be given to different aspirations of the plan.
- 5.8 Following the issues report, the vision was amended further and agreed by members on 28 September 2007. The SEA of the agreed vision is presented in paragraph 5.29.
- 5.9 The draft vision was used to generate a series of draft aims for the plan. These were statements of what the plan should be seeking to achieve when the aspiration of the vision was applied to different topics that the plan might require to address. These statements were reviewed to produce a set of working draft aims. These aims were then analysed to produce specific objectives for the plan to achieve. Again this was a creative and iterative process designed to generate a small number of objectives, which were relevant over a wide range of development types.
- 5.10 The significance of this is that stakeholders used these “working draft objectives” as part of the qualitative evaluation of the strategic options.

### Strategic Options

- 5.11 Working draft strategic options were also developed through an iterative process. Initial analysis identified that the preferred strategic option would require to identify where, how much and when development would be allowed. Eight basic patterns for spatial distribution of development were identified. Whether additional models could be considered was tested through reference to expert stakeholder groups.
- 5.12 It was concluded that over 120,000 possible permutations of different scales, spatial distributions and phasing could be considered and, to narrow this down to a manageable number, exercises were undertaken with expert stakeholder groups. These exercises tested the eight basic patterns of distribution against the requirements for a development in the Aberdeen area as articulated by the National Planning Framework, the broad aspirations of other plans and strategies operating in the area and known planning objectives and constraints. This resulted in eight specific strategic options being identified for consultation, each composed of elements from two of the basic strategies. These conclusions were tested through reference to a key stakeholder reference group.
- 5.13 A simple approach to issues of scale and phasing was promoted. Low, medium and high growth scenarios were developed based on forecast requirements, average development rates over the past 10 years and additional “aspirational” growth respectively. Early intervention, sustained development and late intervention scenarios were developed to consider issues of phasing.

Initial rejection of alternatives

- 5.14 The task of identifying a set of working draft strategic options and objectives on which to engage with stakeholders, and on which to assess the strategic options, was not the subject of a rigorous environmental appraisal process. However, for the purpose of transparency Tables 18 and 19 have been produced to identify the main reasons why alternative strategic options and plan objectives were accepted, rejected, or modified to form the current working drafts.
- 5.15 Those alternatives that have significant environmental effects and are feasible are taken forward for further assessment and evaluation. This was an iterative process with key stakeholder involvement. A final set of objectives is presented in the consultative draft structure plan.

**Table 18: Basic spatial strategies and reasons for accepting**

<b>Basic spatial strategy</b>	<b>Justification</b>
New settlements	Accepted to complement the Aberdeen City model despite concerns surrounding regeneration, environmental impact and economic development
Development on the existing road and rail corridor	Accepted in part despite concerns on its ability to deliver both the quantity of development land required and regeneration. ?????
Development in a new transport corridor	Accepted to complement the existing transport corridor despite poor assessment in terms of infrastructure constraints, development of the economy of the City and delivery of sufficient development land ??????????????
Development in Aberdeen City	Accepted in part as it met the majority of criteria against which it was judged. Concerns relating to choice of development location, this models ability to provide sufficient volume of land for needs and lack of alternatives in other areas.
Edge of City Communities	Accepted to complement the Aberdeen City model despite concern about its ability to foster regeneration.
Development in growth poles (e.g. a key growth location) across Aberdeenshire	Accepted to complement the Aberdeen City model despite concerns relating to economic development opportunities, sustainable transport options, environmental quality and promotion of the knowledge economy.

**Table 19 Basic spatial strategies and reasons for rejection**

<b>Basic spatial strategy</b>	<b>Justification</b>
Development in new settlements associated with the Aberdeen Western Peripheral Route	Rejected due to impacts on environmental quality, opportunities to regenerate disadvantaged areas and concerns relating to impacts on the transport network
Dispersal throughout the region	Rejected due to environmental impact, infrastructure constraints, the ability to deliver sustainable transportation, sufficient volume of land for development in marketable locations, and economic development aspirations.

### Assessment of alternatives (the 8 strategic options)

- 5.16 As part of the technical appraisal to identify the preferred spatial strategy, the eight strategic options (see paragraph 5.20) were assessed against the 28 SEA objectives. Each strategic option was assessed using the high growth scenario as a worst-case scenario and against three further scenarios provided below.
- 5.17 Within Aberdeen City, it was assumed that the level of growth required could be accommodated to an extent by brownfield developments, although it was likely to require significant greenfield land release. The option considered for this greenfield land release was either as incremental growth across the city and / or the creation of a major expansion of the city (as has been achieved over a similar period at Bridge of Don). It was also assumed at the time of the assessment that the take up of land would be constant over the plan period.
- 5.18 Within Aberdeenshire, it was assumed that the scale of growth envisaged would be concentrated into “community” sized allocations of around 2,000 dwellings over a 25-year period, and that the take up of land would be constant over the plan period.
- 5.19 It was also assumed that the Aberdeen Western Peripheral Route would be built on its currently proposed alignment and is open to traffic on 1 January 2012.
- 5.20 The eight strategic options that were assessed are:
1. Most of the development in Aberdeen City, significant development in Edge of City Settlements.
  2. Most of the development in Aberdeen City, significant development in the existing transport corridor.
  3. Most of the development in Aberdeen City, significant development in a new transport corridor.
  4. Most of the development in Aberdeen City, significant development in growth poles across Aberdeenshire.
  5. Most of the development in Aberdeen City, significant development in new settlements.
  6. Most of the development in the existing transport corridor, significant development in Aberdeen City
  7. Most of the development in the existing transport corridor, significant development in growth poles across Aberdeenshire.
  8. Most of the development in the existing transport corridor, significant development in a new transport corridor
- 5.21 The full assessment is presented in Appendix 5 which shows where each strategic option is likely to significantly affect the environment either positively or negatively. Table 20 provides a broad summary of the assessment using the ten SEA topics that correspond to the SEA objectives.
- 5.22 Options 2 and 6 (Most of the development in Aberdeen City, significant development in the existing transport corridor and most of the development in the existing transport corridor, significant development in Aberdeen City) have the fewest negative significant environmental impacts overall. They scored well together on water quality (minimum pollution into water courses),



biodiversity (minimum impacts on protected sites), climatic factors and human health. On detailed analysis, Option 2 scored best overall.

- 5.23 Options 4 (Aberdeen City, Growth Poles), 5 (new settlements), 7 (Transport corridor, growth poles) and 8 (transport corridor, new transport corridor) performed the worst, with options 4 and 7 identified as receiving very poor scores when analysed in detail. Their poor scores were mainly attributed to significantly affecting water quality, from water pollution (phosphates) and water abstraction and biodiversity (risk of development affecting designated sites and coastal areas).

