East Lothian Council

2018 local development plan

environmental report

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ABBREVIATIONS

AA	**Appropriate Assessment**	**PAN**	**Proposal of Application Notice**
AQMA	Air Quality Management Area	**PPS**	Plan, Programmes or Strategy
CAT	Countryside Around Towns		
CSGN	Central Scotland Green Network	**SDP**	Strategic Development Plan
DPEA	Department of Environmental and Planning Appeals	**SEA**	Strategic Environmental Assessment
EIA	Environmental Impact Assessment	**SEPA**	Scottish Environmental Protection Agency
ELLP 2008	East Lothian Local Plan 2008	**SESplan**	Strategic Development Planning Authority for Edinburgh and South East Scotland
ER	Environment Report	**SG**	Supplementary Guidance
EU	European Union	**SNH**	Scottish Natural Heritage
HES	Historic Environment Scotland	**SPA**	Special Protection Area
HRA	Habitat Regulation Appraisal	**SPACE**	Spatial Planning Assessment of Climate Emissions
IER	Interim Environment Report	**SPG**	Supplementary Planning Guidance
LDP	Local Development Plan	**SPP**	Scottish Planning Policy
MIR	Main Issues Report	**SUDS**	Sustainable Urban Drainage Systems
NHS	National Health Service	**SSSI**	Site of Special Scientific Interest
NPF	National Planning Framework		

GLOSSARY

Action Programme	A document which identifies the timescale, roles, responsibilities and actions of those partners and stakeholders involved in implementing the Local Development Plan spatial strategy.
Active Travel	Travel characterised by physical activity such as walking and cycling.
Affordable Housing	Housing of a reasonable quality that is affordable to people on relatively modest incomes
Air Quality Management Areas	Areas designated under section 83(1) of the Environment Act where the Council has identified that UK air quality objectives are unlikely to be met.
Ancient Woodland	Woodland identified and included in the Forestry Commissions Native Woodland Survey of Scotland and/or SNH's Ancient Woodland Inventory
Appropriate Assessment	An assessment carried out by the Competent Authority required under the Conservation (Natural Habitats &c) Regulations 1994 (as amended), where there is a Likely Significant Effect on a Natura 2000 site.
Article 4 Direction	Article 4 of the Town and Country Planning (General Permitted Development) (Scotland) Order 1992 gives the Scottish Government and planning authorities the power to remove permitted development rights by issuing a direction
Battlefields	Site within Historic Environment Scotland's Inventory of Historic Battlefields
Biodiversity	The variability in living organisms and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems (UN Convention on Biological Diversity, 1992)
Blue infrastructure/space	Water features that have recreational, biodiversity or landscape value
Brownfield Land	Land which has been previously developed. The term may cover vacant or derelict land, infill land or land occupied by redundant or unused buildings and developed land within the settlement boundary where redevelopment is acceptable.
Business use	Class 4 of the Town and country Planning (use Classes)(Scotland) Order 1997 which includes general office, light industry or research and development which can be carried out without detriment to the amenity of any residential area
Climate change adaptation	Adjustment to reduce or avoid the harmful consequences of climate change
Climate Change mitigation	Action to reduce or limit the amount of greenhouse gas in or emitted to the atmosphere.
Countryside Around Towns	A planning policy applied to countryside adjacent to a settlement to protect the character of the settlement (including its landscape setting) and the local area or to prevent coalescence between settlements.
Cumulative effects	Additional changes caused by a proposal, plan or policy in conjunction with others.
Development Brief or Framework	Document approved by the Council providing guidance on how a specific site or significant size or sensitivity should be developed in line with the relevant planning and design policies. It will usual contain some indicative vision of future development form.

Development Plan	A document(s) that sets out how places should change and what they could be like in the future. It stipulates what type of development should take place where, and which areas should not be developed. In the Edinburgh City Region the development plan is made up of the Strategic Development Plan, Local Development Plans and any Supplementary Guidance.
Environmental Report	A document required under the Environmental Assessment (Scotland) Act 2005 which describes and evaluates the likely significant impact of implementing a plan, policy or strategy.
European Protected Species	Species listed on Schedules 2 (animals) and 4 (plants) of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended; in East Lothian the animal species which might be found are bats (all species are EPS) otter, great crested newt.
European sites	A European site is one defined as set out in Section 10 (1) of the Conservation (Natural Habitats etc.) Regulations 1994 as amended. They comprise Special Areas of Conservation and Special Protection Areas designated by the Habitats and Birds Directives respectively. They can also be referred to as Natura sites (see also Natura 2000 sites). Ramsar sites, classified under the Ramsar Convention on Wetlands of International Importance also form part of the Natura 2000 network of European sites, either as a Special Protection Area or Special Area of Conservation. The Scottish Government requires authorities to afford the same level of protection to proposed Special Areas of Conservation and Special Protection Areas as they do to sites which have been designated. In Scotland, European sites are given protection through The Conservation (Natural Habitats &c,) Regulations 1994 as amended.
Functional flood plain	The areas of land where water flows in times of flood which should be safeguarded from further development because of their function as flood water storage areas. For planning purposes the functional floodplain will generally have a greater than 0.5% (1:200) probability of flooding in any year.
Flood risk	A measure of the likelihood of flooding occurring and the associated impacts on people, the economy and the environment
Garden and Designed Landscapes	Area on the Inventory of Historic Gardens and Designed Landscapes kept by Historic Environment Scotland; local and regional Gardens and Designed Landscapes also exist and these will be identified in supplementary planning guidance.
Green Belt	An area defined in the development plan which can encircle settlements as well as act as buffers, green corridors or wedges. It can prevent the merging of settlements and provide clarity on where development will or will not take place.
Greenfield land	Land which has not previously been developed.
Green infrastructure/space	Outdoor spaces with landscape, biodiversity or recreational value such as parks, woodlands, play spaces; can included blue infrastructure such as rivers, ponds, beaches, sustainable urban drainage systems.
Green Network	Connected areas of green infrastructure and open space that together form an integrated and multi-functional network.
Habitats Regulations	General term for the Conservation (Natural Habitats, &c) Regulations 1994, as amended, which translated into UK law the EU Habitats and Wild Birds Directive.
Historic Environment	The physical evidence for previous human activity that connects people with place; includes listed buildings, battlefields, conservation areas, scheduled monuments and their settings as well as buildings or archaeological sites of more local interest and currently unknown archaeology

Housing in Multiple Occupation	Accommodation which is the main residence of three or more unrelated people who share a bathroom, toilet and kitchen. It can also be known as a house share.
Housing land audit	Assessment of the amount of housing land available across East Lothian as at 31 March each year.
Housing land requirement	The amount of land required to be allocated for housing (including generosity) to meet the identified housing requirement.
Listed Building	A building identified by Historic Environment Scotland as being of special architectural or historical interest as set out in the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997. Categorised A, B, C(s) to reflect their relative importance.
Local Centre	A local shopping centre as identified by the LDP.
Local Development Plan (LDP)	The document setting out where development should and should not occur, and providing planning policy for the local area. The plan must conform to the strategic development plan for the area, if there is one.
Low and zero carbon generating technology	Equipment provided on-site or integrated into buildings and which use solely renewable sources, resulting in zero carbon dioxide emissions, or which include use of fossil fuels but with significantly lower carbon dioxide emissions overall, which may include combined heat and power (CHP) and/or a range of other methods.
Local Biodiversity Site	Site designated by Councils to recognise and protect locally or regionally important biodiversity.
Local Geodiversity Site	Site designated by Councils to recognise and protect locally or regionally important geodiversity.
Master Plan	A detailed document that explains how a site or sites will be developed, usually prepared by or on behalf of the landowner, including a representation of the three-dimensional form of proposals and an implementation programme.
Monitoring Statement	Report prepared on the relevant planning and environmental issues to inform the preparation of a local development plan.
National Planning Framework 3	The third of a series of national spatial plans prepared by the Scottish Government, published in 2014 and current at the time of preparation of the LDP and ER.
Natura 2000 sites	Natura sites represent the very best of Scotland's nature. Natura is the term given to Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). These internationally important sites are designated under two of the most influential pieces of European legislation relating to nature conservation, the Habitats and Birds Directives. The network of sites across the European Community is known as Natura 2000.
Prime agricultural land	Class 1, 2, and 3.1 agricultural land as defined by the James Hutton Institute, being land that is the most versatile for food production.
Priority habitat	Habitats that is identified as a priority in the East Lothian Local Biodiversity Action Plan (note; these are not the same as European Priority Habitats listed in Annex 1 of the Habitats Directive as referred to in the LDP).
Ramsar Site	Ramsar sites are wetlands of international importance, which provides for the conservation and good use of wetlands designated under the Ramsar Convention.
Retail Impact Assessment	Systematic study predicting the impact of new shopping space on the vitality and viability of town centres and existing facilities
Scottish Planning Policy	Scottish Government's policy statement on national importance land use planning matters; the version referred to is that published in 2014.

Scheduled Monument	An archaeological monument of national importance that is legally protected under the Ancient Monuments and Archaeological Areas Act 1979
Sensitive receptor	Aspect of the environment particularly likely to be affected by development
Site Brief	Document generally prepared by the Council setting out the main issues in developing a site and its views on how they should be addressed.
Site of Special Scientific Interest	SSSI's are those areas of land and water (to the Mean Low Water Springs) that best represent our natural heritage – its diversity of plants, animals and habitats, rocks and landforms, or a combination of such natural features. Designated by SNH under the Nature Conservation (Scotland) Act 2004, it is an offence to intentionally or recklessly damage their protected natural features.
SPACE Tool	Spatial Planning Assessment of Climate Emissions tool supported by the Scottish Government to help inform decisions about the greenhouse gas implications of planning policies.
Special Areas of Conservation	An internationally important site designated under the Habitats Directive to protect threatened habitats and species, both terrestrial and marine. Together with SPA's these sites make up the Natura site series.
Special Protection Area	An internationally important site designated under the EU Birds Directive to give protection to specific rare, threatened or vulnerable bird species, or to regularly occurring migratory species. Together with SAC's these sites make up the Natura site series
Special Landscape Area	An area designated by the Council through this local development plan as being of special landscape character requiring special protection against inappropriate forms of development.
Strategic Development Plan	In Scotland's four city regions, Strategic Development Plans provide a long term vision, a spatial strategy and strategic policies and proposals, setting clear parameters for Local Development Plans.
Supplementary Guidance	Guidance and detailed criteria prepared by the Council which deals with further information or detail in respect of particular LDP issues. Supplementary guidance must be expressly identified in the LDP and be submitted to Scottish Ministers before it can be approved by Council.. Once adopted, supplementary guidance forms part of the development plan.
Supplementary planning guidance	Supplementary planning guidance is to be prepared to provide additional information and guidelines to enable certain policies of the Local Development Plan to be implemented. It does not form part of the plan but sits beside it as a non statutory document and a material consideration.
Sustainable Development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The Brundtland Definition. Our Common Future, The World Commission on Environment and Development, 1987.
Sustainable Urban Drainage Systems	A range of techniques designed to manage the flow of water runoff form a site by allowing water control and treatment on-site, reducing the impact on existing drainage systems.
Thermal generation	he process of generating electricity from heat. There are four thermal energy fuels: coal, natural gas, wood waste and geo-thermal. Strictly speaking, nuclear power is also thermal energy fuel, but it is set aside in a class of its own because of its unique traits.

Town Centre	Centres that provide a diverse and sustainable mix of activities and land uses which create an identity that signals the function and wider role.
Transport Appraisal	Systematic assessment of likely impacts of proposals on the transport network.
Travel Plan	A site based tool for an organisation to manage its transport needs to encourage safe, healthy and sustainable travel options, reflecting the different needs and problems of different locations. The principal objective of a plan is typically to minimise car use associated with a development.
Watercourse	All means of conveying water except a water main, sewer or receptacle.
Windfall	A site which becomes available for development during the plan period which was not anticipated when the plan was being prepared.

NOTE ON MAPPING

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NON-TECHNICAL SUMMARY

In compliance with Section 14(3) and Schedule 3 (10) of the Environmental Assessment (Scotland) Act 2005, the Environmental Report must contain a non-technical summary covering the following items:

1. **Description of the broad findings of the SEA;**
2. **A summary of the information and findings specified at paragraphs 1 – 9 of Schedule 3 of the Act – i.e. a summary of the findings of each stage of the assessment and section of the ER;**
3. **Details of the consultation and the address to which any comments should be sent.**

BACKGROUND

The Environmental Assessment (Scotland) Act 2005 has the effect of making Strategic Environmental Assessment (SEA) mandatory when preparing a Local Development Plan (LDP) under the Town & Country Planning (Scotland) Act 1997 (as amended). The SEA process is to be aligned with the key stages of preparing the Development Plan, with the SEA findings reported at each stage. This is done with the advice of the 'Consultation Authorities' (CA), namely Historic Environment Scotland (HES), Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH). This Environmental Report (ER) reports the SEA findings and has been prepared with the advice of the CAs.

In October 2014 the Council published for consultation its Main Issues Report for its LDP and the associated Interim Environmental Report (IER). This consultation period ended in February 2015. Although the Consultation Authorities were satisfied with the scope and content of the IER, they made some minor suggestions for how the IER might be improved while noting that these would not change the outcome of the SEA overall. The proposed LDP was published in September 2016 for representation for a period of 7 weeks. The Draft Environment Report was published alongside this for consultation and to help inform responses to the LDP. The suggested changes from the Consultation Authorities were indicated throughout the Draft Environmental Report as follows: **Brown: Historic Environment Scotland suggestions**; **Green: Scottish Natural Heritage suggestions**; **Blue: Scottish Environmental Protection Agency suggestions**.

The Consultation Authorities were generally satisfied with the assessment however following publication of the proposed LDP and Draft Environmental Report gave some additional comments. A small number of comments were also received from members of the public and other organisations. All responses were considered and where

appropriate, incorporated into this Finalised ER [1]. As such, this SEA Environmental Report has evolved with the plan making and consultation processes. The paragraphs below summarise the main findings of the SEA. However, the approach that scores best in SEA terms was not necessarily that progressed by the LDP. Sometimes for other planning reasons an approach was taken including in choice of sites for development. The purpose of the ER is to identify, describe, predict and evaluate the likely significant effects on the environment of implementing a plan, policy or strategy (PPS), and its reasonable alternatives. It is to describe any measures envisaged to prevent, reduce and as far as possible offset any significant adverse effects (mitigation). It is also to clarify who will be responsible for delivering any mitigation and describe the monitoring arrangements.

The Finalised Environment Report also takes into account changes to the LDP made through Examination. The SEA Post Adoption Statement has been published to show how the consultation responses to the SEA and changes to the LDP from the Examination have been taken into account, and set out the effect that the SEA process as a whole has had on the LDP.

This document is the Environmental Report (ER) of East Lothian Council's LDP.

SEA OBJECTIVES & SUB-OBJECTIVES

The SEA process requires SEA Objectives and Sub-objectives to be set and used in the assessment of the LDP. These are set out in Table A below. The Consultation Authorities have had extensive involvement in selecting these objectives to ensure that they reflect the intentions of higher tier PPSs, to which the LDP must conform.

TABLE A: SEA OBJECTIVES AND SUB OBJECTIVES

Sea Topic	SEA Objective	SEA Sub Objective
Biodiversity, Flora and Fauna	Conserve or enhance biodiversity, flora and fauna.	• *conserve or enhance sites designated for their international, national or local nature conservation interest;* • *conserve or enhance wider habitat connectivity;* • *conserve or enhance protected trees or woodland important for its type, extent or landscape significance;*
Population	Maintain or enhance the quality of life for East Lothian's residents.	• *contribute to regeneration of disadvantaged areas;* • *promote the provision of affordable housing;* • *ensure access via active travel or public transport options to facilities, or services, or employment opportunities;*
Human Health	Maintain, or provide opportunities to improve, human health.	• *ensure reasonable accessibility to existing open spaces, or sports facilities, or the core path network;* • *preserve or enhance the Central Scotland Green Network (CSGN);* • *ensure acceptable levels of noise;*

[1] See the SEA Post-adoption Statement for further detail of how comments have been taken into account.

		• *reduce or maintain levels of emissions and help ensure that the threshold for an AQMA designation is not triggered;*
Water	Maintain or enhance the water environment and reduce flood risk.	• *avoid inappropriate development in areas at flood risk and ensure that the overall flood risk in the area is not increased as a result of development;* • *maintain or enhance the ecological status of the water environment;*
Soil	Conserve or enhance soil quality, quantity, function.	• *avoid the loss of prime quality agricultural land;* • *avoid the loss of rare or carbon-rich soils;*
Air	Maintain or enhance air quality.	• *maintain or enhance current levels of air quality;* • *promote good public transport accessibility;* • *promote good local access to existing facilities, services and employment;*
Climatic Factors	Contribute to reducing GHG emissions/energy consumption or adapting to effects of climate change.	• *reduce the need to travel as well as the distance travelled;* • *promote development that is energy and resource efficient;* • *promote resilience to the effects of climate change through, for example, flood, storm, landslip or subsidence;*
Material Assets	Manage, maintain or promote the efficient, effective or appropriate use of material assets.	• *promote the re-use of existing buildings worthy of retention, make an efficient use of land and / or prioritise the use of brownfield land over greenfield land;* • *safeguard mineral resources, the extraction of which would be acceptable in policy terms, from permanent sterilisation;* • *support and / or ensure provision of adequate infrastructure, services and facilities;* • *promote the reduction, reuse and recycling of waste;*
Cultural Heritage	Preserve or, where appropriate, enhance East Lothian's historic environment.	• *preserve and if appropriate enhance:* - *the character or appearance of Conservation Areas;* - *listed building or their settings;* - *Scheduled Ancient Monuments or their settings;* - *local archaeological sites;* - *Historic Gardens or Designed Landscapes;* - *sites included in the Inventory of Historic Battlefields.*
Landscape	Conserve or enhance the character and appearance of settlements and the landscape.	• *prevent development from harming locations containing built or natural landscape features of significance;* • *protect the separate identity of settlements;* • *allow the consolidation /appropriate expansion of the existing settlement pattern and settlement structure;* • *conserve or enhance important areas of open / green space.*

CURRENT STATE OF THE ENVIRONMENT

East Lothian has a relationship with the city of Edinburgh and the city region and its settlements and centres, but it also offers something different. It has a wide variety of high quality built and natural environmental capital and an attractive landscape. The area also has a considerable amount of prime quality agricultural land as well as some carbon rich and rare soil types. Water quality is generally good, but there is scope for further improvement particularly in relation to agricultural run-off. The Tyne and Esk rivers have a history of flooding, as does the Biel Water and some coastal locations. With countryside and coast in the area there is an abundance of leisure tourism opportunities. This places the area in demand as a place to live, work, for recreation and to visit. The very characteristics that attract people to East Lothian are also those at risk of being lost if new development is not managed sensitively.