**Table 20: Summary of the eight strategic options of the Aberdeen and Aberdeenshire Structure Plan**

SEA Topic	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape	Material Assets
Option 1	+/-	-	?	-	+/-	+/-	?	?	+
Option 2	+/-	-	?	+/-	+/-	++/-	?	?	++
Option 3	+/-	--	?	-	+	+/-	?	?	++
Option 4	+/-	--	?	-	-	+/-	?	?	++
Option 5	+/-	-	?	-	+/-	+/-	?	?	+
Option 6	+/-	-	?	+/-	+	+/-	?	?	+
Option 7	+/-	--	?	-	+/-	+/-	?	?	+/0
Option 8	+/-	--	?	-	+	+/--	?	?	+
Key: ++ very positive +positive +/-mixed --very negative - negative ? uncertain 0 neutral									
Ranking	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	6 <sup>th</sup>	6 <sup>th</sup>
Option	2	6	3	1	5	8	4	7	

Cumulative impact assessment of alternatives (the 8 strategic options)

- 5.24 Table 21 provides a summary of the cumulative impact assessment of the eight strategic options. The full assessment is presented in appendix 6. Most impacts identified in the assessment were cumulative, although there were some synergistic impacts for water quality (all negative) and climatic factors (all positive).
- 5.25 Option 5 (Aberdeen city and new towns) scored best, with consistent positive impacts across most of the SEA topics. This is due to the option proposing development away from historic towns and designated natural heritage sites. The majority of the other options performed relatively poorly. With the exception of option 5, all score very negatively on impact to watercourses. The results are mixed for the other SEA topics. Overall, options 4 (Aberdeen city and growth poles) and 7 (existing transport corridor and growth poles) received the lowest score.

**Table 21: Summary of the cumulative & synergistic effects assessment of the structure plan’s alternative strategic options**

SEA Topic	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape
Option 1	+/-	--	?	+/-	?	?	--	+
Option 2	+/-	--	?	-	?	?	+/-	-
Option 3	-	--	?	-	+	?	0	0
Option 4	-	--	?	-	+/-	?	-	-
Option 5	+	+/--	?	-	+	?	+	+
Option 6	+/-	--	?	+/-	?	?	+/-	-
Option 7	0	--	?	-	+/-	?	--	-
Option 8	+	--	?	-	+	?	--	-
Key: ++ very positive +positive +/-mixed --very negative - negative ? uncertain 0 neutral								
Ranking	1 <sup>st</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	4 <sup>th</sup>
Option	5	1	3	6	2	8	4	7

## **Strategic Environmental Assessment of the draft structure plan**

- 5.26 The plan's vision, aims, spatial strategy, and strategic objectives were assessed against the 28 SEA objectives agreed through the scoping process. The draft plan proposes a preferred option to deliver the housing requirements and two further alternatives. With the exception of the vision statement and aims, the plan's spatial strategy and objectives will be assessed three times. This will ensure that the plan's key delivery mechanisms (the spatial strategic and objectives) are appropriately assessed.
- 5.27 Significant environmental effects of the plan's vision, aims, spatial strategy and strategic objectives were predicted to determine whether the plan had negative, positive, uncertain or neutral effects. Furthermore, the effects were evaluated to determine the nature of their effect, if any. These effects include the likely significant environmental effects to receptors in terms of their reversibility or irreversibility of effects, risks, duration (permanent, temporary, long-term, short-term and medium term) and cumulative (direct, indirect, secondary) and synergistic effects. This process was undertaken with key stakeholders and external bodies through meetings discussing officers' assessment of the plan,.
- 5.28 To ensure the SEA influenced the policy context of the structure plan, the assessment identified how the development plan framework will achieve positive environmental effects through implementing the plan's vision and aims. The framework derived from identifying the mitigation measures required to address the significant environmental problems identified in the baseline data (this data is provided in Appendix 4). This is in addition to the assessment process proposed in the scoping report in April 2007.
- 5.29 Tables 22 to 25 present a summary of the strategic environmental assessment of the structure plan's vision, aims, spatial strategy and objectives, as agreed at the scoping process. To show the results more clearly in the summary tables below, the 28 SEA objectives have been broken down into their corresponding SEA 10 topics. The full assessment can be found in Appendix 5.
- 5.30 The cumulative effects assessment identifies potential weaknesses in the draft plan which could be mitigated. The assessment only identifies those sections of the plan's vision, aims, spatial strategy and strategic objectives that are likely to have cumulative/synergistic/secondary effects.
- 5.31 The assessment of cumulative effects was undertaken using the following process:
- further assessing the structure plan's vision, aims, spatial strategy and/or strategic objectives that were identified of having cumulative/synergistic/secondary effects;
  - stakeholder meeting(s);
  - considering the effects that may arise from interaction with proposals within the structure plan as well as those within other plans, programmes and strategies (National Planning Framework, Regional Transport Strategy and Local Economic Development Strategy);
  - taking account of whether any effects will bring critical environmental capital (e.g. water) close to their capacity or threshold to remain productive or sustainable; and

- being aware of the level of uncertainty in identifying cumulative, secondary or synergistic effects and ensuring that, where uncertainty exists, this is documented.

5.32 The cumulative effects assessment is presented in Appendix 6. Summaries are provided at the end of each sub-section.

#### Assessment of vision and aims

5.33 The vision and aims, which are presented in paragraphs 3.3 to 3.6, were assessed together, as the aims breakdown how the vision will be delivered. They were divided into 12 principles listed below:

- (1) facilitate economic growth;
- (2) diversify the regional economy;
- (3) efficient use of resources;
- (4) address sustainable development;
- (5) address climate change;
- (6) provide sufficient services (quality of life);
- (7) protect valued assets (e.g. natural heritage designations and protected species and habitats);
- (8) protect valued resources;
- (9) facilitate the creation of mixed communities;
- (10) facilitate the creation of infrastructure;
- (11) urban and rural design; and
- (12) sustainable travel.

5.34 Table 22 provides a summary of the assessment against the 10 SEA Topics that correspond to the SEA Objectives. The vision and aims score very positively. The majority of the positive impacts are under human health and population although, on close analysis, the majority of impacts on the population will be neutral. Material assets also score positively although mixed impacts are identified in the full assessment where development is proposed in sensitive locations. The SEA identified mixed impacts on air quality and climatic factors where growth in new development is proposed (energy consumption and emissions).

5.35 Economic growth is the only principle to impact on the environment negatively although mixed impacts are predicted for communities and infrastructure. However, as mentioned in paragraph 5.7 and to ensure the plan actually achieves positive environmental effects, the assessment sets out the policy context of the development plan framework (e.g. how air quality would actually be improved). This is provided in Appendix 5.

**Table 22: Summary of the SEA of the Aberdeen and Aberdeenshire Structure Plan's vision and aims**

SEA Topic/ Principle	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape	Material Assets
1. Economy	+/-	+/-	+/-	-	+/-	+/0	?	?	+
2. Diversify	+/-	0	?	?	+/-	+/0	?	?	+
3. Efficiency	+	+	+	?	+	+/0	+	+	+
4. Sustain.	+	+	+	0	+	+/0	+	+	+
5. Climate	+	++	+/0	+	+	+/0	0	+	+
6. Quality	+/-	+/-	+	?	+	++	+	+	+
7. Assets	NA	+	+	++	+	+/0	++	++	+
8. Resources	NA	+	++	++	+	+/0	+	+	+
9. Communities	+/-	0	?	+/-	+	+	?	?	+
10. Infrastructure	+/-	0	+	+/-	+/-	+	0	?	+
11. Design	+	+	+	0	++	+	+	0	+
12. Travel	+	0/+	?	?	++	+	+	0	+
Key: ++ very positive +positive +/-mixed --very negative - negative ? uncertain 0 neutral									

5.36 Cumulative effects were not identified due to the broad nature of the vision and aims. Instead, focus was given to how the development plan framework would achieve long-term positive outcomes (e.g. through objectives, targets and proposals).