Agricultural activity continues throughout the area, reflecting the quality of agricultural land, but the area's economic base is also changing, particularly with tourism and leisure opportunities. However, East Lothian is currently a less preferential location for attracting large scale economic development and employment opportunities in comparison to others in the wider city region. This is a significant obstacle to bringing about an increase in the comparatively low job density in the area and realising associated social, economic and environmental benefits, including reducing commuting travel patterns and associated CO_2 emissions. East Lothian has been the subject of strategic development pressure for many years, mainly because it is part of the Edinburgh Housing Market Area. This has resulted in the expansion of settlements, with those neighbouring ones in the west drawing closer together and those in the east near the limit of what can be achieved in the way of expansion without significant change to their character, setting and infrastructure.

However, there is a need to facilitate new development, including affordable housing development. Regeneration opportunities should also be promoted as well as sustainable transport options. In so doing consideration needs to be given to the existing settlement pattern in the area, the form and structure of towns as well as the form of the green belt. Significant amounts of greenfield land will be required to meet the SDPs development requirements given the lack of brownfield land available in the area. East Lothian has six main towns and many smaller settlements of different character. The main towns act as service hubs for smaller settlements around them. They are well consolidated and this influences the type and scale of new development, including commercial and retail development, that can be accommodated within them.

These factors combine to restrict access to housing, jobs and other opportunities for some residents (placing them at a disadvantage) as well as generate commuting travel patterns and associated CO_2 emissions. In turn these influence the need for affordable housing, transport network capacity issues, demand for and limited capacity in public transport and other services and car based commuting. Air quality is now an issue in Musselburgh town centre. The trend towards travelling longer distances (and possibly online retailing) has also influenced shopping habits, impacting on the role, vitality and viability of East Lothian's town centres and the range of amenities available locally.

Additional demands are being placed on the area's facilities and infrastructure, local service provision and infrastructure capacity. While some water and drainage capacity exists in the west of East Lothian, infrastructure capacity is lacking in many areas and needs to be provided to accommodate new development. In view of the scale of growth the area has accommodated and already has planned, the lack of available education capacity is now a significant constraint on further new development. Significant investment will be required to overcome these constraints, at a time when the restricted availability of funds impacts on delivery of the increased infrastructure capacity necessary to deliver growth. However, there is continuing need to make appropriate development land available in the area and whilst finding this will present challenges it will also offer opportunities.

KEY ENVIRONMENTAL ISSUES

Following on from the summary of the current state of the environment, Table B below provides a summary the key environmental issues likely to be faced in East Lothian as relevant to the LDP. These issues are set out per the SEA objectives described in Table A above.

TABLE B: KEY ENVIRONMENTAL ISSUES	
SEA Objective	**Issues**
Biodiversity, Flora, Fauna	• the cumulative impact that bringing forward additional development land could have on East Lothian's extensive international, national and local nature conservation designations, particularly the Firth of Forth and the Forth islands SPAs and including that which is not subject to statutory protection and outwith designated sites; • new development could have an impact on protected species, e.g. bats, badgers and water voles etc.; • the need to encourage the creation of and enhance biodiversity and ecological networks~~;~~ • ~~the need to encourage~~ through the creation of green networks to contribute to the delivery of a wider Central Scotland Green Network ~~and habitat connectivity etc.~~;
Population	• the need to provide housing land, including affordable housing, and promote regeneration and reduce inequalities; • there is a need to balance the requirement for, and location of, new housing against the availability and provision of employment opportunities to help redress the current significant levels of out-commuting from East Lothian, particularly by less sustainable forms of transport; • the need to secure the development of sustainable mixed communities that are accessible, well-designed, as self-contained as possible, and have an appropriate range of housing and local employment, social and community facilities and infrastructure etc.;
Human Health	• the need to ensure that new development can be well-connected into walking and cycling networks so that increased physical activity and active travel can be promoted, including through the green network; • the need to secure the proper provision of greenspace and sports pitch provision in new development so people can make positive life style choices; • the traffic impacts of new development including noise or air quality related impacts, and the need to select locations for new development which minimise the need to travel and are accessible to public transport, thereby minimising emissions (particularly in Tranent and Musselburgh town centres) and that do not increase flood risk;

Soil	• the need to deliver additional development land, particularly housing, may have an impact on soils that have an important role in water quality, flood prevention and biodiversity; • it is unlikely that East Lothian's development requirements can be delivered without some impact on its supply of greenfield land and prime quality agricultural land and on other carbon rich and rare soil types;
Water	• the requirement to identify additional land for development while seeking to avoid land which is liable to flood or the development of which would increase a flood risk elsewhere, **thereby also recognising the relationship between this and human health**; • the need to mitigate the impacts of flooding and to adapt to and be resilient to future flood risk; • the requirement to consider aspects of the water environment - for example, pressures relating to sewage disposal, water resources or potential physical changes to the water environment - that may be affected by the LDP;
Air	• the need to provide for additional development while ensuring that its traffic / air quality impacts are minimised, **including on human health**, by choosing locations which integrate land use and transport and minimise the need to travel and are accessible via public transport and active travel options; • in particular, to ensure that new development is planned alongside measures that seek to manage Air Quality within acceptable limits at Musselburgh and Tranent;
Climatic Factors	• to ensure that the traffic impacts of new development are minimised by choosing locations which minimise the need to travel as well as the distance that need be travelled and are accessible to public transport, thereby minimising additional greenhouse gas emissions; • to ensure that East Lothian's settlements are resilient to the impacts of a changing climate, including rising sea levels, drier summers, wetter winters, and an increased frequency of heavy rain events;
Material Assets	• The need to minimise the loss of greenfield land and to maximise the reuse of existing buildings and previously developed land as well as make an efficient use of land if developed; • to recognise that potential mineral reserves in East Lothian, particularly coal that could be extracted by opencast means, often occur in populated areas set within an open, attractive landscape where the intervisibility and proximity of workings and settlements would be a significant landscape and visual impact and amenity issue; • The constraints generated by the lack of available infrastructure capacity; • The need to ensure the reduction, reuse and recycling of waste;
Cultural Heritage	• to accommodate additional development requirements while **preserving and enhancing historic environment features, including their setting, and** ensuring that the impact on the cultural heritage of East Lothian's towns, villages and rural areas is minimised including that which is not subject to statutory protection and outwith designated sites;
Landscape	• to accommodate development requirements while minimising any adverse visual and landscape impact; • to minimise the impact of new development on the landscape and the setting of communities and to avoid settlement coalescence where possible and appropriate; • to accommodate additional development while respecting the form and identity of existing settlements and the settlement pattern; • to conserve or enhance important areas of green space and prevent town cramming.

EVOLUTION OF THE BASELINE WITHOUT THE LDP

In the absence of the LDP it is likely that changes to the environmental baseline will occur due to natural processes and human activity unrelated to the LDP strategy. The existing environmental issues described above would therefore persist. In addition, due to higher tier PPS as well as PPS that operate at the same level as the LDP the pressures for future development would continue, yet there would be no land use plan to guide the location of it and to co-ordinate the delivery of related infrastructure in an up to date policy context through which any mitigation could be secured - considerations include:

- Out of date policy context may not properly reflect the approach of current natural and cultural environmental protection regime objectives;
- A missed opportunity to promote appropriate locations for development in a way that would benefit the area and its residents in the long term;
- Inability to promote development in the right place at the right time alongside adequate supporting infrastructure and service provision.

The role of the LDP in respect of contributing to each of the SEA Objectives is described fully in Section 3. However, this role mainly relates to the LDP influencing where new development should happen and how through its spatial strategy, and where it should not happen. In addition, the LDP criteria based policies can be used to secure appropriate mitigation where the principle of development is acceptable. As such, Table C below identifies key potential changes to the environmental baseline for each of the SEA Objectives if the local development plan were not prepared.

TABLE C: POTENTIAL CHANGES TO THE ENVIRONMENTAL BASELINE WITHOUT THE LDP	
SEA Objective	**Evolution of baseline without the LDP**
Biodiversity, Flora, Fauna	**In the case of international and national sites and species, these would be protected by higher level plans policies and strategies. Other** ~~These~~ natural heritage assets would not be as well protected, particularly in the case of local sites. As such, these **other** assets may be lost or irrevocably damaged. Opportunities to promote habitat creation, connectivity and to support biodiversity would also be reduced.
Population	Opportunities and outcomes associated with creating mixed communities, promoting regeneration and providing opportunities for housing, including affordable housing, and employment in a way that is integrated with transport, particularly public transport, and active travel would be reduced.
Human Health	Related opportunities to maintain or provide opportunities to improve human health would be reduced. These include maintaining or enhancing air quality, ensuring acceptable levels of noise as well as ensuring access to open spaces, active travel and leisure opportunities and to seek provision of community facilities locally.
Soil	The policy framework to prioritise use of brownfield land and to ensure development of greenfield land is minimised would not be as clear. The same would also apply to ensuring that the loss of prime quality agricultural land and the disturbance of carbon rich / rare soils is minimised. In addition, the ability to promote an efficient use of land, for example in terms of the density of development, would also be reduced.

Water	There would be an increased risk that development may take place in areas of flood risk and / or increase the risk of flooding elsewhere, and that resilience to flood risk would be reduced in new development. The ecological and morphological status of the water environment may deteriorate with opportunities for improvement also reduced.
Air	The opportunity to maintain or enhance air quality by selecting appropriate locations for new development and by integrating land use and transport would be reduced. The same principles would apply in terms of LDP criteria based policies that can seek to manage the introduction of mixed land uses and to protect amenity.
Climatic Factors	Related opportunities to reduce Scotland's greenhouse gas emissions by at least 80% by 2050 against the 1990 baseline would be reduced. The plan can help achieve this by encouraging renewable energy development and low and zero carbon technologies in appropriate areas, and by integrating land use and transport including in the design of new development.
Material Assets	Opportunities to manage, maintain or promote the efficient, effective or appropriate use of material assets would be reduced. Such assets include land, buildings and infrastructure, minerals and aggregates, and the ability to make provision for the appropriate treatment of waste.
Cultural Heritage	Cultural heritage assets **and their settings** would not be as well protected, conserved or where appropriate enhanced, and may be lost or irrevocably damaged as a result. Opportunities for an appropriate reuse, conversion or enhancement of cultural heritage assets may also be reduced, **as would the opportunity to promote the historic environment, such as battlefields**.
Landscape	The opportunity to sensitively integrate new development and to manage landscape change and urban renewal would be reduced, with related objectives undermined.

SEA FINDINGS

There is a statutory requirement to prepare an LDP. The SEA should therefore be based on a comparison between the approaches that can be followed; an assessment against a continuation of current baseline conditions would be inappropriate. The LDP could have followed different approaches as provided by the approved SDP, to which it must conform. **As such, the SEA is a comparative assessment of the approach which has been adopted for the LDP against alternatives as set out in the Main Issues Report. The options not progressed from the MIR in the development of the LDP are shown 'greyed out' so this comparative assessment can take place.**

The role of SEA is to predict (identify and describe) and evaluate (make a judgement on the significance of) the environmental effects of the LDP and any 'reasonable alternative'. This is done in the context of the SEA objectives scoped into the assessment. The assessment method is based on a series of assessment questions that relate to each of the SEA objectives - these are presented at Appendix 2. Assessment questions that relate to options for the location of new development are termed 'Strategic Options'. Assessment questions on how the introduction of new development will be managed are termed 'Policy Approaches'. Assessment questions that have been used in the site assessments are termed 'Development Sites' (full site assessments are at

Appendices 5 – 10). The assessment questions are framed to help predict and evaluate the significance of the environmental effects on each SEA objective and to identify if the approach would be a 'move away from or towards' them. To ensure the assessment is consistent the questions take their lead from the SEA objectives, but to ensure proportionality they become more focused to suit the different elements of assessment – e.g. broad brush questions are posed in respect of the strategy options for the LDP, whereas more focused questions are used in the assessment of candidate development sites.

Importantly, the prediction and evaluation of effects in SEA do not need to be expressed in quantitative terms, as qualitative predictions based on expert opinion and professional judgement are equally valid[2]. Qualitative predictions and evaluations are made in this assessment. The environmental effects are expressed as Very Positive (++), Positive (+), Neutral (0), Negative (-), Very Negative (- -) or where it has not been possible to predict and / or evaluate an effect Uncertain (?). Cumulative effects have been predicted, and where a series of individual effects are predicted to combine to become 'significant' this evaluation is also based on expert opinion and professional judgment. Explanations have been provided to ensure that the judgments made in the assessment are transparent. This is an established and accepted method for SEA.

In some cases the LDP follows an approach that was identified as a 'reasonable alternative' by the MIR. As the LDP has been developed the policy approaches have become clearer, and can feature in the SEA of the LDP approach, including as 'assumed mitigation'. The full list of LDP policies and how they relate to the SEA objectives and assessment questions is set out at Appendix 4. This categorisation of policies provides the structure for considering their environmental effects on the SEA objectives. Whilst it is possible to consider the role of the LDP policies, this has not been possible in respect of the approaches that have not progressed from MIR to the LDP; as such, the assessment of those options remains as presented at MIR stage and are shown 'greyed out' so this comparative assessment can take place.

LDP & Alternative Spatial Strategy Approaches

The Strategic Development Plan for Edinburgh and South East Scotland (SDP) requires that new development be accommodated within East Lothian. In terms of how this may be achieved there are broadly two options – the selected 'compact' spatial strategy and an alternative more 'dispersed' spatial strategy. These options have been compared against one another in the SEA and the findings for the selected LDP strategy approach **have been compared to the alternative** as described below. This is followed by a summary which compares the two strategy options in SEA terms.

[2] Scottish Government SEA Tool Kit paragraph 9.3.5

LDP Spatial Strategy Approach

Table D below summarises the SEA of the LDP '**compact**' strategy approach. Overall, the strategy is predicted to have very positive effects on biodiversity, population, material assets and positive effects on human health **when compared to the alternative**. It is also predicted to have, neutral effects on water quality and cultural heritage, and negative effects on soil, air and climatic factors and on landscape.

TABLE D: CUMULATIVE ASSESSMENT OF THE LDP SPATIAL STRATEGY APPROACHES										
SEA TOPIC	**BIODIVERSITY**	**POPULATION**	**HEALTH**	**WATER**	**SOIL**	**AIR**	**CLIMATE**	**ASSETS**	**HERITAGE**	**LANDSCAPE**
Compact Growth	++	++	++	0	-	-	-	-	0	-
New Town Centre	0	++	?	0	-	-	-	++	0	+
Employment: Mix all sites	0	++	0	0	-	-	-	++	0	-
Housing: Longer term	++	++	+	0	- -	-	-	++	0	-
Green Belt: Modify	++	++	+	0	-	-	-	++	0	-
Introduce other countryside designations / CAT	++	0	+	0	0	0	0	0	+	++
CSGN with SPG	++	++	++	+	0	++	++	++	0	++
Countryside & Coast: More small scale housing	0	+ -	0	0	- -	-	-	+	0	-
OVERALL SEA SCORE	**++**	**++**	**+**	**0**	**- -**	**-**	**-**	**++**	**0**	**-**
COMMENT	- **In terms of development locations**, discussion with SNH suggests that the compact strategy could be promoted without causing significant harm to Natura 2000 sites or Ramsar sites, including the Firth of Forth SPA. This has been the subject of more detailed assessment and the assessment of proposed sites under the Habitats Regulations/Appropriate Assessment. Where required policy, proposal or site specific mitigation has been identified, and for some sites it may be that project level EIA **and HRA** would be required for some proposals. **In terms of managing the introduction of new development**, LDP Policy NH1: Protection of Internationally Designated Sites; Policy NH2: Protection of Sites of Special Scientific Interest and Geological Conservation Review Sites; Policy NH3 Protection of Local Sites and Areas; Policy NH4: European Protected Species; Policy NH5: Biodiversity and Geodiversity Interests, Including Nationally Protected Species; Policy NH6: Geodiversity Recording and Alternative Exposures; Policy NH7: Protecting Soils; Policy NH8: Trees and Development all seek to protect, conserve or where appropriate enhance biodiversity, flora and fauna. Similar secondary and synergistic benefits could be expected from the operation of LDP Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; Policy NH12: Air Quality. Additionally, Policy DP1: Landscape Character; Policy DP2: Design; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to natural heritage. With **site briefs and** appropriate master planning and delivery, the proposed approach offers scope for mitigation and the improvement and strategic enhancement of the Green Network, active travel, woodland planting, open space										

	provision and habitat connectivity in the west of East Lothian. Within this there would be clear opportunities to prioritise the strategic extension of the CSGN and associate active travel routes in to East Lothian. **Overall, very positive effects are predicted for biodiversity, population and some aspects of human health.** - **In terms of development locations**, the compact strategy would contribute to the regeneration of communities in the west of East Lothian, which are currently the most deprived areas in the county. New town centre could also be promoted at Blindwells, potentially to serve a wider area than just that settlement. This may assist in providing additional services and amenities locally. The compact strategy would also deliver affordable housing in an area of need, and where there is a significant volume of demand for new housing. It would also promote housing, including affordable housing, in other areas of East Lothian where there is also a more acute need for affordable housing, such as in the east of the area and in more rural areas. However, the west of East Lothian is the most accessible part of East Lothian. It also has good public transport connectivity to amenities in the wider city region, such as hospitals and further education, meaning that the distance travelled is reduced to access them when compared with other parts of the area. All of these factors would also help to minimise CO_2 emissions. **In terms of managing the introduction of new development**, general urban development policies (Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity) recognise the importance of vibrant town centres and maintaining access to local service provision and protecting amenity, particularly residential amenity. Policies on the approach to planning for employment (particularly Policy EMP1: Business and Employment Locations' Policy EMP2: Operational Harbours) and tourism (particularly Policy TOUR4: Hotels and Guest Houses) seek to ensure that jobs can be retained and created in appropriate locations or premises. Policies on the approach to planning for housing (Policy HOU1: Established Housing Land; Policy HOU2: Maintaining an Adequate 5-year Effective Housing Land Supply; Policy HOU3: Affordable Housing Quota; Policy HOU4: Affordable Housing Tenure Mix; and on specialist housing provision and other specific needs (Policy HOU5: Residential Care and Nursing Homes – Change of Use; Policy HOU6: Residential Care and Nursing Homes – Location; Policy HOU7: Housing in Multiple Occupation; Policy HOU8: Gypsy / Traveller's Sites) seek to ensure that housing opportunities, including affordable and housing for specialist and specific needs can be provided. Policies on the approach to education, community and health care facilities (Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals) seek to ensure that education and community facilities are safeguarded and will be expanded to accommodate the demand generated by new development if required. Policies on open space and play provision (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites) seek to ensure existing open space and play facilities will be protected or enhanced to accommodate new development if required and that new open space or play facilities of different types will be provided in association with new development if required. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework will all seek high quality development, including in relation to population. **Overall, very positive effects are predicted for population.** - **In terms of development locations**, there are uncertain impacts in terms of air quality and noise. **In terms of managing the introduction of new development**, higher tier plans, polices or strategies (such as PAN 1/2011: Planning and Noise) and LDP policies