Assessment of the spatial strategy

5.37 The spatial strategy shows the scale of development proposed for the draft plan and the phasing that development. It proposes:

- three strategic growth areas:
  - Aberdeen City
  - Huntly to Laurencekirk
  - Aberdeen to Peterhead (via Hatton);
- local growth and diversification outwith the three strategic growth areas (additional development opportunity to be delegated for allocation in the Aberdeenshire local development plan); and
- Regeneration Priority Areas (in Aberdeen and Aberdeenshire)

5.38 The plan proposes 255ha of employment land between 2011 and 2020; with at least 60ha of marketable land being maintained at all times in Aberdeen and Aberdeenshire (40ha between Huntly and Laurencekirk and 20ha between Potterton and Peterhead). Strategic reserve land is also required.

5.39 The housing allowances in the structure plan proposes 36,000 dwellings in both Aberdeen City and Aberdeenshire, equating to 72,000 dwellings over the lifetime of the plan.

5.40 The development of new dwellings in Aberdeen will consist of:

- brownfield sites (10,000 dwellings);
- regeneration areas (5,000 dwellings); and
- greenfield sites (this may include the Future New Communities, as set out in the finalised Local Plan) (21,000 dwellings).

5.41 The housing allowances for Aberdeenshire expand on the strategic growth areas. Three options to deliver the housing allowances (a preferred option and two alternatives) are proposed in the draft plan. As a result, the strategic growth areas in Aberdeenshire will have to be assessed three times.

5.42 Tables 23 and 24 set out the housing allowances proposed in the structure plan for Aberdeenshire.

**Table 23: Housing allowances in the Huntly to Laurencekirk (A90/A96) strategic growth area, including the preferred option and two alternatives**

Aberdeenshire	Preferred option total	Alternative 1 total	Alternative 2 total
Huntly-Pitcable	1,000	800	1,000
Inverurie-Blackburn	6,500	1,000	10,000
Portlethen-Stonehaven	6,000	13,500	8,000
Sout of Drumlithie-Marykirk	1,000	1,200	1,200

**Table 24: Housing allowances in the Aberdeen to Peterhead (North) strategic growth area, including the preferred option and two alternatives**

Aberdeenshire	Preferred option total	Alternative 1 total	Alternative 2 total
Peterhead- Hatton	2,000	2,000	2,000
Ellon-Potterton	2,400	0	500

- 5.43 The phasing of the housing allowance (preferred option) is set out in Table 25 below. Overall, the plan proposes front-loading housing allocations, although variations exist between different areas.

**Table 25: Phasing of the preferred option housing allowances in the strategic growth areas**

Aberdeenshire	2007-2016	2017-2023	2024-2030	Total	Summary
Aberdeen City					
Aberdeen City - brownfield	4,000	3,000	3,000	<b>11,900</b>	Sustained rate of development
Aberdeen City – regeneration areas	2,000	2,000	1,000	<b>5,000</b>	Sustained rate of development
Aberdeen City - greenfield sites	12,000	5,000	4,000	<b>19,100</b>	Front-loading
A90/A96 corridor					
Huntly-Pitcapple	300	500	200	<b>1,000</b>	Sustained rate of development
Inverurie-Blackburn	1,000	1,500	4,000	<b>6,500</b>	Back-loading
Portlethen-Stonehaven	2,600	2,400	1,000	<b>6,000</b>	Front-loading
South of Drumlithie-Marykirk	500	400	100	<b>1,000</b>	Front-loading
North corridor					
Peterhead- Hatton	600	800	600	<b>2,000</b>	Sustained rate of development
Ellon-Potterton	400	1,400	600	<b>2,400</b>	Mid-loading
<b>Total</b>	<b>29,500</b>	<b>22,500</b>	<b>20,000</b>	<b>72,000</b>	<b>Front-loading</b>

- 5.44 The structure plan also proposes housing allowances for the local growth areas and includes a section in the spatial strategy entitled ‘Local growth and diversification’. These will be excluded from the SEA as it is not known which settlements will receive ‘local growth’. However, as the local development plan will identify the settlements to receive ‘local growth’, its SEA will be able to examine the likely environmental impacts.
- 5.45 For ease of the assessment, the three versions of the housing allocations have been categorised into the following table (Table 26):



**Table 26: Categorising the three housing allocations of the draft structure plan**

Strategic growth areas	Preferred option	Alt. 1	Alt. 2
Aberdeen City - brownfield	1*	1*	1*
Aberdeen City – regeneration areas			
Aberdeen City - greenfield sites			
Huntly-Pitcaple	2a	2b	2c
Inverurie-Blackburn			
Portlethen-Stonehaven			
South of Drumlithie- Marykirk			
Peterhead- Hatton	3a	3b	3c
Ellon-Potterton			

\*No changes in housing allocations are proposed for the city between the preferred option and the two alternatives.

- 5.46 A summary of the assessment matrix of the spatial strategy and alternatives is provided in Table 27. The full assessment matrix is provided in Appendix 5. The SEA identified that the preferred option performed better than the two alternatives. The City overall scored very positively for human health, population and material assets. Identifying significant development opportunities in the City will address some of its deprivation issues and reduce areas of brownfield land. Mixed or negative effects were identified for half of the SEA Topics (e.g. air, soil and the natural and historic environment). These negative effects are attributed to increased air pollution from commuting traffic, increased water abstraction and development of greenfield sites. Climatic factors also show mixed impact, as the plan will reduce carbon emissions by proposing large-scale developments on the exiting transport corridors. However, the cumulative effects from the size of the developments could neutralise the efficiency gains.
- 5.47 Development along the A90/A96 between Huntly and Laurencekirk scores similarly to the City. Fewer positive impacts were identified. Alternative 1 scores slightly worse out of the three variations of the strategy as development is concentrated on the A90 south (Portlethen to Stonehaven), which creates only neutral impacts elsewhere (e.g. housing provision).
- 5.48 However, the third strategic growth area (Potterton to Peterhead) scores fewer positive impacts on human health, population and material assets as land allocations are lower. On a positive side, fewer allocations of development are likely to have a lower effect on climatic factors such as soil and air quality. In addition, Peterhead has been identified as a regeneration priority area where the redevelopment of brownfield sites requires a particular focus.