	require these impacts to be mitigated, particularly LDP Policy NH12: Air Quality and Policy NH13: Noise. The Musselburgh Town Centre Air Quality Strategy has been prepared to complement the LDP. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to relevant aspects of human health. It may be that project level EIA would also be required for some proposals. A neutral impact on these aspects of human health is predicted. **Overall, a positive effect on human health is predicted.** - **In terms of development locations,** the proposed strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. **In terms of managing the introduction of new development**, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective too. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to the water environment. It may be that project level EIA or specialist studies (water and drainage impact assessment / flood risk assessment etc.) would be required for some proposals, and the LDP identifies the need for these where known at this stage. **Overall, a neutral effect on the water environment is predicted.** - **In terms of development locations,** given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The west of East Lothian contains a significant proportion of East Lothian's prime quality agricultural land with the area around Musselburgh being predominantly Grade 1. However, there is a balance to be struck between the loss of prime quality agricultural land and the accessibility, regeneration and other positive effects of the compact spatial strategy. Wherever possible, the re-use of previously developed land will be promoted, for example at Blindwells **(if Blindwells is capable of expansion, further previously developed as well as greenfield land would be used)**. **In terms of managing the introduction of new development**, the policies of the LDP will ensure that land is developed in the most efficient way, through for example promoting higher density development in appropriate locations, in accordance with LDP Policy DP3: Housing Density. The proposed strategy would also seek to minimise the loss of prime quality agricultural land and carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils. **Overall, a very negative effect on soils is predicted.** - **In terms of development locations,** while overall CO_2 emissions and transport based particulate matter is likely to increase as a result of overall growth requirements in the area, the proposed strategy would focus development in the most accessible parts of East Lothian and where there is good public transport accessibility and good local access to facilities, services and employment. This will promote the use of public transport and thus help minimise the need to travel by car as well as air quality impacts and CO_2 emissions. However, there are currently air quality issues in Musselburgh and emerging concerns in Tranent. Any impact of additional development on air quality will require mitigation, and the impact of the proposed strategy may be more acute in certain locations, such as Musselburgh High Street. The Musselburgh Air Quality Action Plan, a was approved in February 2017 and will ensure that the mitigation takes into account the likely cumulative impact of the LDP. This issue has been considered in parallel with

	the transport mitigation measures, including those on the road network as well as for public transport including rail (to help promote modal shift and minimise other road based transport). **In terms of managing the introduction of new development**, LDP Policy NH12: Air Quality will help ensure air quality is maintained or enhanced as appropriate. LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vice versa. It may also be that project level EIA or specialist studies or plans (e.g. Travel Plans in line with Policy T1: Development Location and Accessibility) would also be required for some proposals. **Overall, a negative effect on Air and Climatic Factors is predicted.** - **In terms of development locations,** accommodating the SDP development requirements will require additional land to be developed. In view of the lack of brownfield land available in the area the release of greenfield land is needed. Prioritising the redevelopment of land and making an efficient use of it, for example at Blindwells and by developing at higher density, will help reduce impacts. Policies of the LDP also ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The longer term strategy would help ensure land is available and can be developed for the creation of infrastructure and facilities for the growing population. Importantly, a longer term approach may also allow the infrastructure planning for the area to be aligned better with the development strategy. In particular it may help to clearly identify the need for, justify and provide solutions and delivery mechanisms that can achieve a step change in the nature of infrastructure provision in line with the growth in population. Although greenfield land would be developed, it would be developed in such a way that could help ensure an efficient use of land, and could be used to help better integrate land use and transport, particularly public transport. **In terms of managing the introduction of new development** and maintaining adequate infrastructure and services, a series of transport policies and proposals (Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points; Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; Proposal T15: Old Craighall Junction Improvements; Proposal T16: A1 Junction Improvements at Queen Margaret Drive Interchange; Proposal T17: A1(T) Interchange Improvements; Proposal T18: Land Safeguard for Trunk Road Interchange at Adniston and Eastern Tranent By-pass; Policy T19: Transport Improvements to Musselburgh High Street; Proposal T20: Transport Related Air Quality measures: Relocation of Bus Stops; Proposal T21: Musselburgh Urban Traffic Control System; Proposal T22: Reopen Link to Vehicular Access at Queen Margaret drive / Whitehill Farm Road. Proposal T23: Transport Improvements A198 and Meadowmill Roundabout; Proposal T24: Land safeguard for A198 / B1361 Meadowmill Roundabout Improvements; Proposal T25: Land Safeguard for Dualling of A198 and Reconfiguration of Bankton Interchange; Policy T26: Transport Improvements to Tranent Town Centre; Proposal T27: Tranent Town Centre One-way System; Proposal T28: Junction Improvements at Elphinstone Road and Edinburgh Road all seek to provide for improvements to the trunk and local road networks and to the rail network to accommodate the demands of new development. Policies on the approach to education, community and health care facilities (Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health

	Care Sites; PROP HSC2: Health Care Facilities Proposals) all seek to ensure that education and community facilities are safeguarded and will be expanded to accommodate the demand generated by new development if required. Policies on open space and play provision (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites) seek to ensure existing open space and play facilities will be protected or enhanced to accommodate new development and that new open space or play facilities will be provided in association with new development. Policies and Proposals MIN 1 – MIN11 ensure minerals safeguarding, responsible extraction and suitable aftercare and restoration proposals, as well as bonds and guarantees to ensure these are delivered. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework will all seek high quality development, including in relation to material assets. **Overall, a very positive effect on material assets is predicted.** - **In terms of development locations,** there are a range of cultural heritage assets in the area such as listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields that will be taken into account, including their settings. Legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the LDP would ensure those impacts are appropriately mitigated. **In terms of managing the introduction of new development** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will help secure related objectives. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality design, including in relation to cultural heritage. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish project level mitigation. **Overall, a neutral effect on heritage is predicted.** - **In terms of development locations,** accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The proposed strategy approach would continue to focus the majority of East Lothian's population in the west and consolidate the existing settlement patter. However this could lead to the coalescence of settlements or impact upon their landscape settings. Yet there may be significant opportunities to strategically mitigate this impact and improve important areas of open space and the green network in this area by implementing national policy objectives such as the CSGN. Relevant LDP Policies include Policy DC7: Development in the Edinburgh Green Belt; Policy DC8: Countryside Around Towns; Policy DC9: Special Landscape Areas; Policy DC10: The Green Network and Policy DC6: Development in the Coastal Area. These policies acting together will seek to direct development to the most appropriate locations and resist it in inappropriate locations. Policies of the LDP will also ensure development of appropriate types and scales can take place within the countryside (this is dealt with separately under the other relevant part of this assessment). **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to

	landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies** **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies** **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Alternative Spatial Strategy Approach

Table E below summarises the SEA of the alternative '**dispersed**' spatial strategy approach as compared to the proposed approach set out in Table D. Overall, the dispersed strategy is predicted to have neutral / positive effects on biodiversity, positive effects population and material assets and neutral impacts on human health, water quality and heritage. It is also predicted to have negative effects on landscape, soil, air and climatic factors.

TABLE E: CUMULATIVE ASSESSMENT OF THE ALTERNATIVE SPATIAL STRATEGY APPROACHES										
SEA TOPIC	BIODIVERSITY	POPULATION	HEALTH	WATER	SOIL	AIR	CLIMATE	ASSETS	HERITAGE	LANDSCAPE
Dispersed Growth	+	+	0	0	-	-	- -	-	0	-
Existing Town Centres	0	+	?	0	- -	-	- -	+	0	?
Employment: Mix only Local	0	+	0	0	-	-	-	+	0	-
Housing: Plan to 2024	+	+	+	0	-	-	-	+	0	-
Green Belt: Don't modify	+	+	+	0	-	- -	- -	+	0	-
No OCD / CAT	0	0	0	0	0	0	0	0	-	-
CSGN: No SG	+	+	+	0	0	+	+	+	0	+
Countryside & Coast: Maintain Current Approach	0	+	0	0	-	-	-	++	0	+
OVERALL SEA SCORE	0	+	+	0	0	-	-	-	+	0	-
COMMENT	- SNH has advised that the dispersed strategy may have the potential to harm the integrity of the Firth of Forth SPA as it may result in a greater scale of development in the main pink footed goose area than a compact strategy would. The alternative strategy is not assessed under HRA/AA; only the strategy that is to be taken forward is assessed. During the SEA site assessment process, the potential for impact on Natura sites was considered. Without detailed assessment, it cannot be certain that more negative effects will result from the development of certain sites in the east than the west of the area, however that is SNH's view. Notwithstanding this, with appropriate site design and delivery, this strategy approach offers scope for selective delivery of the Green Network, as well as active travel routes and open space provision to help improve habitat connectivity and active travel options in East Lothian. It could therefore have positive impacts on biodiversity, flora and fauna and human health. Yet given the more dispersed nature of this alternative strategy, opportunities for creating networks and improving habitat connectivity and woodland networks may be reduced in comparison to the proposed approach. **Overall, at this stage, neutral or positive effects are predicted for biodiversity, positive effects for population and neutral effects on human health.** - The strategy may have the effect of diverting development away from areas in greatest need of regeneration in the west of East Lothian and would instead focus it in areas where limited regeneration potential exists if any. Although the strategy would provide affordable housing in a range of locations across East Lothian, it may reduce the volume of affordable housing that could be provided										

	in areas with most population and housing need and demand. A new town centre could also be promoted at Blindwells, potentially to serve a wider area than that settlement. This may assist in providing additional services and amenities locally, including for regenerating communities. However, if Blindwells cannot expand the focus would be on growing existing centres, which may not be able to compete with other centres offering a wider range and choice of goods elsewhere in the city region. Overall, although this strategy would seek to direct development towards settlements with existing facilities and services, it may also have the effect of directing development to less accessible parts of East Lothian, particularly in terms of public transport accessibility and access to employment opportunities in the wider city region. This may not minimise related CO_2 emissions. **Overall, positive effects are predicted for population.** - There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. An air quality management strategy is being developed to complement LDP strategy. It may be that project level EIA would be required for some proposals. **Overall, a neutral effect on human health is predicted.** - The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. It may be that project level EIA or specialist studies (water and drainage impact assessment / flood risk assessment etc.) would be required for some proposals. **Overall, a neutral effect on the water environment is predicted.** - Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. Wherever possible, the re-use of previously developed land will be promoted through the strategy, for example at Blindwells. Additionally, the policies of the plan will ensure that land is developed in the most efficient way, for example through promoting higher density development in appropriate locations. The strategy and policies of the plan would also seek to minimise the loss of carbon rich or rare soils. **Overall, a negative effect on soils is predicted.** - While overall CO_2 emissions and transport based particulate matters are likely to increase as a result of overall growth requirements in the area, the alternative dispersed strategy would not focus development in the most accessible parts of East Lothian. This is particularly influenced because no modification of green belt boundaries is proposed. This would likely result in higher CO_2 emissions and particulate matter than would the compact strategy as the alternative strategy would direct development to less accessible locations beyond the green belt and likely increase the need to travel by car. The more dispersed strategy would also likely increase the distance travelled to access higher level facilities, services and employment opportunities in the wider city region. It would not minimise air quality impacts and CO_2 emissions. **Importantly, based on findings from the Scottish Governments SPACE Tool (see Appendix 3), the alternative dispersed strategy is predicted to result in increased emissions from transport energy use of 7,500 tCO_2eq (tonnes of CO_2 equivalent) per annum (base date 2014), when compared to the proposed strategy. <u>This represents an increase of over 52%.</u>** However, a more dispersed strategy may reduce the impact on certain locations, such as Musselburgh High Street, whereas the compact strategy may have more of an acute impact on these locations. There is currently an air quality issue in Musselburgh and emerging air quality issues in Tranent. Any impact of additional development on air quality will require mitigation. A strategy to manage air quality in Musselburgh is being developed alongside the LDP development strategy, to ensure that the mitigation takes into account the likely impact of the LDP strategy. It may be that project level EIA would be required for some proposals. **Overall, a negative effect on Air and Climatic Factors is predicted.**

	- In view of the lack of brownfield land available in the area the release of greenfield land is needed. Prioritising the redevelopment of land and making an efficient use of it, for example through developing at higher density, will help reduce impacts. Policies of the LDP will also ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. It may be that project level EIA would be required for some proposals. **Overall, a positive effect on Material Assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish mitigation. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The alternative strategy may help avoid coalescence of settlements in the west, yet it could impact upon the landscape settings of other existing settlements in the east. However, there may be opportunities to mitigate this impact and improve the green network by implementing national policy objectives such as the Central Scotland Green Network, although the dispersed nature of the alternative strategy would make delivery of a well connected network more challenging. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA and consequent adaptation of policies in mitigation during plan preparation and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as retail impact assessments, flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Summary

The main differences between the two spatial strategy approaches is that with a compact spatial strategy there is the opportunity to secure more significant positive environmental effects for certain SEA Objectives and reduced environmental effect on other SEA Objectives. The positive effects of the 'compact' approach are mainly attributed to the ability to take a strategic and longer term view for the development of a particular area. In particular, this allows consideration to be given to longer term infrastructure solutions as well as to seek opportunities for the provision of and strategic improvements to and connections in the green network, habitat network as well as the provision and extension of active travel routes / networks etc. The chosen LDP approach is therefore predicted to have more significant positive effects on the SEA Objectives of biodiversity, population and on material assets than the alternative 'dispersed' approach would have done.

Both strategy approaches show positive impacts on the SEA Objectives for human health as well as a neutral effect on the SEA Objectives for water quality and cultural heritage, which are assumed to be safeguarded by the policies of the LDP. The compact spatial strategy is also predicted to have a less significant environmental impact on SEA Objectives in relation to climatic factors and air, mainly because it will focus development in the most accessible part of East Lothian which is well served by public transport options: the distance that need be travelled to access the existing range of jobs and amenities available in the wider city region will also be reduced. Both of these factors should help minimise the need to travel as well as the distance that is travelled, together with minimising the emission of particulate matter and CO_2 emissions, particularly by private car use. Importantly, based on findings from the Scottish Governments SPACE Tool (see Appendix 3), the alternative dispersed strategy was predicted to result in increased emissions from transport energy use of 7,500 tonnes of CO_2 equivalent per annum (base date 2014), when compared to the selected strategy. This represents an increase of over 52%.

The selected compact spatial strategy approach is also predicted to have a less significant environmental impact on SEA Objectives in relation to soils. This is because even though more greenfield land may be used, it could be used more efficiently. While both strategy approaches are predicted to have negative effects on landscape, the compact strategy approach is also likely to have a minor positive impact. This is because the provision of green network measures and structural planting as part of a compact strategy is likely to provide more significant strategic mitigation measures that create a network than the alternative 'dispersed' strategy.

The full SEA of the spatial strategy options can be found in the main report.

Major Policy Issues

As with the approach to the Spatial Strategy, the SEA of the Major Policy areas is a comparative assessment of the approach which has been adopted for the LDP against the alternative as set out in the Main Issues Report.

Developer Contributions

No significant environmental effect is predicted from this policy area as it relates to delivery mechanisms for mitigation once the need for it has been established. As such, the effects on all SEA Objectives from this policy area are predicted to be neutral under the selected approach as well as the reasonable alternative.

Affordable Housing

The LDP approach is predicted to have a positive effect on the SEA Objective population, whereas the reasonable alternative policy approach is predicted to have a very positive impact on population since more affordable housing may be delivered. The effect predicted for all other SEA Objectives from this policy area is neutral.

Energy, Including Renewables

The LDP approach is predicted to have a positive effect on SEA Objective on population and material assets, an uncertain effect on biodiversity, a neutral effect on health, water, soil, air, climate and heritage, and a negative effect on landscape. The reasonable alternative policy approach is predicted to have the same effects.

Minerals, Including Aggregates & Coal

The LDP approach is predicted to have a positive effect on SEA Objective on material assets, an uncertain effect on biodiversity, a neutral effect on population, health, water, air, climate and heritage, and a negative effect on soil and landscape. The reasonable alternative policy approach suggests the inclusion of a potential area of search for open cast coal working. It is predicted to have similar effects to the LDP approach, but there is predicted to be a very positive

effect instead of positive effect on material assets, a negative instead of neutral effect on population and climate, and a very negative effect instead of negative effect on landscape.

Waste

The LDP approach is predicted to have a very positive effect on the SEA Objective material assets, a positive effect on soil (mainly because waste installations would be supported at suitable employment sites, thus potentially minimising greenfield land take etc.) and a neutral effect on all other SEA Objectives. The reasonable alternative policy approach is predicted to have similar effects to the LDP approach, but the effect on soil is predicted to be neutral, since there would be no clear support for waste facilities to be delivered on appropriate employment sites. Importantly, it is not clear at this stage if any additional waste installations would be required or where they may be developed. The effect predicted for all other SEA Objectives from this alternative policy approach is neutral.

The full SEA of the Major Policy Issues can be found in the main body of the report.

MITIGATION

The Environmental Assessment (Scotland) Act 2005 requires that the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of the plan are set out in the Environmental Report – i.e. mitigation. However, the outcome of the SEA should not stop a course of action being followed by the plan because one approach may have a greater environmental effect than another[3]. A key role of SEA is to identify the likely effects and associated mitigation to help avoid or reduce environmental effects as far as possible. The sequence of identifying suitable mitigation is usually done in a hierarchy – 1) avoid / prevent; 2) reduce / minimise; and 3) offset / compensate. These may include such measures as making changes to the plan, amending a policy or proposal, adding further policies to the plan, identifying specific effects to be addressed at project level, or a combination of these. This has been done iteratively and in full consultation with the Consultation Authorities in the preparation of the Proposed LDP. However, further specific project level mitigation may be identified through the Development Management process.

A further consideration is the extent to which other environmental assessments should be integrated with the SEA, or how the SEA can be used to streamline such other assessment processes to avoid potential effects. An important consideration in this will be the need for Habitats Regulation Appraisal (HRA) for

[3] Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.25 – 3.28

the Proposed LDP (and LDP) and signposting a likely need for any project level assessments. The LDP signposts where project level assessment is likely to be required, taking in to account consultation responses on the MIR and further collaborative working with the Consultation Authorities in the preparation of the LDP. Mitigation measures should also be capable of being implemented. This means that the mitigation identified should be as specific as possible. Clarity on who will be responsible for providing the mitigation and when, and monitoring if the mitigation has been implemented as well as monitoring the overall effects of the plan on the environment, will also be important. However, further specific project level mitigation may be identified through the Development Management process.

The process of preparing the LDP should help avoid significant environmental effects where possible. This will include assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as an air quality management strategy and Development Briefs. These assessments / strategies have been used in the preparation of the LDP to help guide the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis, including in Development Briefs. The SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites / proposals. However, further specific project level mitigation may be identified through the Development Management process.

It is likely that much of the mitigation required once the plan is operative will be the responsibility of applicants to provide and deliver. In order to secure any planning permission, a prerequisite of this would include the preparation of supporting studies and masterplans as required. Where necessary planning conditions and / or obligations will be used to ensure mitigation is provided. At this stage the following is the type of mitigation that is anticipated by SEA Objective, taking in to account the mitigation hierarchy:

1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate
3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies** **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies** **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

7. **Climate** - LDP strategy and policies / potentially project level EIA or specialist studies / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) / site briefs / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) / site briefs / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees

MONITORING

Any significant environmental effects of the plan should be monitored, consistent with the Environmental Assessment (Scotland) Act 2005. SEA monitoring arrangements should help identify possible significant environmental effects and help identify any unforeseen issues arising from the implementation of the LDP. This is to allow any remedial action to be taken, if required, by the Council and others as appropriate. It is a challenge to identify appropriate and proportionate Monitoring Statement and SEA indicators that can actually achieve this, and that can be monitored within available resources - this is because it is not always possible to directly link changes in the environment to the specific effects of implementing an LDP. The Environmental Assessment (Scotland) Act 2005 does not require bespoke monitoring arrangements or timelines, although this should be tied to the implementation of the plan. As such, the effects of the plan will be monitored in terms of the requirements of the Environmental Assessment (Scotland) Act 2005 through the parallel monitoring arrangements required by The Town and Country Planning (Scotland) Act 1997 (as amended) – i.e. with a Monitoring Statement and Action Programme.

LIMITATIONS & DIFFICULTIES IN THE ASSESSMENT

In terms of limitation in the assessment, the LDP needs to acknowledge the requirements of higher tier PPSs, align with those that operate at the same level as it as well as set an appropriate context for any that will operate under it. The SEA also needs to recognise that the LDP will be one of many PPSs that act together to achieve positive outcomes whist encouraging sustainable economic growth. Importantly, the limited remit of the LDP will place limitations on its ability to influence the wider forces acting on the environment.

The primary limitation on the assessment however is that the principal elements of the LDP that are likely to have significant environmental effects, being the amount and broad location of land for housing and economic development and other development to be planned for, must be done in accordance with

the SDP. From these requirements flow many others that the LDP needs to provide for through its policy approach and land use proposals, including new community and education facilities and transport and other infrastructure. Whilst the ER predicts and evaluates the likely significant environmental effects of the Proposed LDP, it is not an option for the LDP to exclude an approach if its effects are found to be negative as it must be consistent with the SDP. As explained above it is also not the case that the option with the least negative environmental effects need be followed.

Due to the stage of the planning process at which Development Plans are prepared it is also not possible to establish the detailed environmental impacts of development at the LDP stage: this is why the SEA is to focus on likely significant environmental effects. Such detailed assessment is to be undertaken at later stages of the planning process - for example, at project level through the preparation of Transport Assessments, Flood Risk Assessments and other technical assessments etc. These more detailed assessments would be (in some cases already have been) submitted with planning applications, once the nature of proposals are fully understood and can be assessed in detail. Yet it is possible through SEA to identify what issues will need to be addressed in the development of a site and what kind of mitigation may need to be put in place by the LDP. As mentioned, this could include the need for further study through which any requirement for detailed mitigation prior to and / or during and / or post development will be specified.

The SEA has an important role in identifying any need for this and to help scope and identify any further study that may be necessary at later stages of the planning process. The consultation responses from the Consultation Authorities were key to establishing the nature of mitigation that the Proposed LDP should put in place and / or require as part of any applications for planning permission. Further project level mitigation may be identified through the Development Management process.

1 INTRODUCTION & BACKGROUND

1.1 THE NEED FOR STRATEGIC ENVIRONMENTAL ASSESSMENT

The Environmental Assessment (Scotland) Act 2005 sets the legislative context for Strategic Environmental Assessment (SEA) in Scotland and is the basis against which any need for SEA is to be judged. Section 5(3) of the Act as the effect of making SEA mandatory when preparing a Local Development Plan (LDP) under the Town & Country Planning (Scotland) Act 1997, as amended by the Planning &c (Scotland) Act 2006.

The SEA process is to be aligned with the key stages of preparing the Development Plan, with the SEA findings reported at each stage. This is done with the advice of the 'Consultation Authorities', namely Historic Scotland (HS), Scottish Environmental Protection Agency (SEPA) and Scottish Natural Heritage (SNH). It begins with the preparation of a Scoping Report which identifies the scope and level of detail for the SEA and the consultation timescales. The Scoping Report is followed by an Interim Environmental Report (IER) which reports the findings of the SEA of the Main Issues Report (MIR). In October 2014 the Council published for consultation its Main Issues Report for it Local Development Plan and the associated Interim Environmental Report. This consultation period ended in February 2015. Although the Consultation Authorities were satisfied with the scope and content of the IER, they made some minor suggestions for how the IER might be improved while noting that these would not change the outcome of the SEA overall. These suggested changes from the Consultation Authorities were indicated in the Draft Environmental Report as follows: **Brown: Historic Environment Scotland**; **Green: Scottish Natural Heritage**; **Blue: Scottish Environmental Protection Agency**. This colouring is retained in this Environment Report.

A Draft Environmental Report (DER) is prepared with the Proposed Local Development Plan. Publication of the Finalised ER (this document) amended following the Examination of the Proposed LDP, is done with the adoption of the LDP. A post adoption statement is also prepared to explain if and how the SEA process influenced the LDP process and the adopted LDP. The evolving ER is a key consultation tool in the SEA process. It describes likely significant environmental effects and provides an opportunity to make comment at the key stages of the plan making process. The finalised ER is to identify, describe, predict and evaluate the likely significant effects on the environment of implementing a plan, policy or strategy (PPS), and its reasonable alternatives. It also describes any measures envisaged to prevent, reduce and as far as possible offset any significant adverse effects (mitigation). It is to specify who will be responsible for delivering any mitigation and describe the monitoring arrangements.

This document is the ER for East Lothian Council's Proposed Local Development Plan (Proposed LDP) and is published alongside the LDP. The paragraphs below explain how it sits in the process of preparing the LDP for East Lothian.

1.2 THE DEVELOPMENT PLANNING REGIME

1.2.1 Requirement to Prepare Development Plans

The Town & Country Planning (Scotland) Act 1997, as amended by the Planning etc. (Scotland) Act 2006, provides the basis of the plan-led Scottish planning system. New development planning arrangements came in to force through secondary legislation in 2013[4]. Old-style Development Plans are to remain in force until new style plans are prepared. These new development planning arrangements identify the National Planning Framework (NPF) as a material consideration in all planning decisions as well as a requirement to prepare two-tier development plans for the four largest city regions, which are to be reviewed at least every five years.

East Lothian is part of the Edinburgh city region. The new Development Plan for the city region area must therefore have regard to the NPF and consist of a Strategic Development Plan (SDP), approved by Scottish Ministers, and a series of Local Development Plans (LDPs) that conform to the SDP, adopted by Local Authorities. East Lothian Council must prepare a LDP that is consistent with the approved SDP, and the two together will provide the basis for decision-making on planning applications in its area. As such, it is not possible that the LDP is not prepared.

Development Plans may also be accompanied by Supplementary Guidance (SG), for example, in relation to policies or proposals that are too detailed for inclusion within the Development Plan itself. Depending on the way SG is prepared and adopted, it may be considered part of the Development Plan. Non-statutory supplementary planning guidance may also be prepared to accompany the LDP.

1.2.2 The National Planning Framework

The Scottish Government prepares the National Planning Framework for Scotland (NPF) and reviews it every five years. The third National Planning Framework (NPF3) is the Scottish Government's spatial plan for how to make a more successful country with opportunities for all to

[4] Scottish Government Development Planning (Scotland) Regulations 2008 & Circular 6/2013: Development Planning

flourish by increasing sustainable economic growth. Scottish Planning Policy: June 2014 (SPP) sets out national planning policies for how the planning process can contribute to realising this. The LDP should take account of both NPF3 and SPP.
NPF3 sets out the Scottish Government's spatial development strategy for Scotland and addresses key national / regional issues with a spatial dimension, such as where growth in the Scottish economy ought to be encouraged and how it is to be facilitated, for example by identifying National Developments which are to be provided for in development plans.

NPF3 expects south east Scotland, which includes East Lothian, to continue as the driver of the Scottish economy. It notes that there is a need to deliver land for new homes and to invest in infrastructure including where cross local authority boundary impacts are expected, such as trunk road capacity, including the A720 Edinburgh city by-pass. Opportunities for regeneration are to be maximised. The importance of towns in the city region is also recognised.

NPF3 acknowledges that infrastructure capacity in general is a significant issue. In some cases new facilities will be needed, but best use should first be made of existing capacity and facilities where appropriate. Innovation and joint working will be needed to secure funding mechanisms for more capacity. Into the longer term the spatial strategy for the Edinburgh city region will need to acknowledge regional infrastructure constraints.

Key economic sectors to be supported in the city region include financial services, life sciences and universities, food and drink, tourism and energy related development. Cockenzie Power Station and the Forth coast to Torness is potentially an important energy hub and NPF3 recognises the need for infrastructure that allows electricity from off shore wind projects to be connected to the grid. In relation to Cockenzie, the LDP is to (i) continue to support its status as a location for non-nuclear baseload electricity generating capacity and associated infrastructure, potentially including facilities for Carbon Capture and Storage (ii) recognise its potential for renewable energy related development as well as (iii) its potential for port-related to energy development. If competing proposals emerge, those with greatest economic benefits and which make best use of the location's assets are to be prioritised. NPF3 does not support development of new nuclear power stations, but an extension to the operational life of Torness is not ruled out.

The CSGN is to extend into East Lothian to help maintain the environmental quality of the area and to promote active travel opportunities and healthier lifestyles.

1.2.3 Scottish Planning Policy

A revised Scottish Planning Policy was published in June 2014. It is a statement of Scottish Government planning policy on nationally important land use matters. SPP provides an overview of the key components and overall aims and principles of the Scottish planning system, including where these are influenced by the requirements of higher tier plans, polices and strategies, for example at European Union (EU) level. It is an important material consideration in the preparation of Development Plans.

SPP sets out subject specific policies on economic development, town centres and retailing, housing, rural development, coastal planning, fish farming, historic environment, landscape and natural heritage, open space and physical activity, green belts, transport, renewable energy, flooding and drainage, waste management, minerals, on-shore oil and gas, surface coal mining and infrastructure. It sets out desired outcomes, including the creation of high quality sustainable places and mixed communities and promotes sustainable economic growth.

1.2.4 The Existing Development Plan

On the 27th June 2013 The Edinburgh & Lothian Structure Plan 2015 was revoked and replaced with approval of the Strategic Development Plan for South East Scotland (SDP). The local plan for East Lothian which the LDP replaces is the East Lothian Local Plan 2008 (ELLP 2008), adopted in October 2008. The existing Development Plan for East Lothian comprises the SDP and the ELLP 2008. The ELLP 2008 sought to implement the strategic housing and economic land requirements of the previous SDP (the Edinburgh & Lothian Structure Plan 2015) at local level through its policies and proposals.

Supplementary Planning Guidance (SPG) is in place to assist with the interpretation of current Development Plan policies in relation to affordable housing and the technical layout and design of new housing areas. Development Frameworks for large-scale housing / employment allocations at Wallyford, Blindwells, Haddington and North Berwick were subject to SEA procedures.

1.2.5 Preparation of the Emerging Development Plan

The new planning regime requires that the old arrangement of structure plans and local plans be replaced with new style SDPs and LDPs. This is underway with the Edinburgh and South East Scotland Strategic Development Plan (SESplan) SDP now approved. The main difference between the regimes relates to procedure as well as the expected form and content of new-style Development Plans. The expectation that new Development Plans have a sharp focus on how much, what kind and what scale of development can take place where and when, as well as where different types and scales of development should not occur. While the Development Plan is to be evidence based, the production of this evidence, including in the SEA and its monitoring, must be proportionate, relevant and related to resources[5].

1.2.6 The Strategic Development Plan

The SESplan Proposed SDP was published in November 2011, alongside its SEA Environmental Report (SEA Gateway Ref: SEA\00399). It was approved by Scottish Ministers with modification on the 27th June 2013, following an Examination in Public. By law, the LDP must conform to the SDP. SESplan covers the City of Edinburgh, East Lothian, Midlothian and West Lothian Council areas as well as the whole of Scottish Borders Council area and the southern part of Fife Council area. SESplan's main role is to prepare and review a SDP for Edinburgh and South East Scotland, it being the broad spatial development strategy for the city region.

The SDP identifies a number of Strategic Development Areas which Local Development Plans must prioritise as locations to accommodate the SDP strategic housing and employment growth requirements. East Lothian has one Strategic Development Area, which extends along the key transport corridor of the A1 and East Coast railway line between Musselburgh and Dunbar. The approved SDP for the SESplan area rolls forward the existing strategies of previous structure plans[6] and plans the way forward for the SESplan area for the period up to 2024. It also provides an indication of the possible scale and general location of housing land that may be required in the period 2024 - 2032[7].

[5] Scottish Government PAN 1 / 2010 paragraph 4.49 & 5.0 & Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.35
[6] SESplan SDP page 39 paragraph 108
[7] Scottish Government Scottish Planning Policy paragraph 118 and SESplan SDP page 39 Table 2

The SDP sets an overall housing land requirement for the SESplan area of 107,545 homes up to 2024. To meet this total, land capable of delivering 74,835 homes is to be available in the short term up to 2019, with land for a further 32,710 homes to be available in the medium term up to 2024. The distribution of this housing land across the city region has been confirmed by Ministerial approval of SESplan's Supplementary Guidance on Housing Land (see para 5.35 below). Of this regional total, this Supplementary Guidance identifies that, for East Lothian, land capable of delivering 10,050 homes will be needed up to 2024, with an interim requirement of land capable of delivering 6,250 homes up to 2019. A five year effective housing land supply is also to be maintained at all times.

A further requirement of the SDP is to maintain 76 hectares of employment land in East Lothian. It also identifies four key employment locations within the area where employment land is to be provided. These locations are at Craighall, Macmerry, Blindwells and at Spott Road Dunbar. The SDP also establishes a policy framework on matters such as employment, housing, town centres and retailing, minerals, energy and waste, transportation and infrastructure, water and flooding, and on green belts and green networks.

The LDP must conform to the SDP development strategy, development requirements and policy framework. Importantly, the SDP is clear that in the selection of new development sites to meet its requirements, existing allocated sites must be carried forward and these existing allocations must be complemented by and must not be undermined by new land allocations[8].

In addition, when considered in comparison to other parts of the SESplan area, the approved SDP highlights that East Lothian has high commuting travel patterns, restricted access to affordable housing, a lack of capacity in its transport infrastructure and public transport services and other infrastructure capacity constraints[9]. However, the SDP states that the distribution of additional housing requirements and thus the introduction of additional housing land to East Lothian is to be based on an analysis of environmental and infrastructure opportunities and constraints[10]. The LDP must conform to the SDP as well as its associated Supplementary Guidance on Housing Land. The Housing Land Supplementary Guidance Technical Note (November 2013) refreshes the spatial strategy assessment carried out for the SDP.

[8] SESplan SDP page 6 and paragraphs 18
[9] SESplan SDP paragraph 48 - 56
[10] SESplan SDP paragraph 56

1.3 THE PROCESS FOR PREPARING THE LDP

East Lothian Council has prepared a single, Council area-wide Local Development Plan (LDP) for East Lothian. Its preparation involves a number of key stages. These are set out in the Councils Development Plan Scheme, which is available for inspection on the Council's website[11]. The most significant of these stages and their relationship to the SEA process are described in the paragraphs below.

1.3.1 Pre-Main Issues Report Engagement

The new development plan regime focuses on front-loading the plan-making process through early and effective engagement with the public and other interested parties, and the SEA does have an important role to play in this.

The Key Agencies (SNH, SEPA, Scottish Water, Scottish Enterprise, SEStran, NHS Lothian) have a duty to co-operate in the preparation of the LDP, as do Scottish Ministers (Historic Environment Scotland (HES) and Transport Scotland), the Forestry Commission and all other planning authorities within the same SDP area. As part of this, the Council held early meetings with the Key Agencies and has undertaken an awareness raising exercise, including notifications in the local press and on its web site as well as a round of pre-MIR engagement in the form of public workshops / events run by Planning Aid Scotland. It has also invited landowners, developers and other interested parties to comment on the perceived 'main issues' facing the area as well as to suggest candidate development sites which may be able to contribute to the emerging LDP spatial strategy – i.e. 'a call for sites'.

Prior to the preparation of the LDP SEA Scoping Report the Consultation Authorities were approached informally to discuss the possible scope and content of the SEA. The SEA Scoping Report was submitted formally to the SEA Gateway on the 21st November 2011 (SEA Gateway Ref: SEA/00670). Since then, the Consultation Authorities have had extensive involvement in gathering and supplying baseline data and views on East Lothian's environment.

[11] http://www.eastlothian.gov.uk/info/204/statutory_development_plans/231/statutory_development_plans/9

The Consultation Authorities also commented on the content of the LDPs policies to establish if they remain relevant or if any new policies are needed. They have helped to identify the environmental problems facing the area set out in Section 3.5. In addition to helping with the collection of baseline data, the Consultation Authorities have also contributed expert opinion and professional judgement to the SEA Strategic Environmental Assessment and its outputs, and will continue to do so as the SEA progresses.

1.3.2 Publication of the Monitoring Statement, Main Issues Report & SEA Interim Environment Report

As required by the new development planning regime, a Monitoring Statement was published alongside the MIR and the IER. The preparation of these documents was closely aligned. The Monitoring Statement was been republished alongside the Proposed LDP and it discusses the changes in the principal physical, economic, social and environmental characteristics of the area and the impact on these of the policies and proposals of the existing plan. There is no need to undertake separate monitoring of the Development Plan and SEA ER[12]. The Council intends to use future Monitoring Statements as the basis for discharging its monitoring obligations under the Environmental Assessment (Scotland) Act 2005.