**Table 27: Summary of the SEA of the draft Aberdeen and Aberdeenshire Structure Plan’s spatial strategy and alternatives**

SEA Topic: Strategy:	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape	Material Assets
City (1)	+/-	+	+/-	-	+/-	++	+/-	+/-	++
A90/A96 (2a)	+/-	+/-	+/-	-	+/-	+	+/-	+/-	+
A90/A96 (2b) (Alternative1)	+/-	+/-	+/-	-	-	+/-	+/-	+/-	+
A90/A9 (2c) (Alternative2)	+/-	-	+/-	-	+/-	+	+/-	+/-	+
North (3a)	+/-	-	+0	-	+	+0	+/-	+/-	+0
North (3b) (Alternative1)	0	+/-	+0	-	+	+/-	+/-	+/-	+/-
North (3c) (Alternative2)	0	+/-	+0	-	+	+0	+/-	+/-	+/-
Key: ++ very positive +positive +/-mixed --very negative - negative ? uncertain 0 neutral									
Ranking of A90/A96	1 <sup>st</sup>			2 <sup>nd</sup>			2 <sup>nd</sup>		
Strategy	A90/A96 (Preferred) (2a)			A90/A96 (Alternative 2) (2c)			A90/A96 (Alternative 1) (2b)		
Ranking of North	1 <sup>st</sup>			2 <sup>nd</sup>			2 <sup>nd</sup>		
Strategy	North (Preferred) (3a)			North (Alternative 2) (3c)			North (Alternative 1) (3b)		

- 5.49 Overall, the preferred option ranks slightly higher compared with Alternative 2 which comes second. Alternative 1 has the most negative impacts. However, as the strategy does not specifically allocate development to individual settlements, how the plan is implemented through local development plans will impact on its environmental performance.
- 5.50 A summary of the cumulative effects is provided in Table 28. The full assessment is provided in Appendix 6. The assessment shows that the strategy will have negative impacts on the natural and historic environment where development is concentrated in the City (affecting air quality) and along the River Don valley (water pollution from waste and surface water, loss of biodiversity and soil from development, and increased development in historic settlements). The development of transport infrastructure, as proposed in transport strategies, will also have a cumulative effect in terms of loss of soil and biodiversity. The strategy is also likely to lead to a reduction in water levels (abstraction) which could affect protected species in the River Dee, a SAC.
- 5.51 Where concentrations of development are proposed (e.g. City, and A90/A96 Alternatives 1 and 2) it can have mixed impacts. Air quality is likely to be reduced in the short term from increased vehicle usage but improve long term as the critical mass for public transport may make it a more frequent and a viable alternative.
- 5.52 The assessment also identified that the overall strategy could have positive cumulative effects in terms of improving human health (e.g. reducing overcrowding) and water quality (the scale of development providing the necessary waste treatment and water abstraction infrastructure), reducing resource use (e.g. by expanding existing towns) and promoting development in areas of social exclusion and deprivation (e.g. Aberdeen and Peterhead).
- 5.53 Combined with transport strategies and rail action plan(s) the synergistic effects could be positive especially for human health (access) and air quality.

**Table 28: Summary of the SEA of the Cumulative, secondary & synergistic effects of the draft structure plan’s spatial strategy and alternatives**

SEA Topic: Strategy:	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape	Material Assets	
City (1)	+/-	--	-	--	0	++	-	0	+	
A90/A96 (2a)	+/0	--	-	-	0	+	-	0	+	
A90/A96 (2b) (Alternative1)	+/-	-	--	-	0	+	-	0	+	
A90/A96 (2c) (Alternative2)	+/-	--	-	--	0	+	-	0	+	
North (3a)	+/0	-	-	-	0	+/0	-/0	0	+/0	
North (3b) (Alternative1)	+/0	-	-/0	-	0	+/0	-/0	0	+/0	
North (3c) (Alternative2)	+/0	-	-/0	-	0	+/0	-/0	0	+/0	
Key: ++ very positive +positive +/-mixed --very negative - negative ? uncertain 0 neutral										
Ranking of A90/A96	1 <sup>st</sup>				2 <sup>nd</sup>			2 <sup>nd</sup>		
Strategy	A90/A96 (Preferred) (2a)				A90/A96 (Alternative 1) (2b)			A90/A96 (Alternative 2) (2c)		
Ranking of North	1 <sup>st</sup>				1 <sup>st</sup>			2 <sup>nd</sup>		
Strategy	North (Alternative 1) (3b)				North (Alternative 2) (3c)			North (Preferred) (3a)		

### Assessment of the objectives

- 5.54 To deliver the plan's vision and aims, six objectives have been identified. These are:
- (1) economic growth;
  - (2) sustainable development and climate change;
  - (3) population growth;
  - (4) environmental quality;
  - (5) sustainable mixed communities; and
  - (6) accessibility.
- 5.55 The assessment of the plan's vision and aims identified several mitigation measures required (e.g. amendments to the plan) to ensure positive (or neutral) significant environmental impacts. This assessment was taken into account when developing the objectives and assessing them.
- 5.56 The assessment of the draft objectives includes the introduction and implementation chapters of the draft plan, as they:
- ensure the plan's delivery by addressing the strategic issues to be resolved;
  - meet international, national and regional targets; and
  - identify how the plan (and the objectives) will be delivered (i.e. through the local development plan) and monitor indicators.
- 5.57 The spatial strategy (including the preferred housing allocations and the two alternatives, as shown in tables 23, 24 and 26, was also taken into account when undertaking the assessment. Each objective was assessed individually. The results of the assessment is summarised in Table 29 below. The full assessment is provided in Appendix 5.
- 5.58 The individual objectives are likely to have both positive and negative impacts on the environment. The majority of the negative impacts are identified under the economic and population growth objectives (e.g. the scale of development could adversely affect the natural and historic environment). This impact is to be expected as their main focus is to promote economic development and population growth.
- 5.59 Overall, however, the impact of the plan will be far less adverse. Positive outcomes can be achieved in the long-term providing lower tier plans (e.g. local development plans) recognise the links between each of the structure plan's aims and strategic objectives as set out in the introductory chapter of the draft plan. For example, siting development in least sensitive sites (economic growth and environmental quality). In the short to medium term neutral effects on air and water is likely. Development will be required to reverse the adverse environmental impacts that have occurred in the past before positive outcomes can be achieved.
- 5.60 With regard to the housing allocation options, the second option (1, 2b and 3b) known as "Alternative 1" in Schedule 1 of the draft structure plan, performed best overall. However, the impacts of the three options are very similar. The preferred option (1, 2a and 3a) came second. The scale and location of the proposed development in the preferred option resulted in slightly more positive impacts on the environmental quality, sustainable mixed communities and accessibility objectives.

**Table 29: Summary of the SEA of the Aberdeen and Aberdeenshire Structure Plan's draft strategic objectives**

SEA Topic/ objectives:	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape	Material Assets
<b>1. Economic growth</b>									
1, 2a and 3a	+/-	-/0	+/-	-	+/-	+/0	+/-	-	+/-
1, 2b and 3b	+/-	0/-	+/-	-	+/-	+/0	+/-	-	+/-
1, 2c and 3c	+/-	0/-	+/-	-	+/-	+/0	+/-	-	+/-
<b>2. Sustainable development and climate change</b>									
1, 2a and 3a	+/0	+	+	+	++	0	+/-	-/0	+
1, 2b and 3b	+/0	++	+	+	++	0	+/-	-/0	+
1, 2c and 3c	+/0	+	++	+	++	0	+/-	-/0	+
<b>3. Population growth</b>									
1, 2a and 3a	-	-	+/-	-	+/-	+	+/-	-	+
1, 2b and 3b	-/0	-/0	+/-	-	+/-	+/0	+/-	-	+/0
1, 2c and 3c	-/0	-/0	+/-	--	+/-	+	+/-	-	+
<b>4. Environmental Quality</b>									
1, 2a and 3a	0	+	+	+	+/0	+/0	+	+	+
1, 2b and 3b	0	+/0	+/0	+	0	+/0	+	+	+/0
1, 2c and 3c	0	+	+/0	+	0	+/0	+	+	+/0