SEA monitoring arrangements should identify possible significant environmental effects and help identify any unforeseen issues arising from the implementation of the Development Plan. This is to allow any remedial action to be taken, if required. However, it has been a challenge to identify appropriate and proportionate Monitoring Statement and SEA indicators that can actually achieve this, and that can be monitored within available resources. This is because it is not always possible to directly link changes in the environment to the specific effects of implementing a Development Plan. The related limitations of the assessment are discussed further in Section 8.

Informed by the pre-MIR engagement, the MIR set out the main issues affecting and expected in the area, including the need to accommodate further strategic development so as to conform to the position set out in the SDP as well as relevant higher tier plans policies and strategies. In response to these pressures, the MIR set out a proposed spatial strategy and policy approach, as well as at least one reasonable alternative

[12] Scottish Government PAN 1/2010: SEA of Development Plans paragraph 4.47 – 4.49 & Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.38

where appropriate. The MIR for the LDP also considered a range of proposed development sites, and their reasonable alternatives, which must conform to the SDP[13].

Content of the existing local plan intended to be retained, or which is not considered to have a significant environmental or other effect, was identified by the MIR but with limited discussion[14]. In terms of SEA, sites with planning permission are committed as part of the baseline.

The MIR was the main way of integrating SEA into the plan making process, since it is at that stage the strategy options for the future development of the area were to be considered and discussed. However, the MIR was not as detailed as the Proposed LDP or LDP is, since it was not intended to be a draft version of the plan. Instead, the MIR concentrated on the key changes that have occurred since the previous plan and on the big ideas and options for future development as well as any need for policy review. This means that as the plan making process progressed to the Proposed LDP and LDP stage, additional material has been subject to SEA, for example as the detailed wording of policy emerged and as new candidate sites presented that the Council was not aware of at MIR stage. The Consultation Authorities contributed to the SEA of these new sites and issues leading up to and at proposed LDP stage.

Importantly, whilst the SEA is a means of assessing the likely significant environmental effects of the LDP, and is an important tool in the plan making process, it does not follow that the Council's proposed approach must be the one that scores best in SEA terms. This is because there are a number of other considerations that must be taken into account when selecting a spatial strategy and policy approach, including the ability to deliver a wider range of outcomes than may be possible if the SEA alone were to direct the approach. For example, the LDP must have regard to the resources available to implement the plan, and infrastructure providers must be able to support the delivery of development in the required timeframe[15]. This may significantly influence where development can be delivered as part of any approach. The SEA has not been the determining factor in what should and should not be included in the LDP, but it has been used to advise and help avoid inappropriate development in the most environmentally sensitive areas, and to help steer growth to locations with more capacity[16].

[13] Scottish Government Planning Advice Note 1/2010: SEA of Development Plans paragraph 4.20
[14] Scottish Government Circular 6/2013 paragraph 68
[15] Scottish Government Scottish Planning Policy paragraph 29 – 30 and 119
[16]Scottish Government PAN 1/2010; SEA of Development Plans paragraph 4.30 – 4.32 Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 1.4 and 3.24

An important output of the SEA process is to signpost mitigation measures and responsibilities alongside appropriate and proportionate monitoring indicators. Necessary mitigation is reflected in the LDP as appropriate. However, within this mitigation and monitoring framework, the SEA must recognise the remit of the LDP and the limitations on its ability to influence wider forces acting on the environment and this is discussed further in Section 8. Non-statutory advice on the SEA process published by the Scottish Government has been and will be followed[17].

1.3.3 Preparation and Publication of the Proposed LDP and SEA ER for Representation

Following consideration of responses made on the MIR and IER, the Proposed LDP was been prepared and published for representation. It presented the Council's settled view on its spatial strategy, being a detailed statement of polices and proposals that will guide the future development and use of land in the area so as to conform to the approved SDP. Scottish Ministers expect the LDP to be a concise, map-based document that focuses on the main proposals for the period up to year 10 from adoption. The Draft ER accompanied the Proposed LDP.

1.3.4 Submission of Proposed LDP, with or without modification, to Scottish Ministers

Following publication of the Proposed LDP, there was the opportunity for the Council to modify the plan to take in to account views expressed in representations. Modifications may be minor, but where major (notifiable) modifications are proposed a new proposed plan must be prepared and published before it can be submitted to Scottish Ministers. The Council did not choose to make any modifications to the proposed LDP prior to submission to Scottish Ministers.

The Proposed LDP must be submitted to Scottish Ministers prior to its adoption by the Council together with its associated Action Programme, a report of conformity with the participation statement, and if there are unresolved representations a request that Scottish Ministers appoint a person to examine the Proposed LDP. As there were unresolved representations to the Proposed LDP, on submission of the plan to Scottish Ministers an Examination in Public was arranged. A summary of these unresolved issues together with copies of the original representations, and the Monitoring Statement and ER were supplied to the Scottish Ministers Department of Environmental and Planning Appeals (DPEA) at this stage to provide all the information necessary to examine the proposed plan.

[17] Scottish Government PAN 1/2010: SEA of Development Plans & Scottish Government: Strategic Environmental Assessment Guidance August 2013

The Scottish Government Reporter has made independent recommendations on how any unresolved representations should be handled. This included a small number of recommendations to modify the plan. recommendations are largely binding on the Council, although there are limited and specific circumstances where recommendations need not be followed. These grounds are set out in the The Town and Country Planning (Grounds for Declining to Follow Recommendations) (Scotland) Regulations 2009.

Scottish Ministers expected the LDP to be adopted not later than two years after approval of the relevant SDP – i.e. by 27th June 2015. However, when approving the SDP, Scottish Ministers acknowledged that the need for SESplan to prepare supplementary guidance on housing land would impact on LDP programmes. Twin-tracking between the two tiers of the plan making process is encouraged. However, in practice East Lothian's MIR was not published until after the distribution of housing requirements through SESplan's Supplementary Guidance on Housing Land was set by Scottish Ministers (27th June 2014) and adopted by East Lothian Council (28th October 2014). This was to ensure that a meaningful consultation could take place, in particular how the housing requirement for the area should be addressed. As such, the timescale for adoption of the LDP was more related to the timetable for approval of the SESplan Supplementary Guidance by Scottish Ministers than that of the SDP itself. Following Examination of the Proposed LDP, the LDP as adopted is accompanied by this Finalised ER, as well as a Post Adoption Statement detailing any changes made consequent on the outcomes of the above processes.

1.4 FORM & CONTENT OF THE LDP

The LDP sets out a detailed spatial strategy consisting of policies and proposals that conform to the SDP and that will manage development and use of land in East Lothian. Only policies and proposals relevant to these land use planning objectives are included. The LDP need not repeat policy material contained in the SDP, including the SDP Vision.

The LDP is a map-based document that focuses on the main development proposals that are needed to satisfy the approved SDP development requirements over a 10 year period, as well as the associated infrastructure that will be required to deliver it, on a phased basis if necessary. It comprises of a written statement accompanied by a series of maps which together will constitute the "*Proposals Map*". Together these describe and illustrate the spatial implications of the policies and proposals of the LDP. The proposals map is sufficiently detailed to enable the location

of policies and proposals for development and the use of land to be identified site by site. The LDP has a sharp focus on how much, what kind and what scale of development can take place where and when, as well as where different types and scales of development should not occur. It is accompanied by an Action Programme to help ensure that the necessary actions / infrastructure requirements are highlighted to help deliver the strategy. The Action programme need not be subject to SEA[18], but it can highlight mitigation identified by the SEA process[19].

1.4.1 Supplementary Guidance & Supplementary Planning Guidance

The LDP refers to and is accompanied by statements of statutory Supplementary Guidance (SG) and non-statutory Supplementary Planning Guidance (SPG). The main purpose of SG is to act as an extension of the Development Plan. Its use should be limited to explain in more detail policies and / or proposals of the plan and to inform applicants what the Council expects and requires of planning applications so they are consistent with the Development Plan.

SG is to be considered part of the Development Plan where the intention to prepare and adopt it has been specifically identified in the Development Plan and it has been the subject of consultation[20]. Some forms of SG also require SEA[21], and where SG is available at the time of the first formal preparatory act of an LDP, or becomes available before the LDP is adopted, then for the purposes of SEA it should be treated as part of the plan.

SG or SPG may be used to set out minor proposals as well as more specific and detailed policies, such as those relating to the Development Management process, including detailed design guidance. Such guidance should be prepared to provide more detailed policy guidance where this would be inappropriate for inclusion in the LDP itself.

Supplementary Guidance has been prepared in relation to Developer Contributions Framework, which is mainly financial in nature. This SG has been screened for SEA (SEA Gateway ref: 01197) the result of which was that SEA is not required for the SG.

[18] Scottish Government PAN 1 / 2010 paragraph 4.42
[19] Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.26 and 3.38
[20] Section 22 of The Town and Country Planning, (Scotland) Act 1997, as amended, and regulation 27 of the Development Planning (Scotland) Regulations 2008
[21] Scottish Government PAN 1 / 2010 paragraph 4.50-4.55 & Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.3

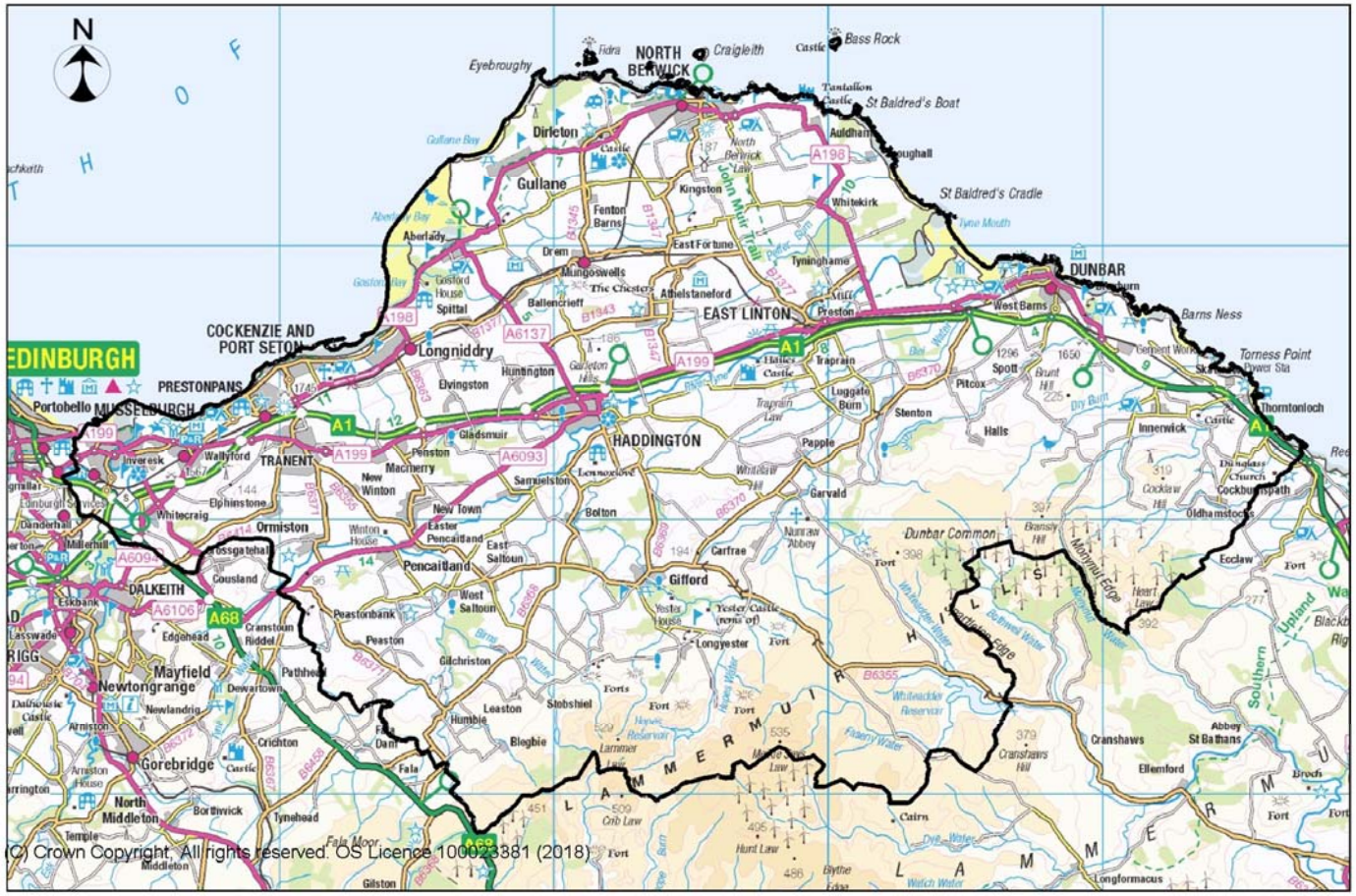
A number of SPG documents, including Development Briefs (SEA Gateway ref: 00717), a Farmsteading Design Guide (SEA Gateway ref: 00718), and on Waste (SEA Gateway ref:00719) have been subject to SEA pre-screening processes, the result of which was that SEA is not required in respect of them because they of themselves do not have significant environmental effects beyond those of the LDP.

1.5 THE KEY FACTS RELATING TO THE LDP

Table 1 below sets out the key facts relating to the LDP:

TABLE 1: KEY FACTS RELATING TO THE LDP	
Responsible Authority	East Lothian Council
Title of PPS	East Lothian Local Development Plan (LDP)
What prompted the PPS	Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006
Subject	Town and Country Planning
Period covered by PPS	Ten years from adoption – mid 2018
Frequency of updates	At least every five years
Area covered by PPS	East Lothian Council Local Authority area (See map below)
Purpose of PPS	Sets out a spatial strategy, being a detailed statement of the planning authority's policies and proposals for the development and use of land in its area
Contact point	Iain McFarlane Service Manger Planning East Lothian Council John Muir House Haddington EH41 3HA Tel: 01620 827216 Email: imcfarlane@eastlothian.gov.uk

Area covered by the LDP



1.6 SEA ACTIVITIES TO DATE

Table 2 summarises the SEA activities to date in relation to the LDP:

TABLE 2: SEA ACTIVITIES		
SEA Action/Activity	**When**	**Notes**
Screening to determine whether the PPS is likely to have significant environmental effects	N/A	No need to screen for SEA since SEA is mandatory in the preparation of an LDP, and ELC opted to proceed directly to SEA Scoping.
Scoping the consultation periods and the level of detail to be included in the Environmental Report etc.	21/11/11 – 20/12/11	Advice received from Consultation Authorities on the scope and level of detail to be included in the SEA and ER as well as the consultation period. All SEA Objectives scoped into the assessment.
Outline and objectives of the PPS	16/10/ 2014	Established as part of early draft of PPS and set out in SEA screening / scoping documents. However, NPF3 and SPP have since been published.
Relationship with other PPS and environmental objectives	16/10/ 2014	Established as part of the Scoping Opinion and amended as a result of Consultation Authority responses.
Environmental baseline established	16/10/ 2014	Completion of Monitoring Report
Environmental issues identified	16/10/ 2014	Completion of IER
Assessment of future of area without the PPS	16/10/ 2014	Completion of IER
Alternatives considered	16/10/ 2014	Completion of IER
Environmental assessment methods established	16/10/ 2014	Completion of IER
PPS alternatives to be included in the environmental assessment	16/10/ 2014	Completion of IER

Identification of environmental issues that may persist after implementation and measures envisaged to prevent, reduce and offset any significant adverse effects	16/10/ 2014	Completion of IER
Monitoring methods proposed	16/10/ 2014	Completion of IER
Consultation timescales	16/10/ 2014	
Receipt of Consultation Responses to MIR / IER	10/02/15	
Report of Consultation Responses to MIR / IER	21/04/15	
Commence site assessments of additional sites	21/04/15	
Production of Draft Proposed Local Development Plan	17/11/15	
Target community consultations on additional sites	01/02/16 – 01/05/16	
Finalisation of Proposed LDP and Draft Environmental Report	26/08/16	
Consultation timescales on Draft Environmental Report	19/09/16 – 31/10/16	See Section 9 below.
Review consultation responses to Draft ER	07/11/2016 – 31/03/2017	
Review and amendment of Draft ER in response to Report of Examination	14/03/2018 - 30/06/2018	

1.7 SEA OBJECTIVES SCOPED INTO THE ASSESSMENT

In accordance with Schedule 2 of the Environmental Assessment (Scotland) Act 2005, East Lothian Council has considered as part of its SEA scoping exercise whether the environmental effects (positive and negative) of the LDP are likely to be significant. A summary of the conclusions from the SEA Scope is provided in Table 3 below - all SEA objectives are scoped into the assessment.

TABLE 3: SCOPING OF SEA ISSUES

SEA issues	Scoped in	Scoped out	If scoped out, why
Biodiversity, flora, fauna	X		
Population	X		
Human health	X		
Soil	X		
Water	X		
Air	X		
Climatic factors	X		
Material assets	X		
Cultural heritage (including architectural and archaeological heritage)	X		
Landscape	X		

2 THE LDPs RELATIONSHIP TO OTHER RELEVANT PPSs

Schedule 3 (1) of the Environmental Assessment (Scotland) Act 2005, requires that the ER:

1. **Outline of the relationship between the LDP and other qualifying PPSs (Plans, Programmes or Strategies);**
2. **Identify the environmental protection objectives 'established at international, community or member state level' that have been taken into account - Schedule 3 (5);**
3. **Identify where the PPS sits in the hierarchy of PPSs, including lower tier ones, such as SG and other related actions, such as project level EIA and the assessment of planning applications against the Development Plan policy framework;**
4. **Set the main SEA objectives for the LDP;**

2.1 RELATIONSHIP OF THE LDP TO OTHER RELEVANT PPSs

The Proposed LDP is influenced by a wide range of international, national and other local level plans, programmes and strategies (PPSs). These include the EU Habitats Directive, the EU Water Framework Directive, the Climate Change (Scotland) Act 2009, the Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006, NPF, the Zero Waste Plan and SPP. SESplan's Proposed SDP SEA Scoping Report (May 2009) sets out these higher level PPSs and they are set out and updated at Appendix 1 of this ER, together with a brief summary of what each is intended to achieve and their implications for the LDP.

Importantly, the SDP (SEA Gateway Ref. SEA\00399) must also be compliant with these higher tier PPSs. The approved SDP and the SG on Housing Land set the context for the preparation of lower tier LDPs which, by virtue of conforming to the strategy and policies of the SDP, should be compliant with these higher tier PPSs. The LDP must be consistent with the approved SDP and its SG on Housing Land and will take into account

a range of national and other policy statements[22]. This will have a bearing on the form, content and scope of the LDP and its accompanying SEA. As set out in Scottish Government Circular 6/2013: Development Planning, related considerations include:

- The National Planning Framework;
- The resources available or likely to be available for the carrying out of the policies and proposals set out in the LDP;
- Any LDP or SDP for an adjoining area, or proposed LDP, or SDP;
- Any regional transport strategy for the area and any local transport strategy for the area;
- Any river basin management plan relating to the area;
- Any local housing strategy relating to the area;
- The Zero Waste Plan 2010;
- Issues arising out of the European Directive on the control of major accident hazards involving dangerous substances.

2.2 ENVIRONMENTAL PROTECTION OBJECTIVES OTHER RELEVANT PPSs

When preparing the LDP the authority is required to do so with the objective of contributing to sustainable development, having regard to any related guidance from Ministers[23]. This guidance currently exists as Scottish Planning Policy (SPP), and these paragraphs also broadly identify the environmental protection objectives 'established at international, community or member state level' that need to be taken into account when preparing an LDP. SPP states that planning decisions should:

- contribute to the reduction of greenhouse gas emissions with the commitment to reduce emissions by 42% by 2020 and 80% by 2050;
- contribute to reducing energy consumption and to the development of renewable energy generation opportunities;
- support the achievement of Zero Waste objectives, including the provision of required waste management installations;
- protect and enhance the cultural heritage;
- protect and enhance the natural environment, including biodiversity and the landscape;

[22] Scottish Government Circular 6/2013 Development Planning paragraph 57
[23] Scottish Government Circular 6/2013 Development Planning paragraph 12 - 14

- maintain, enhance and promote access to open space and recreation opportunities;
- take into account the implications of development for water, air and soil quality; and
- support healthier living by improving the quality of the built environment, by increasing access to amenities, services and active travel opportunities, and by addressing environmental problems affecting communities.

The guidance goes on to say that decisions on the location of new development should:

- promote regeneration and the re-use of previously developed land;
- reduce the need to travel and prioritise sustainable travel and transport opportunities;
- promote the development of mixed communities;
- take account of the capacity of existing infrastructure;
- promote rural development and regeneration; and
- prevent further development which would be at risk from flooding or coastal erosion.

The guidance continues by stating that decisions on the location of new development should:

- encourage the use of and enable access to active travel networks and public transport and support habitat connectivity;
- promote the efficient use of land, buildings and infrastructure;
- encourage energy efficiency through the orientation and design of buildings, choice of materials and the use of low and zero carbon generating technologies;
- support sustainable water resource management;
- support sustainable waste management;
- consider the lifecycle of the development; and
- encourage the use of sustainable and recycled materials in construction;

There is also a specific requirement within Section 72 of the Climate Change (Scotland) Act 2009, which introduced Section 3F into the Town and Country Planning (Scotland) Act 1997, that LDPs include policies requiring all developments to be designed to ensure new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions through low and zero-carbon generating technologies.

2.3 RELATIONSHIP BETWEEN THE LDP & OTHER RELEVANT LOCAL LEVEL PPSs

In addition to these higher tier PPSs, a number of local PPSs provide further context for the LDP. These local PPS's and a brief description of what each is intended to achieve is provided below and at Appendix 1:

- East Lothian Single Outcome Agreement– 2017 - 2027, East Lothian Partnership;
- East Lothian Biodiversity Action Plan, ELC;
- East Lothian Environment Strategy, East Lothian Partnership;
- East Lothian Local Housing Strategy, 2012-2017, ELC;
- East Lothian Heritage Strategy, 2007-2010, ELC;
- East Lothian Parks and Open Spaces Strategy 2000, ELC (under review);
- East Lothian Sports Pitch Strategy 2007, ELC (under review);
- East Lothian Local Transport Strategy, ELC (being reviewed in parallel with LDP);
- East Lothian Community Planning Economic Development Strategy, 2012-2022, ELC;
- East Lothian Core Paths Plan, ELC;
- East Lothian Contaminated Land Strategy, ELC;
- East Lothian Design Standards for New Housing Areas, ELC;

2.4 SEA OBJECTIVES AND SUB OBJECTIVES

Taking the aims and objectives of the above PPSs into account, as they relate to the SEA Topics scoped into this assessment (Table 3), the SEA Objectives and Sub-objectives to be used in the Strategic Environmental Assessment of the LDP are set out in Table 4 below. The Consultation Authorities have had extensive involvement in selecting the objectives and sub-objectives that will form the basis of the assessment to ensure that they reflect and are consistent with the higher tier PPSs, to which the LDP must conform.

TABLE 4: SEA OBJECTIVES AND SUB OBJECTIVES

Sea Topic	SEA Objective	SEA Sub Objective
Biodiversity, Flora and Fauna	Conserve or enhance biodiversity, flora and fauna.	• *conserve or enhance sites designated for their international, national or local nature conservation interest;* • *conserve or enhance wider habitat connectivity;* • *conserve or enhance protected trees or woodland important for its type, extent or landscape significance;*
Population	Maintain or enhance the quality of life for East Lothian's residents.	• *contribute to regeneration of disadvantaged areas;* • *promote the provision of affordable housing;* • *ensure access via active travel or public transport options to facilities, or services, or employment opportunities;*
Human Health	Maintain, or provide opportunities to improve, human health.	• *ensure reasonable accessibility to existing open spaces, or sports facilities, or the core path network;* • *preserve or enhance the CSGN;* • *ensure acceptable levels of noise;*

		• *reduce or maintain levels of emissions and help ensure that the threshold for an air quality management Area (AQMA) designation is not triggered;*
Water	Maintain or enhance the water environment and reduce flood risk.	• *avoid inappropriate development in areas at flood risk and ensure that the overall flood risk in the area is not increased as a result of development;* • *maintain or enhance the ecological status of the water environment;*
Soil	Conserve or enhance soil quality, quantity and function.	• *avoid the loss of prime quality agricultural land;* • *avoid the loss of rare or carbon-rich soils;*
Air	Maintain or enhance air quality.	• *maintain or enhance current levels of air quality;* • *promote good public transport accessibility;* • *promote good local access to existing facilities, services and employment;*
Climatic Factors	Contribute to reducing GHG emissions and energy consumption or adapting to the effects of climate change.	• *reduce the need to travel as well as the distance travelled;* • *promote development that is energy and resource efficient;* • *promote resilience to the effects of climate change through, for example, flood, storm, landslip or subsidence;*
Material Assets		

	Manage, maintain or promote the efficient, effective or appropriate use of material assets.	• *promote the re-use of existing buildings worthy of retention, make an efficient use of land and / or prioritise the use of brownfield land over greenfield land;* • *safeguard mineral resources, the extraction of which would be acceptable in policy terms, from permanent sterilisation;* • *support and / or ensure provision of adequate infrastructure, services and facilities;* • *promote the reduction, reuse and recycling of waste;*
Cultural Heritage	Preserve or, where appropriate, enhance East Lothian's historic environment.	• *preserve and if appropriate enhance:* - *the character or appearance of Conservation Areas;* - *listed building or their settings;* - *Scheduled Ancient Monuments or their settings;* - *local archaeological sites;* - *Historic Gardens or Designed Landscapes;* - *sites included in the Inventory of Historic Battlefields;*
Landscape	Conserve or enhance the character and appearance of settlements and the landscape.	• *prevent development from harming locations containing built or natural landscape features of significance;* • *protect the separate identity of settlements;* • *allow the consolidation /appropriate expansion of the existing settlement pattern and settlement structure;* • *conserve or enhance important areas of open / green space.*

3 CURRENT STATE OF THE ENVIRONMENT

Schedule 3 (2), (3) and (4) of the Environmental Assessment (Scotland) Act 2005 requires that the ER:

1. **Include a description of the relevant aspects of the current state of the environment;**
2. **Identify the environmental characteristics of area likely to be significantly affected;**
3. **Include a description of environmental problems in the area, in particular any relating to Natura 2000 sites;**

This section follows the SEA Objectives scoped into the assessment at scoping stage.

3.1 PRINCIPAL PHYSICAL, SOCIAL & ECONOMIC CHARACTERISTICS OF THE AREA

3.1.1 Background Environmental Baseline & Issues

The basis for the SEA is an understanding of the existing environmental characteristics of the area and what is likely to happen should the LDP not be prepared. East Lothian and its settlements have strengths, weaknesses, opportunities and threats in terms of sense of place, identity, connectivity, competitiveness and access to housing, employment, local services, infrastructure and other facilities. These factors should be considered as an integral part of the SEA baseline in terms of how they relate to the SEA objectives scoped into the assessment. Relevant issues include:

1. The landscape to be protected and / or enhanced, including those areas that contribute most to green belt objectives;
2. The cultural and natural heritage designations and environmental characteristics in general including air, soil and water that ought to be preserved, conserved and, where appropriate, enhanced;
3. Transport connectivity and particularly public transport availability and accessibility and opportunities for active travel;
4. The adaptability within urban structures - e.g. are they consolidated or is there scope for further brownfield development etc.;
5. Local access to services and the capacity in, or that can be made available in, facilities;
6. The ease of movement in and around settlements and barriers to movement;

7. Provision of open space in terms of type, quantity, quality and accessibility;
8. Population and Human Health: socio economic profile - areas of comparative deprivation and wealth etc.;
9. Climatic considerations (emissions etc.) and resilience to climate change (flood risk etc.).

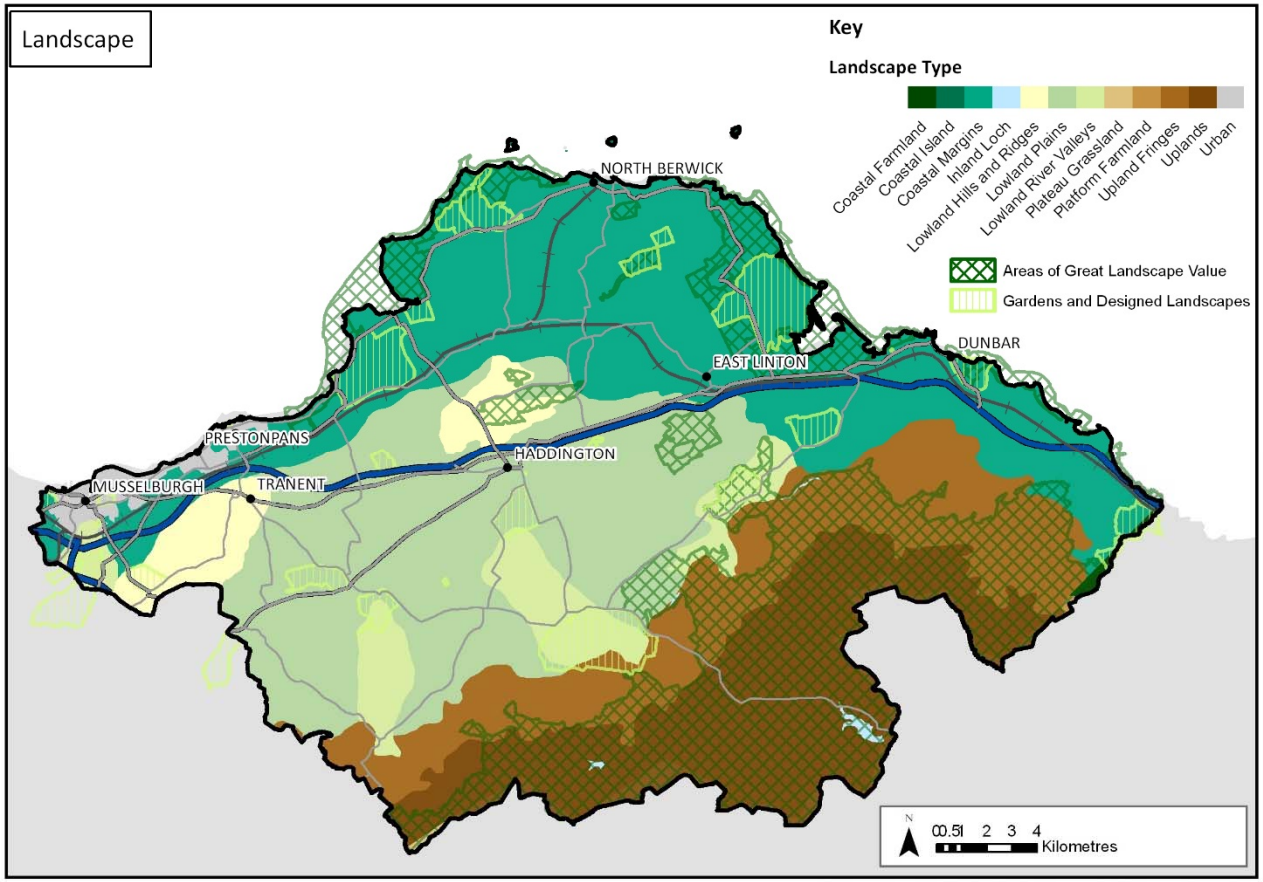
The paragraphs below summarise these characteristics firstly for East Lothian as a whole and then for each of the main settlements. Where relevant the information is discussed under a heading related to an SEA objective which has been scoped into the SEA.

3.2 EAST LOTHIAN WIDE

3.2.1 Landscape

East Lothian is situated between the Scottish Borders and Edinburgh. It is an area with a varied and attractive landscape, comprising countryside and coast. River valleys dissect the agricultural coastal plain, which is framed by the backdrop of the Lammermuir Hills. Land cover varies as raised beaches and dunelands give way to arable farmland, much of which is prime quality in the agricultural plain. There is rough grassland in the upland fringes and heather moorland and peatland in the uplands. Woodland plantation features in the upland fringes as well as in lower lying areas, including shelter belts and policy plantations along river valleys, but such planting is generally absent along the Lammermuir ridge line.

This landscape is interspersed with historic towns and villages and prominent geological and other physical features. These include the volcanic outcrops of the Garleton Hills and North Berwick and Traprain Laws as well as designed landscapes and other historical sites, buildings, landmarks and monuments. The A1(T) Trunk Road and the East Coast Main Line pass east-west through the area, with the North Berwick Branch Line to the north. The agricultural landscape is one of large generally flat fields that allow attractive distance views across the countryside and coastal plain and its landmarks and to the Firth of Forth and beyond. Locally important landscapes have previously been recognised through designation as Areas of Great Landscape Value; through this LDP this designation will be replaced by Special Landscape Areas, as the local landscape designation. Currently, there are 10 designated Areas of Great Landscape Value, including the coastline, the Lammermuir and Garleton Hills and Traprain Law.



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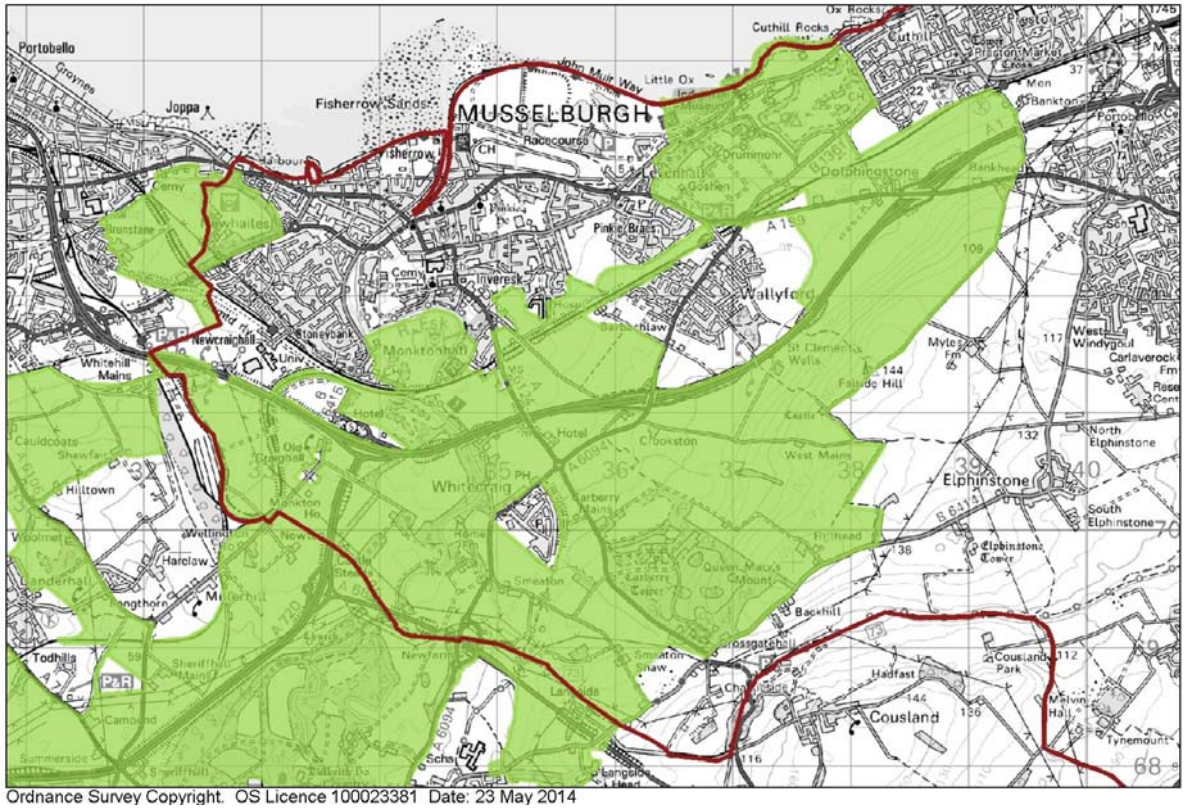
Around half of East Lothian's population live in the west of the area in the relatively tight group of expanding settlements positioned between the coast and the hills around and along the main transport corridors. The potential coalescence of some of these settlements is becoming an issue of increasing significance. To the east the settlement pattern is more dispersed as the agricultural plain widens and the distance between settlements increases. Some of the land between settlements is used for leisure tourism uses, including golf, but being mainly prime quality agricultural land, much of it is generally in agricultural use.

Settings have been maintained for settlements, and the appropriate treatment of their edges, including with the introduction of new development, has maintained the landscape character and the identity of settlements. Yet the need to accommodate new development will continue to pressurise these characteristics. An appropriate balance will need to be found between accommodating the SDP development requirements sensitively in to the area and to reduce the need to travel and to promote sustainable modes of transport. The Edinburgh Green Belt has a role in managing this in the west of East Lothian. However, areas within the green belt are accessible by public transport and some have been identified through study as making a lesser contribution to green belt objectives. There are also regeneration opportunities here.



East Lothian's history is in agriculture, fishing and mining, with the latter most prevalent to the west. Settlements have grown and evolved in this context, with many developing organically around harbours, market squares, former coal mines and river crossings with some including historic mills and lades. Often smaller settlements developed around farmsteads, fortifications, parish churches and manses, while some were planned by estate managers to house workers during agricultural improvement. Roads and railways were introduced to connect the area to market, although many railways were removed.