SEA Topic/ objectives:	Air	Water	Soil	Biodiversity	Climatic Factors	Health & Population	Historic Environment	Landscape	Material Assets
<b>5. Sustainable Mixed communities</b>									
1, 2a and 3a	0/+	+/0	+	+/-	+	++/-	+	+	+
1, 2b and 3b	0	+/0	+	+/-	+	+/-	+	+	+
1, 2c and 3c	0/+	+/-	+	+/-	+	++/-	+	+	+
<b>6. Accessibility</b>									
1, 2a and 3a	+	0	0	+/-	+/-	++	+/-	+/-	+
1, 2b and 3b	+/-	0	0	+/-	+/-	+/0	+/0	+/-	+
1, 2c and 3c	+/-	0	0	+/-	+/-	0	+/-	0	+
Key: ++ very positive +positive +/-mixed --very negative - negative ? uncertain 0 neutral									
Ranking		1 <sup>st</sup>			2 <sup>nd</sup>			3 <sup>rd</sup>	
Housing allocation options		1, 2b and 3b			1, 2a and 3a			1, 2c and 3c	

- 5.61 Cumulative effects and synergistic effects were identified for the economic growth, population growth, sustainable mixed communities and accessibility draft strategic objectives (see Appendix 6, Table B). Air quality is likely to worsen in the short term in the city until efficient public transport networks are created/built. Cumulative effects from new development and infrastructure on biodiversity and water bodies could be significant if development is not carefully sited and designed. The ecology of the River Dee, an internationally important natural heritage designation could be affected if water is not used efficiently throughout the region. Adverse impacts to built and cultural heritage (pollution, setting and vibration from vehicles) has also been identified if development is not proposed sensitively. Cumulative impacts to the landscape could be avoided if development and infrastructure is appropriately sited and is designed sensitively into the landscape.
- 5.62 The assessment also identified that the objectives have largely failed to implement the forth strategic aim (b): “Protect and enhance our valued assets and resources, including our built, natural and cultural environment”. The natural and historic assets are protected under the ‘Environmental quality’ strategic objective. However, social and economic assets and resources are omitted from the objectives. Table 30 below shows a number of options on how the objectives could be amended to reflect the structure plan Aim b). However, it is recognised that these issues could be covered by lower-level plans given the structure plan’s strategic focus.
- 5.63 Furthermore, the assessment identified that there may be insufficient housing (e.g. special needs, rented and privately owned) allocated for the northern transport corridor. Monitoring of the housing needs in the north transport corridor should be undertaken to ensure there is sufficient housing for the private, rented and special needs housing sectors. The plan, however, already recognises this issue.

**Table 30: Possible amendments to the objectives**

Structure Plan objective	SEA issue	Amendment to objective
Sustainable mixed communities or Environmental Quality	Human health (12 <sup>th</sup> objective): the region’s socially important assets are not protected and enhanced, as required under strategic aim b).	To ensure the regions socially important assets are protected and enhanced two options are available: <ul style="list-style-type: none"> <li>• include a further target under the ‘Sustainable mixed communities’ objective that aims to protect and enhance the north east’s strategically valued social assets (e.g. recreation areas); or</li> <li>• amend the ‘Environmental Quality’ objective to reflect Aim b), and rename it to ‘Economic, Social and Environmental Assets and Resources’.</li> </ul>



Sustainable mixed communities or Environmental Quality	Human health (13 <sup>th</sup> objective): the region's socially important assets are not protected and enhanced, as required under strategic aim b).	To ensure the regions socially important assets are protected and enhanced two options are available: <ul style="list-style-type: none"> <li>include a further target under the 'Sustainable mixed communities' objective that aims to protect and enhance the northeast's strategically valued social assets (e.g. hospitals, affordable housing for rent and schools); or</li> <li>amend the 'Environmental Quality' objective to reflect Aim b), and rename it to 'Economic, Social and Environmental Assets and Resources'.</li> </ul>
Sustainable mixed communities or Environmental Quality	Human health (14 <sup>th</sup> objective): the region's socially important assets are not protected and enhanced, as required under strategic aim b).	To ensure the regions socially important assets are protected and enhanced two options are available: <ul style="list-style-type: none"> <li>include a further target under the 'Sustainable mixed communities' strategic objective that aims to protect and enhance the northeast's strategically valued social assets (e.g. recreation facilities); or</li> <li>amend the 'Environmental Quality' objective to reflect Aim b), and rename it to 'Economic, Social and Environmental Assets and Resources'.</li> </ul>

Sustainable mixed communities or Environmental Quality	Human health (15 <sup>th</sup> objective): the region's socially important assets are not protected and enhanced, as required under strategic aim b).	To ensure the regions socially important assets are protected and enhanced two options are available: <ul style="list-style-type: none"> <li>the 'Sustainable mixed communities' objective should include a further target that aims to protect and enhance the northeast's strategically valued social assets (e.g. hospitals, affordable housing for rent and schools); or</li> <li>amend the 'Environmental Quality' objective to reflect Aim b), and rename it to 'Economic, Social and Environmental Assets and Resources'.</li> </ul>
Population growth	Population (17 <sup>th</sup> objective): the level of economic growth and housing allocations proposed in the draft plan for Peterhead (Aberdeenshire's largest town) may not be sufficient, as the size of the town is likely to attract a lot of in-migration workers	Monitor the housing needs e.g. (private housing and affordable) of Peterhead, and if necessary, increase the housing allowance in the north transport corridor at future reviews of the plan.
Population growth	Population (18 <sup>th</sup> objective): in Peterhead (the largest settlement in Aberdeenshire) the impact will be less positive, as the corridor receives less development, resulting in fewer houses for special needs.	In order to meet the likely housing needs in Peterhead (e.g. special needs, rented and privately owned) the housing needs of the town should be monitored, and if necessary increase the housing allowance in the north transport corridor at future reviews of the plan.
Economic growth or Environmental Quality	Material assets (25 <sup>th</sup> objective): although economic growth is promoted in the strategic objectives, they fail to protect and enhance the region's strategically important existing (economic) assets (e.g. Peterhead and Aberdeen harbours) and resources (e.g. mineral reserves), as set out in the plan's strategic	To ensure the regions valued assets and resources are protected and enhanced, two options are available: <ul style="list-style-type: none"> <li>include a further target under the 'Economic growth' objective that aims to protect and enhance the northeast's strategically important economic assets (e.g. Aberdeen and Peterhead harbours and Aberdeen Airport, and their</li> </ul>

	aim (b).	<p>access to them) and resources (e.g. mineral reserves); or</p> <ul style="list-style-type: none"> <li>• amend the ‘Environmental Quality’ objective to reflect Aim b), and rename it to ‘Economic, Social and Environmental Assets and Resources’.</li> </ul>
Sustainable development and climate change or Environmental Quality	Material assets (27 <sup>th</sup> objective): the protection and enhancement of existing flood defensive assets is not proposed in any of the structure plan’s strategic objectives.	<p>To ensure the regions valued assets and resources are protected and enhanced, an option is available:</p> <ul style="list-style-type: none"> <li>• include a further target under the ‘Sustainable development and climate change’ objective that aims to protect the region’s social, environmental and economic assets from flooding. The need for managed retreat of settlements should also be identified as an issue (e.g. add at the end of the first paragraph, “In the future, it may also be necessary to relocate part of the population at risk from flooding”); or</li> <li>• amend the ‘Environmental Quality’ objective to reflect Aim b), and rename it to ‘Economic, Social and Environmental Assets and Resources’.</li> </ul>
Sustainable development and climate change	Material assets (27 <sup>th</sup> objective): the positive impact the sustainable development strategic objective has on the environment is lessened, as it does not promote the sustainable use of resources on land and water (e.g. minerals).	<p>To ensure the sustained use of resources the ‘Sustainable development and climate change’ objective should include a further target that aims to reduce the region’s ecological footprint. For example to the Scottish average in the short term and then the global average in the long term.</p>

Assessment of compatibility of plan’s objectives

5.64 In order to determine the consistency and compatibility of the draft plan’s objectives to each other, an internal compatibility assessment of the objectives was undertaken. The results are provided in Figure 1 below.

**Figure 1: Internal Compatibility Assessment of the draft structure plan's strategic objectives**

		Structure Plan objectives					
		1	2	3	4	5	6
Structure Plan objectives	1						
	2	?					
	3	√	?				
	4	?	√	?			
	5	?	√	√	√		
	6	√	√	√	?	√	

  

Key	Description
?	Uncertain
0	No impact on each other
X	Potentially incompatible
√	Compatible

- 5.65 In terms of compatibility, the assessment identified conflicts and uncertainties between the objectives. Conflict principally exists between the economic growth objective and the environmental quality and sustainability objectives. However, the dual primary aims of the structure plan (sustaining the economy and addressing sustainable development) should ensure developments do not adversely affect sensitive receptors.
- 5.66 The introductory chapter in the draft plan highlights the importance of recognising the links between the differently elements of the plan. The economic growth objective could conflict with half of the objectives. However, these impacts are identified as uncertain and it will be important that the plan is implemented in a way which respects these linkages, implementing the plan as a whole.

## **6 The Appropriate Assessment**

- 6.1 Article 6 of the 'Habitats' Directive 92/43/EEC requires that where a plan or project may significantly affect a Natura 2000 site (natural heritage designation of international importance – Special Areas of Conservation, Special Protection areas, and Ramsar (wetland) sites), an Appropriate Assessment may be required. The purpose of the assessment is to identify the likely significant effects at an early stage.
- 6.2 The Appropriate Assessment comprised of two stages:
- a screening exercise of all Natura 2000 sites against the 8 strategic options (alternatives) to identify which sites are likely to be significantly affected by the structure plan; and
  - a full Appropriate Assessment of specific Natura 2000 sites against the spatial strategy and the objectives.
- 6.3 The screening exercise was undertaken during the technical evaluation of the eight strategic options in July 2007. The technical evaluation exercise identified the preferred strategic option upon the structure plan would be based. The full assessment was undertaken once members of both Aberdeen City and Aberdeenshire Councils agreed the spatial strategy. The screening exercise and full assessment was undertaken in accordance with the Scottish Executive's interim guidelines, *Assessing Development Plans in Terms of the Need for Appropriate Assessment* (May 2006) and with assistance from SNH and SEPA. The process undertaken was as follows:
- identify all Natura 2000 sites that may be affected within or outwith the structure plan boundary;
  - at the screening stage, identify all the qualifying interests and conservation objectives of each designation that may be affected in the context of the eight strategic options;
  - appraise the proposed intentions of the plan's aims, objectives, proposals and policies and any anticipated changes to the qualifying interests of any designation that the plan's implementation may cause or contribute to; and
  - to determine which elements of the plan would be likely to have any significant affect on any interests/feature of any European site, alone or in combination with other projects and plans either directly or indirectly.
- 6.4 The screening exercise was submitted to Scottish Natural Heritage (SNH) and other stakeholders for their comment as a working document. As significant effects were identified for all the options, a full Appropriate Assessment was undertaken.
- 6.5 The screening exercise is appended to the SEA as Appendix 8.

## Monitoring Framework

- 8.1 Aberdeen City Council and Aberdeenshire Council are required to monitor the significant environmental effects arising from the implementation of the structure plan. Monitoring arrangements will be integral to the adopted plan to constantly monitor the significant environmental effects. A possible framework for monitoring significant environmental effects is shown in Table 31 below.

### Limitations and Difficulties in the assessment

- 8.2 The environmental assessment process of the plan by Aberdeenshire Council is constrained by a number of factors, which are summarised as follows:
- this is the first assessment undertaken since the Environmental Assessment (Scotland) Act 2005 came into force. There is little experience prior to undertaking this assessment, although the council's SEA Officer provided assistance/guidance.
  - There were difficulties obtaining all the data for the baseline data. Even when some data was obtained, they did not cover trends and comparators. However, there are only gaps in small sections of the baseline data.
  - There were some technical difficulties assessing cumulative and synergistic effects.
  - There are difficulties compiling environmental problems in the area. As the SEA is being carried out in parallel with the plan, the delays in the planning process affect the timing of the SEA.

**Table 31: Monitoring the structure plan**

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Air quality	Reduction in nitrogen dioxide (NO <sub>2</sub> ) emissions.	<ul style="list-style-type: none"> <li>Aberdeen City Council: <a href="#">Air Quality Report - Air Quality Review and Assessment</a></li> <li>Structure Plan Monitoring of the <i>Accessibility</i> strategic objective</li> </ul>	Whenever the plan is reviewed	<ul style="list-style-type: none"> <li>Neighbourhood Services Central (Environmental Health) of Aberdeen City Council</li> </ul>	Biennially	<ul style="list-style-type: none"> <li>Review the spatial strategy.</li> </ul>
	Reduction in the number of days that exceed the National Air Quality Strategy (NAQS) objectives for NO <sub>2</sub> and PM <sub>10</sub> .					
	Achievement or de-designation of Aberdeen as an Air Quality Management Area.					
	Reduction in odour complaints	Aberdeenshire Council <i>Local Air Quality Management Progress Report</i>	<ul style="list-style-type: none"> <li>Whenever the plan is reviewed.</li> <li>If complaints do not decrease.</li> </ul>	<ul style="list-style-type: none"> <li>Planning and Environmental Service (P&amp;ES) of Aberdeenshire Council</li> <li>Neighbourhood Services Central (Health) of Aberdeen City Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the local plan policies.</li> <li>Preparation of supplementary planning guidance (SPG) for certain uses.</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Water quality	Improvement to water quality and maintain the ecological status of fresh water bodies in rivers and the coastline.	<ul style="list-style-type: none"> <li>SEPA (bathing and river water quality and abstraction rates of the River Dee)</li> <li>River Basin Management Plan (SEPA)</li> </ul>	When the water quality of particular water bodies has not improved or suddenly deteriorates.	SEPA	Annually	<ul style="list-style-type: none"> <li>Review the Action Programmes of the structure and local development plans.</li> <li>Prepare SPG for a particular water body to restrict further adverse impacts.</li> <li>Review development allocations</li> </ul>
	Increase in the number and duration of bathing water areas passing Bathing water quality EC Guideline Standards.					
	Reduction in diffuse pollution (e.g. nitrates) and phosphates within river catchment areas.					
	Reduction in point source pollution in watercourses.					
	Reduction in the number of planning applications granted planning permission in functional floodplains	<ul style="list-style-type: none"> <li>Sustainability and Information and Research of Aberdeenshire Council.</li> <li>Unknown for Aberdeen City.</li> </ul>	When it is identified planning permission is being granted for development not in accordance with policy.	<ul style="list-style-type: none"> <li>P&amp;ES of Aberdeenshire Council</li> <li>Strategic Leadership (Planning) of Aberdeen City Council</li> </ul>	Annually	Discuss future actions with Heads of Service – Member and Development Management Seminars on the issues of flood risk.