The diversity of settlements developed in harmony with their surroundings and in response to the area's economic activities and connectivity. This is reflected in their layout and architectural styles, and in the materials and colours used for building. However, the economic base of the area is changing. The scale and rate of change historically was slower in comparison to the development pressure now being experienced in the area. The challenge is to sensitively integrate new development in such a way that complements the identity and character of the area and that does not undermine its special characteristics.

East Lothian benefits from many historic and more recent buildings of merit, including those of the large country estates, farm houses and steadings, as well as defensive structures. Many have been retained, restored and converted to other appropriate uses, largely due to planning policies that promote this while restricting new build housing in the countryside, thereby encouraging the retention and reuse of existing vernacular buildings. Many estates remain intact with their houses, gateways, boundary stone walls and planting continuing to be important landscape features. There are few locations where landscape improvement is needed with most areas of previous mining activity also now rehabilitated. The network of former railway routes is included as part of the area's Core Path network. They offer access and active travel opportunities for residents and visitors alike to coastal locations and countryside. There are aspirations to extend this path network further.

The Tyne and Esk are the main rivers, and together with smaller water courses they drain the area. Aberlady, Gullane and Belhaven Bays and the beaches along the coastal strip are landscape features that provide important amenity and visitor / leisure tourism attractions in their own right. Some of these areas are also habitat resources for protected species and for biodiversity of international, national and local significance. The ecological and morphological status of the water environment is also to be maintained and enhanced.

Key Messages: Landscape

In association with other plans, policies and strategies, the LDP can help conserve and enhance East Lothian's special landscape characteristics and the character and identity of its settlements and buildings. Its role in this is principally selecting appropriate locations for new development, where possible consolidating the settlement pattern and structure, ensuring landscape fit and if appropriate avoiding settlement coalescence. By managing the introduction of new development with locational and criteria based policies it can also identify where windfall development of particular kinds may be acceptable and how the impacts of all development on landscape character should be mitigated. While following the 'all landscapes' approach, the LDP recognises that some landscapes require particular care and attention, and protects these with designation as Special Landscape Areas.

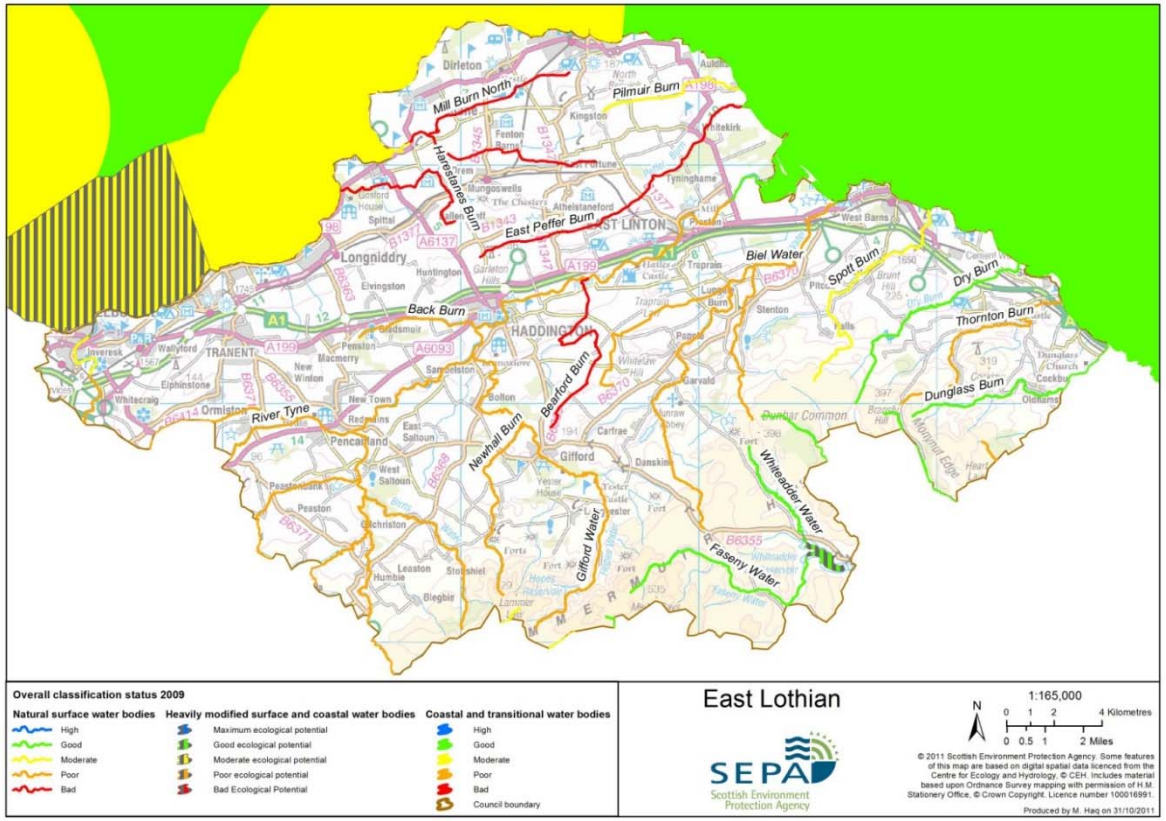
3.2.2 Water

Water Quality

The Forth Area Management Plan established a programme of measures to protect water bodies from deterioration, and to restore water bodies that are below 'good' ecological status. Initial targets were that by 2015 42% of watercourses be classified as having 'good' or 'high' ecological status. So that the situation will improve further the same applies to 58% of them by 2021 and 100% by 2027. It should be noted that land use planning can only contribute to achieving a limited number of related measures / objectives in respect of water quality.

East Lothian has 53 water bodies including rivers, lochs, estuaries, coastal waters and ground water bodies. The Tyne and Esk rivers and smaller water courses generally flow north to drain the area. They discharge into the Firth of Forth where Natura 2000 designations and SSSI's exist. In the Monynut / Mayshiel area of the Lammermuirs, there are streams which flow south to join the River Tweed. Most of this flow accumulates in the Whiteadder Reservoir before passing into the River Tweed Special Area of Conservation in the Scottish Borders Council area. Water bodies

can act as pathways between development and protected sites. The ecological and morphological status of the water environment must be maintained or enhanced.



SEPA reported in 2009[24] that 18 (34%) of water bodies in or partially within East Lothian were at good status. The remaining 35 (66%) were classified as being at moderate, poor or bad ecological status. Water bodies at good status are generally situated in the south eastern areas of East Lothian, whilst those of moderate, poor or bad quality are in the northern, central and western areas where most agricultural activity takes

24 End of 2008 SEPA classification, reported to Europe in 2009

place. Key pressures associated with this agricultural activity include diffuse source pollution, water abstraction, flow regulation and morphological changes.

Point source pollution from sewage disposal is a particular issue within the East Lothian Coastal, River Esk and River Tyne catchments. However, SEPA is working with Scottish Water to bring about a managed improvement in this situation. East Lothian has 12 designated bathing waters[25] that are monitored by SEPA. In 2010 it was reported that eight of East Lothian's bathing waters were guideline quality and four were of mandatory quality, importantly, none were classed as failing.

In 2010 a mine water treatment scheme was completed by the Coal Authority at the former Blindwells opencast coal site. The purpose of the plant is to reduce the iron content in the ground water being abstracted before it is discharged into the Seton Burn and the Firth of Forth. Point source pollution from mining and quarrying is a pressure also affecting the River Esk. Measures to allow the status of the River Esk to reach good status by 2021 have been identified by SEPA, by means of the Coal Authority reducing point source inputs and increasing treatment. These measures have not yet been agreed with the Coal Authority.

Many water bodies in East Lothian are also part of water dependant protected areas. As well as being required to meet good ecological status / potential, these water bodies must also achieve objectives for which the protected area was established – i.e. to prevent them from deterioration. All protected areas in East Lothian are currently achieving the goals for which they were established. The Council continues to work with SEPA, Scottish Water and others to carry forward the measures of the Forth Area Management Plan as appropriate to prevent the deterioration of and to improve water quality, including the implementation of Sustainable Urban Drainage Systems in new development.

Key Messages: Water (Water Quality)

The LDP cannot prevent water pollution. In terms of how the LDP can contribute to the maintenance or enhancement of the water environment, this is mainly through the promotion of Sustainable Urban Drainage Systems (SUDS) in its policies and proposals. Urban diffuse pollution is not currently identified as a pressure affecting any water body in East Lothian.

[25]Water Framework Directive definition of bathing water - where a large number of people are expected to bathe and a permanent bathing prohibition, or permanent advice against bathing, has not been issued.

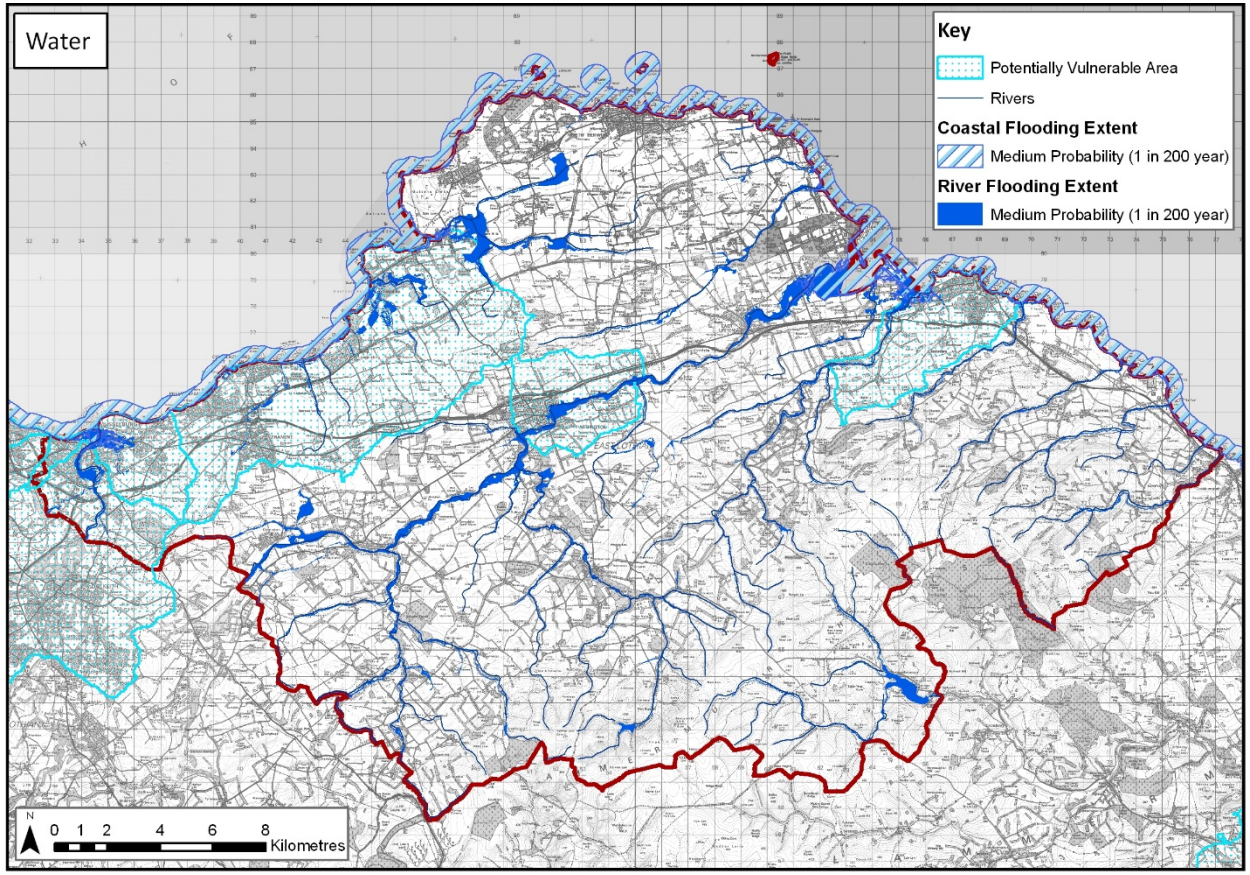
Flooding

The Tyne and Esk rivers and the Biel Water have a history of flooding of agricultural and non-agricultural land. Several towns and communities in East Lothian, including Musselburgh, Haddington and West Barns have a history of and continue to be at risk from flooding. The River Tyne in particular is prone to flooding with floods in 1931, 1948, 1956, 1984 and 1990 causing considerable damage to land and properties in Haddington. Property alongside water courses elsewhere is also liable to flood during periods of heavy rainfall, and property at East Linton, Pencaitland and Ormiston has suffered flood damage.

Approximately 3.2% of East Lothian is at medium to high risk from fluvial (river / stream etc.) flooding, with around 1,191 (2.2%) of properties at medium to high risk of such flooding; of these properties 92% lie within settlements identified in the local plan. Of the 290 flooding related incidents the Council's Transportation Department attended between 1998 and 2007, only 3% were due to fluvial flooding events.

Along the banks of the River Tyne a flood wall exists. It has reduced the severity of flooding, having been 'overtopped' only under very high river levels (1948, 1956 and 1990). The Haddington Flood Study 2009 is being used to assist with the determination of planning applications in this area. It is also being used to review the present Emergency Flood Plan for Haddington and to assist in the design of further flood defences to protect low lying areas of the town. The study includes a set of drawings that provide information on the indicative extent of inundation for a range of flood event return periods.

At the River Esk training walls exist along the banks of the river, but when high river flows are combined with a high tide this causes localised flooding where the height of the training wall is inadequate. The Council has commissioned a consultant to produce a River Esk Flood Study. The Biel Water also has a history of flooding in West Barns and a flood prevention plan is being developed which involves cutting a new channel for flood water to divert it to the River Tyne at Hedderwick.



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Approximately 1.1% of East Lothian is at risk from coastal flooding, and around 2,946 (5.2%) properties are at medium to high risk of such flooding. Of those properties at risk of coastal flooding, approximately 97% lie within settlements identified in the local plan. Of the 290 flooding related incidents the Council's Transportation Department attended between 1998 and 2007, none were due to coastal flooding. Flood defences exist along the coast at Prestonpans, yet this is limited to a short section of sea wall of concrete and brick construction with wave deflector. Other stretches of the coast comprise masonry walls in poor condition.

The Coal Authority has recently secured a Controlled Activities Regulation Licence to increase the rate of ground water abstraction at Blindwells at the treatment plant discussed above. The intention of this is to reduce ground water levels and to manage the risk of flooding in the area.

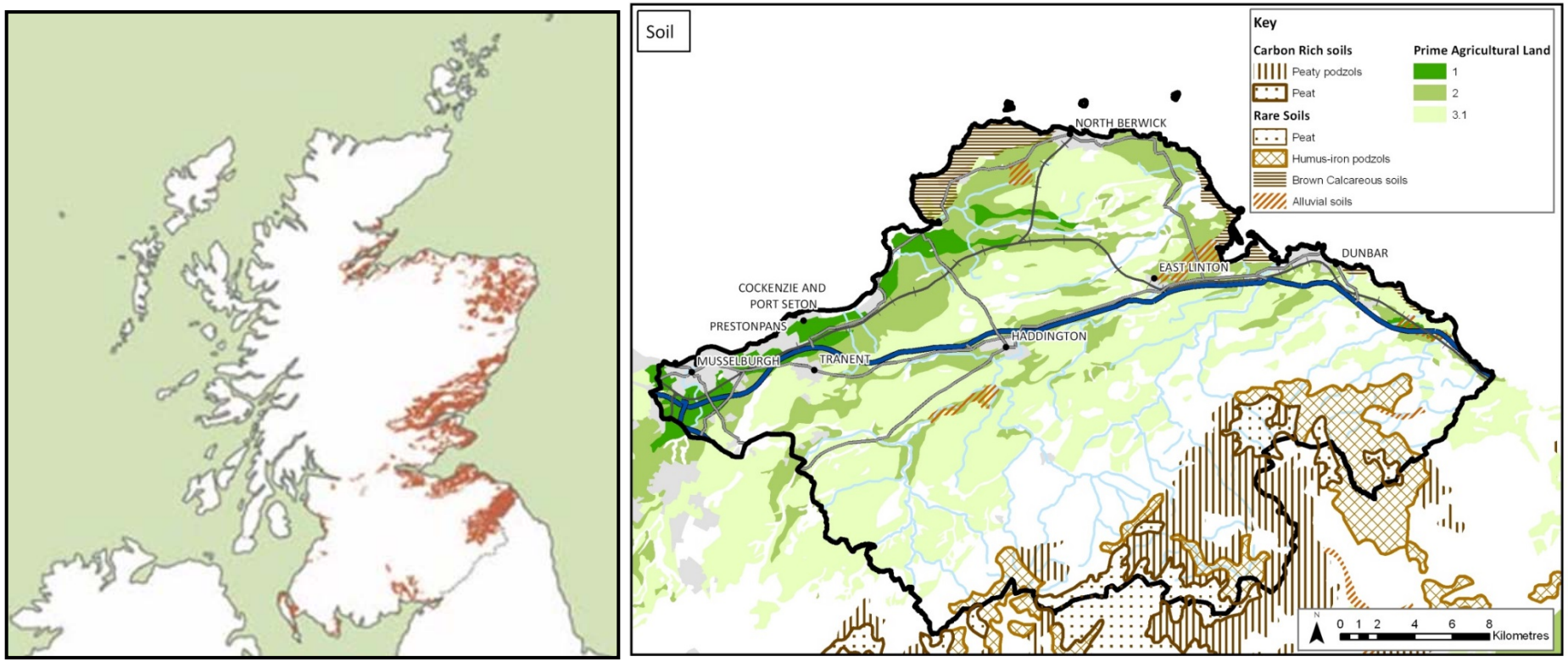
Key Messages: Water (Flooding)

The LDP cannot prevent flooding, but in association with other plans, policies and strategies it can reduce flood risk by selecting locations for new development that are not at risk of flooding and by preventing development occurring that would increase the risk of flooding. With its criteria based policies it can help ensure that the design and layout of buildings ~~respond to~~ avoid flood risk where necessary. Policies can also help maintain or enhance the ecological and morphological status of the water environment by seeking improvements through development where possible. Policies can also promote the use of Sustainable Urban Drainage Systems and support provision of mine water abstraction and water treatment facilities where necessary and appropriate.

3.2.3 Soil

Maintaining soil quality and function is important for a wide variety of reasons, including food production, climatic factors, biodiversity, and controlling the quality and quantity of water flow. Much of East Lothian is classified as prime quality agricultural land by the James Hutton Institute for Soil Research (Class 1 – 3i), this being land which is capable of producing a very wide to moderate range of crops.