What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Soil	Remediation of contaminated land	<ul style="list-style-type: none"> <li>• Aberdeen City Council (2001) <i>Contaminated Land Inspection Strategy</i></li> <li>• Aberdeenshire Council <i>Contaminated Land Strategy, Public Register of Contaminated Land</i> and GGP overlay: <i>Potentially contaminated sites</i></li> </ul>	If the number of contaminated sites/land has not reduced annually.	<ul style="list-style-type: none"> <li>• P&amp;ES of Aberdeenshire Council</li> <li>• Neighbourhood Services (Central Area) of Aberdeen City Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review the Action Programmes of the local development plans.</li> <li>• Review local development plans policies, allocations and/or prepare SPG.</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Meeting Landfill Allowance Targets.	SEPA (quarterly Landfill Allowance Scheme)	If the level of Biodegradable Municipal Waste sent to landfill sites does not decline in accordance with the EC Landfill Directive.	SEPA	Annually	<ul style="list-style-type: none"> <li>Review the Action Programmes of the structure and local development plans.</li> <li>Review local development plans policies &amp; SPG (on strategic waste management facilities).</li> </ul>
Biodiversity	The number of notified or qualitative interests (e.g. protected habitats and species) adversely affected by new development.	Structure plan monitoring of the <i>Environmental Quality</i> objective (planning applications)	When proposals are supported as departures from local development plan policies.	Strategic Development Plan Team	Annually	Review local development plans policies
	Proportion of required open space being natural/wild areas. Increase in the number of wildlife corridors / augmentation of wildlife habitats (however a method of monitoring this would have to be developed).	<ul style="list-style-type: none"> <li>Open space strategies</li> <li>Open space audits</li> <li>Local development plans' policies and proposal maps</li> </ul>	At the review/ preparation stage of the local development plans.	<ul style="list-style-type: none"> <li>P&amp;ES of Aberdeenshire Council</li> <li>Strategic Leadership (Planning) of Aberdeen City Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the Action Programmes of the local development plans.</li> <li>Review local development plans policies</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Climatic factors	Reduction in carbon dioxide (CO <sub>2</sub> ) levels through carbon accounting.	Building Standards	When planning applications are being approved contrary to national guidance and standards.	Strategic Development Plan Team	Annually	<ul style="list-style-type: none"> <li>Review the Action Programmes of the structure and local development plans.</li> <li>Review local development plans policies.</li> </ul>
	Reduction in the North East's global (energy) footprint.	North East Scotland Global Reduction Footprint Report	When the development plan is reviewed.	<ul style="list-style-type: none"> <li>Strategic Leadership (Your environment) of Aberdeen City Council</li> <li>P&amp;ES of Aberdeenshire Council (Sustainability, Information and Research)</li> </ul>	Biennially	<ul style="list-style-type: none"> <li>Review local development plans policies.</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Decrease in the proportion of people travelling to work or study by car.	Aberdeen and Aberdeenshire Local Transport Strategies	When the development plan is reviewed.	<ul style="list-style-type: none"> <li>Strategic Leadership (Planning) of Aberdeen City Council</li> <li>Transportation and Infrastructure (T&amp;I) of Aberdeenshire Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the strategic objectives.</li> <li>Review local development plans policies.</li> </ul>
	Reduction in the number of properties at risk from flooding (either pluvial, fluvial or tidal).	Flood Prevention and Land Drainage (Scotland) Act 1997 Biennial Reports	When the development plan is reviewed.	<ul style="list-style-type: none"> <li>Strategic Leadership (Sustainability) of Aberdeen City Council</li> <li>T&amp;I of Aberdeenshire Council</li> </ul>	Biennially	<ul style="list-style-type: none"> <li>Review local development plans policies and allocations</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Human health and Population	Improvement to the issues highlighted in the <i>Scottish Index of Multiple Deprivation</i> affecting Aberdeen and Aberdeenshire.	Scottish Index of Multiple Deprivation	When the development plan is reviewed.	<ul style="list-style-type: none"> <li>Strategic Leadership (Statistics) of Aberdeen City Council</li> <li>P&amp;ES of Aberdeenshire Council (Sustainability, Information and Research)</li> </ul>	Biennially	<ul style="list-style-type: none"> <li>Review the strategic objectives.</li> <li>Review local development plans policies and land allocations.</li> </ul>
	Increase in the number of regeneration schemes re-developed.	<ul style="list-style-type: none"> <li>Aberdeen City Community Regeneration Masterplans</li> <li>Aberdeenshire Regeneration Outcome Agreement annual reports</li> </ul>	When the development plan is reviewed.	<ul style="list-style-type: none"> <li>Strategic Leadership (Equality and Diversity) of Aberdeen City Council</li> <li>Community Planning and P&amp;ES of Aberdeenshire Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the spatial strategy and strategic objectives.</li> <li>Review local development plans policies and land allocations.</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Decrease in the number of those overcrowded (as identified in the Census).	Census and forecast data	When the development plan is reviewed.	<ul style="list-style-type: none"> <li>Strategic Leadership (Statistics) of Aberdeen City Council</li> <li>P&amp;ES of Aberdeenshire Council (Sustainability, Information and Research)</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the strategic objectives.</li> <li>Review local development plans policies and land allocations.</li> </ul>
	<ul style="list-style-type: none"> <li>Increase in the number of planning permissions granted for the different housing types and the variation between Aberdeen and Aberdeenshire</li> <li>Increase in the number and tenure of dwellings built.</li> </ul>	Housing Land Audit				<ul style="list-style-type: none"> <li>Review local development plans' policies, land allocations and SPG.</li> </ul>
Cultural heritage	Decline in the number of listed buildings and archaeological sites at risk from human (e.g. neglect or vandalism) or natural (e.g. coastal erosion) impacts.	Structure plan monitoring of the <i>Environmental Quality</i> objective (planning applications)	When proposals are supported as departures from local development plan policies.	Strategic Development Plan Team	Annually	Review local development plans' policies

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Increase in the number of buildings renovated/ in regeneration schemes in urban and rural areas.	<ul style="list-style-type: none"> <li>• Aberdeen City Community Regeneration Masterplans.</li> <li>• Aberdeenshire Regeneration Outcome Agreement annual reports</li> <li>• Planning applications</li> </ul>	When historic buildings within regeneration schemes remain undeveloped.	<ul style="list-style-type: none"> <li>• Strategic Development Plan Team</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review the spatial strategy and strategic objectives.</li> <li>• Review local development plans policies and land allocations.</li> </ul>
	Reduced numbers of historic buildings registered as 'at risk'.	Buildings at risk register for Scotland (website)	When the number of buildings on the 'at risk' register remains static or increase in number.	<ul style="list-style-type: none"> <li>• Strategic Development Plan Team</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review the strategic objectives.</li> <li>• Review local development plans policies and land allocations and/or prepare SPG</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Landscape	<p>Decline in the quality of Aberdeen's and Aberdeenshire's landscapes (non/designated) and townscapes (including conservation areas), negative visual impacts on landscape character types and visual amenity.</p> <p>Reduction in the number of planning applications granted planning permission either as departures or against officers' recommendation. For example where:</p> <ul style="list-style-type: none"> <li>• new developments individually or cumulatively adversely affect designated landscapes; &amp;</li> <li>• the insensitive siting and design of new developments adversely affect the landscape and townscape setting.</li> </ul>	Structure plan monitoring of the <i>Environmental Quality</i> objective (planning applications)	When proposals are supported as departures from local development plan policies on the historic environment, landscape and green belt.	<ul style="list-style-type: none"> <li>• Strategic Development Plan Team</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review local development plans policies and land allocations and/or prepare SPG</li> </ul>



What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
Material assets	Increase in the number of waste management facilities built that addresses the need identified in the Area Waste Plan.	Structure plan monitoring of the <i>Sustainable development and climate change</i> strategic objective (SEPA, quarterly Landfill Allowance Scheme Data)	When requirement set out in the North East Area Waste plan are not being delivered in lower tier plans.	<ul style="list-style-type: none"> <li>SEPA</li> <li>Strategic Development Plan Team</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the Action Programmes of the structure and local development plans.</li> <li>Review local development plans policies, land allocations and/or SPG for strategic waste management facilities.</li> </ul>
	Increase and enhancement in the number of wastewater treatment works and water works built.	<ul style="list-style-type: none"> <li>Scottish Water</li> <li>SEPA</li> </ul>	When land allocations are constrained.	<ul style="list-style-type: none"> <li>Strategic Development Plan Team</li> <li>Strategic Leadership (Planning) of Aberdeen City Council</li> <li>P&amp;ES of Aberdeenshire Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Review the Action Programmes of the structure and local development plans.</li> <li>Review the spatial strategy and/or strategic objectives.</li> <li>Review the local development plans' policies and/or land allocations.</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	Decrease in waiting list figures for affordable housing.	<ul style="list-style-type: none"> <li>• Council housing waiting lists</li> </ul>	When the waiting list figures for affordable housing remain static or increases.	<ul style="list-style-type: none"> <li>• Neighbourhood Services (Planning) of Aberdeen City Council</li> <li>• Housing and Social Work of Aberdeenshire Council</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review the spatial strategy and/or strategic objectives.</li> <li>• Review the local development plans' policies.</li> </ul>
	Increase in redevelopment of brownfield sites.	<ul style="list-style-type: none"> <li>• Employment Land Audit</li> <li>• Housing Land Audit</li> <li>• Scottish Annual Vacant and Derelict Land Survey</li> </ul>	When the amount of brownfield land remains static or increases.	<ul style="list-style-type: none"> <li>• Strategic Development Plan Team</li> <li>• Strategic Leadership (Planning) of Aberdeen City Council</li> <li>• P&amp;ES of Aberdeenshire Council (Sustainability, Information and Research)</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review the Action Programmes of the structure and local development plans.</li> <li>• Review the local development plans' policies and/or land allocations.</li> </ul>
	Increase in the use of sustainable materials in new	<ul style="list-style-type: none"> <li>• Housing Land Audit (densities)</li> </ul>	When proposals are supported as	<ul style="list-style-type: none"> <li>• Strategic Development</li> </ul>	Annually	<ul style="list-style-type: none"> <li>• Review the strategic objectives.</li> </ul>

What needs to be monitored? (e.g. effects)	What sort of information is required? (Indicators)	Where can the information be obtained?	When should the remedial action be considered?	Who is responsible for undertaking the monitoring?	How should the results be presented?	What remedial actions could be taken?
	build and retrofit in planning applications.	<ul style="list-style-type: none"> <li>• Planning applications</li> </ul>	departures from local development plan policies on sustainable development.	Plan Team <ul style="list-style-type: none"> <li>• Strategic Leadership (Planning) of Aberdeen City Council</li> <li>• P&amp;ES of Aberdeenshire Council</li> </ul>		<ul style="list-style-type: none"> <li>• Review the local development plans' policies.</li> </ul>

## 8 Next steps

### Proposed Consultation Timescale & Anticipated Milestones

- 8.1 Table 32 shows the remaining steps needed for the SEA of the Aberdeen City Council and Aberdeenshire Council Structure Plan; and how these steps would be carried out and described in the final SEA Environmental Report. The period for consultation on the draft structure plan and the accompanying environmental report is a minimum of six weeks.

**Table 32: Anticipated plan-making and SEA milestone**

Expected date	Milestone	Comments
	Consulting on the Environmental Report and the Draft Plan	The Scottish Ministers agreed on the 6 weeks' period of consultation
	Collating views from the Consultation Authorities and the Public on the Environmental Report and Plan submitted for consultation	
	Make a report to the Committee on the opinion of the public on the plan and the SEA, and recommend appropriate changes	
	Consideration of objections and examination in public if any.	This cannot be predicted
	Take the opinion of the public, and the recommendations of the Committee into account in modifying the SEA and the plan	
	Finalise plan	
	Produce action programme for the plan	
	Adopt plan	
	Post Adoption Statement and Providing Information	
	Monitor Plan	

### Analysing Consultees & their Comments

- 8.3 Table 29 lists those organisations that were invited to comment on the SEA of the structure plan's draft vision and aims. Limited time did not allow for further consultation of the provisional strategy and strategic objectives prior to publishing the Environmental Report. Optional meetings were provided for those wishing to discuss the assessment of the plan's various components. Only SEPA took up this offer.

**Table 29: Organisations consulted on the structure plan's draft vision & aims**

<b>Source</b>	<b>List names</b>
Private individual	None
Community group of interest	Aberdeen City Environmental Challenge Forum Aberdeen Homes Forum Aberdeenshire Environmental Forum
Private sector	Aberdeen Renewable Energy Group Dee District Salmon Fishery Board Scottish Renewables Forum
Public sector	Aberdeen City and Shire Economic Forum Aberdeen Local Housing Strategy Group Architecture and Design Scotland Aberdeenshire Local Housing Strategy Group Historic Scotland North East Waste Partnership Royal Commission on the Ancient and Historical monuments of Scotland Scottish Enterprise Grampian Scottish Environment Protection Agency Scottish Natural Heritage (Grampian) Scottish Water Sportscotland
Internal council departments	Aberdeen City: Planning Policy and Environmental Services (Environmental Health, Landscape, and Conservation and Design and Environment); Sustainable Development; Arts, Culture, Heritage and Sport; and Economic and Environment Sustainability. Aberdeenshire: Transportation and Infrastructure (Roads and Landscape), Planning and Environmental Services (Waste, Natural Heritage, Archaeology, Built and Cultural Heritage, Information and Research, and Environmental Health,) and Education, Learning and Leisure.
Local authority	Angus Council Cairngorms National Park Authority Dundee City Council Highland Council Perth and Kinross Council The Moray Council
Other	Aberdeen City Environment Forum Aberdeen Urban Wildlife Group Aberdeenshire Housing Partnership Aberdeenshire Sports Council Aberdeenshire Towns Partnership Coordinator Huntly Architectural Heritage Society of Scotland Association for the Protection of Rural Scotland Friends of the Earth (Aberdeen)

	National Trust for Scotland North East Scotland Biological Record Centre North East Scotland Preservation Trust RSPB SCARF Energy Advice Centre Scottish Coastal Forum Scottish Environment LINK Scottish Wildlife Trust The Centre for Ecology and Hydrology
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