East Lothian contains a significant proportion of the Scottish resource (see maps below). Prime quality agricultural land is found mostly to the north of East Lothian, on the raised beach of the Firth of Forth, now the agricultural plain, and along the coastal strip. This is with the exception of some patches of rough grassland associated with dune habitats around Aberlady and Gullane Bays.



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Much of East Lothian benefits from soils that fall within the prime category, but most of it is located in the west of the county, since to the east the foothills of the Lammermuir Hills with their lower quality soil types encroach on the coastal plain. Soils in the foothills of the Lammermuirs tend to be capable of producing a narrow range of crops, while in the Lammermuirs soils are usually suitable for only improved grassland and / or rough grazing. As such, the majority of prime quality agricultural land is to be found in those areas where settlement has occurred, and where pressure for further development is likely to be greatest in future. It is important to protect prime land as far as possible and, since development has the potential to irreversibly affect this resource, potential impacts should be minimised.

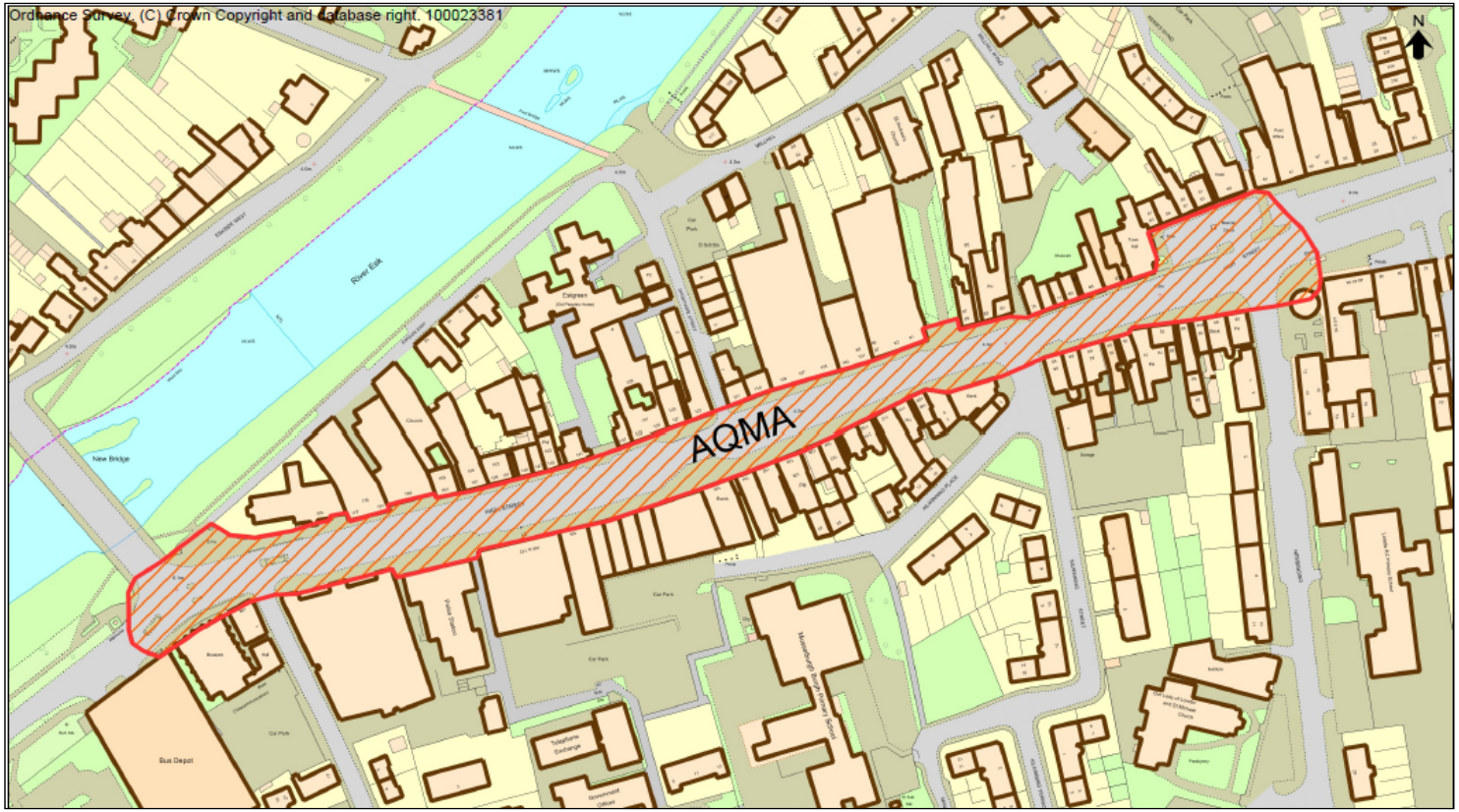
Soil also functions as a carbon store, with some soil types such as peat being particularly high in organic matter. East Lothian contains areas of peat soils predominantly in the uplands of the Lammermuir Hills. In more general terms the organic carbon content of topsoil in East Lothian is also understood to be in the region of 2 – 5%. Development has the potential to cause soil sealing and disturb carbon rich soils. This would result in the loss of soil function, integrity and stability, leading to degradation and a reduction in this finite resource. It is also likely to lead to the release of stored carbon, contributing to greenhouse gas emissions and to the pollution / siltation of watercourses with potential adverse effects on their ecological status, yet there are gaps in knowledge on the effect of land use change on soils.

Key Messages: Soils

In association with other plans, policies and strategies, the LDP can help conserve or enhance soil quality, quantity and function by prioritising locations for new development which reuse previously developed land and buildings, and minimise the loss of greenfield land and prime quality agricultural land. It can also help remediate brownfield land if appropriate. It can seek to ensure an efficient use of land when developed. It can help minimise disturbance of carbon rich soils such as peat, and help to protect rare soil. Minimising loss of greenfield land, and particularly prime agricultural land, safeguards the soil quality and function of such land.

3.2.4 Air Quality

Legislation sets out air quality objectives for certain particulates and pollutants. Local Authorities are to assess air quality and identify any areas where these objectives are not likely to be / are not being met. Where this is the case, and if members of the public will be exposed to it, an Air Quality Management Area (AQMA) is to be designated. As required by Part IV of the Environment Act 1995, the Council annually reviews and assesses local air quality. The air quality objectives for Scotland are set out in the Air Quality (Scotland) Regulations 2000 and its 2002 Amendment. The majority of pollutants (benzene, 1,3-butadine, carbon monoxide, sulphur dioxide and lead) have been screened out in previous assessments for East Lothian. Exceedances of air quality objectives for these pollutants across East Lothian are unlikely.



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The pollutants of greater concern in an East Lothian context are particulate matter (PM10) and nitrogen dioxide (NO2), principally from road traffic sources. For both of these pollutants air quality objectives are unlikely to be exceeded across most of East Lothian. PM10 levels are not considered likely to breach air quality objectives at this time although monitoring continues in Musselburgh. Ongoing automatic monitoring of PM10 confirms that both the annual and 24-hour mean objectives continue to be met in Musselburgh town centre. However, the main issue for East Lothian relates to nitrogen dioxide. Monitoring of NO_2 concentrations in Musselburgh, using monitoring data from 2011 and computer

modelling, predicted that the highest annual average NO_2 concentrations were at receptors on High Street and Bridge Street close to bus stops. Importantly, it was predicted that the majority of these annual mean exceedences were marginal.

Additional monitoring of NO_2 levels in 2012-13 confirmed that parts of the High Street are just exceeding the nitrogen dioxide Annual Mean Objective which is a measure of possible longer term exposure. The one-hour Mean Objective, a measure of short term exposure, is unlikely to be breached. Monitoring of NO_2 in other parts of Musselburgh (including Bridge Street) and in Tranent does not currently indicate any exceedence of air quality objectives. Monitoring of NO_2 levels will, however, continue. East Lothian Council has declared an Air Quality Management Area (AQMA) in Musselburgh in relation to breaches and likely breaches of the nitrogen dioxide annual mean air quality objective. The area contains the High Street from the junction with Newbigging to the junction at Bridge Street. The Musselburgh Air Quality Action Plan has been prepared to guide improvement in local air quality and future compliance with air quality objectives.

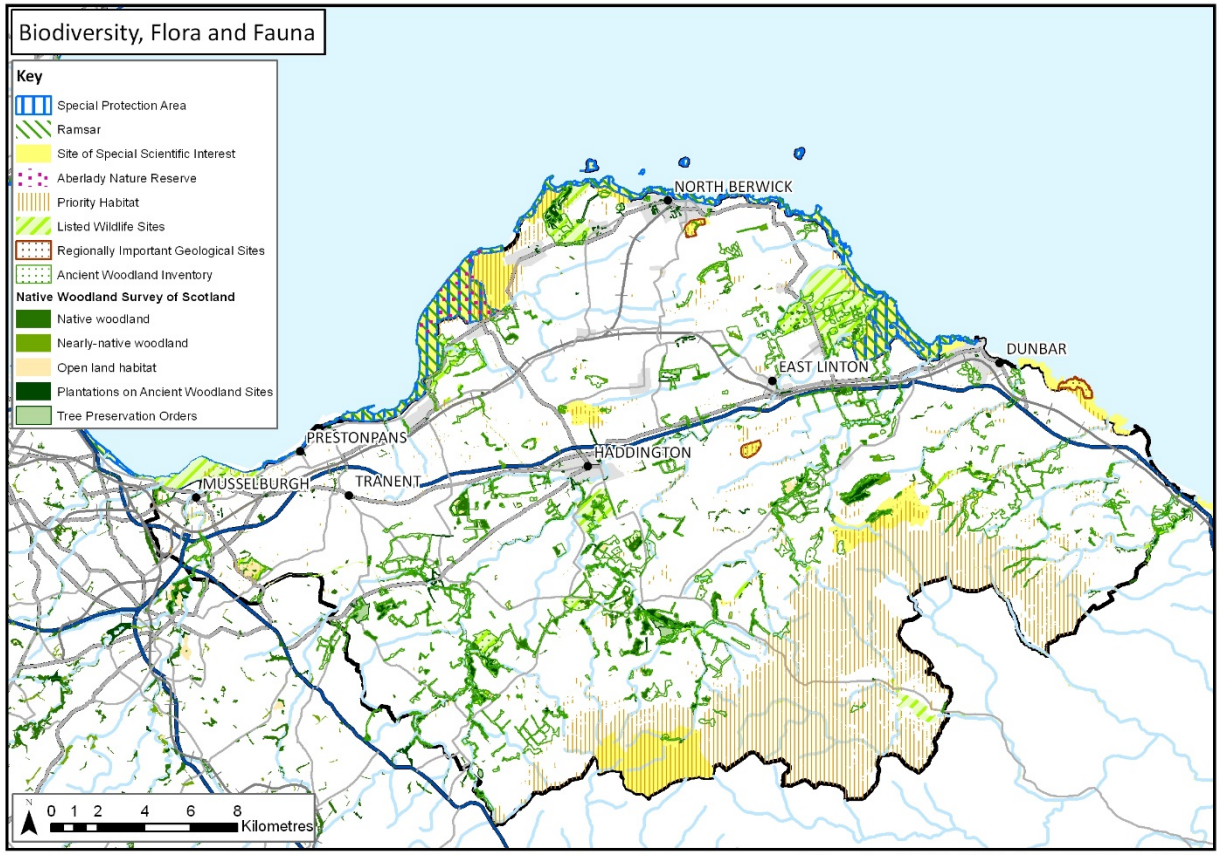
Key Messages: Air Quality

In association with other plans, policies and strategies, the LDP can help to maintain or enhance air quality and meet air quality objectives. It can help do this by taking this into account when selecting locations for development and by ensuring its development strategy is complemented air quality mitigation measures. It can seek to integrate land use and transport, and minimise the need to travel as well as the distance travelled. It can do this by promoting town centres as accessible locations for a mix of land uses and services, and providing community services locally. It can help promote active travel choices and public transport as alternatives to other forms of motorised transport, and seek to reduce the need to as well as distances that need be travelled.

3.2.5 Natural Heritage (Biodiversity, Flora & Fauna)

Areas in East Lothian designated for their biodiversity value include the Firth of Forth Ramsar site (also a Special Protection Area, SPA) and a total of two SPAs, namely the Firth of Forth and the Forth Islands. There are no Special Areas of Conservation in East Lothian, however, as

mentioned above some parts of the south-eastern Lammermuirs (mainly the Monynut Water) drain into the River Tweed Special Area of Conservation in the Scottish Borders Council area.



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There are 15 Sites of Special Scientific Interest (SSSI) in East Lothian covering the Forth Estuary and Islands and parts of the Lammermuir Hills as well as quarries and coastal areas where geological features are visible and areas of woodland and unimproved grassland of significant botanical interest. Aberlady Bay was the first Local Nature Reserve to be designated in Scotland, in 1952. It covers an area of 575 hectares, about 2/3 of

which is below the high tide mark, consisting of tidal sand, salt marsh and mud flats. It is within the Firth of Forth SSSI, and is managed to improve the area for wildfowl, waders and the wide variety of plants there. Marine Protected Areas have been designated to give similar protection to biodiversity offshore.

The East Lothian Biodiversity Action Plan identifies priority habitats. These are the most important for the conservation of biodiversity in the area. The Priority Habitats are based on a Phase 1 survey carried out in 1997, which is the most up to date data available. The Priority Habitats shown are: Acid Grassland, semi improved; acid grassland, unimproved; Bog, dry, modified; Bog, wet, modified; Calcareous grassland, unimproved; Calcareous grassland, semi-improved; Coastal grassland; Coastal intertidal mud/sand; Dense scrub; Dry dwarf heath, acid; Dry heath/acid grassland mosaic; Dune grassland; Dune heath; Dune scrub; Dune slack; Flush/spring acid/neutral; Flush/spring, basic; Inundation vegetation; Maritime hard cliff; Marshy grassland; Mixed woodland, semi-natural; Neutral grassland, semi-improved; Neutral Grassland, unimproved; Open dune; Saltmarsh, continuous; Spaghnum bog, blanket bog; Swamp; Wet dwarf heath; Wet heath/acid grassland mosaic; Woodland, broadleaved, semi-natural.

East Lothian has 1,405ha of native woodland, which is 20.3% of the total woodland area or 2.1% of the total land area of East Lothian[26]. There are 895ha of woodland now present on ancient woodland sites, of which 34% is native. Another 8% is nearly-native in composition (i.e. 40-50% native species in canopy).

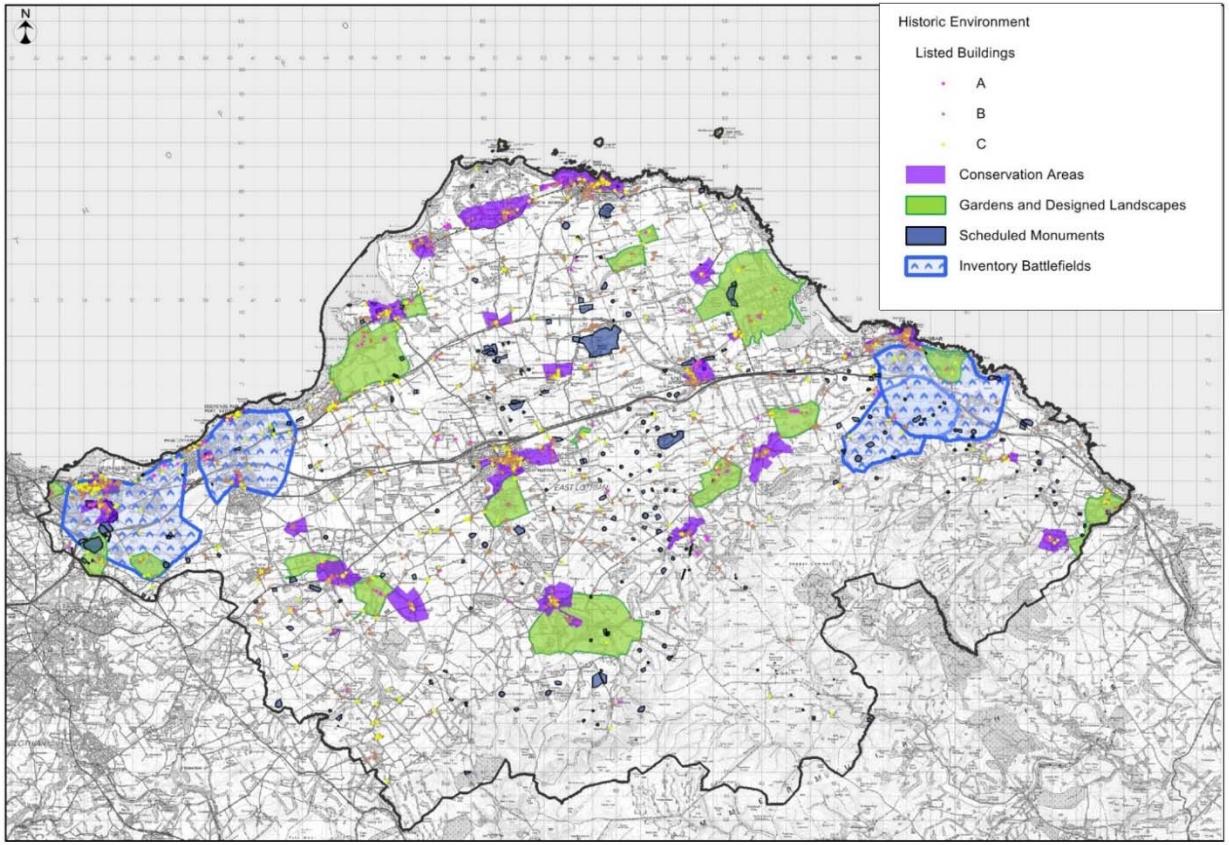
Key Messages: Biodiversity, Flora & Fauna

In association with other plans, policies and strategies, the LDP can help conserve or enhance biodiversity, flora and fauna. Although international sites and SSSI's are protected through legislative provision, the LDP can offer protection to these and other natural heritage assets through its policies and proposals by avoiding inappropriate development in these areas and preventing indirect harmful affects occurring from development in other locations. The plan will give protection to Local Biodiversity Sites as well as Green Network features. Managing the introduction of development using criteria based policies can provide opportunities for habitat creation and increased connectivity, as well as making sure impacts on valuable elements of biodiversity are identified, and, if they cannot be avoided, are mitigated.

[26] Forestry Commission Scotland Native Woodland Survey of Scotland

3.2.6 Cultural Heritage, including Architectural & Archaeological Heritage

East Lothian is known to have been settled since the earliest human occupation in Scotland, c.10,000 years ago. It has few areas where there is not potential for archaeological remains. While many sites are known and a number are scheduled monuments, there are more which are as yet unidentified as areas with archaeological potential. Potential remains range from Mesolithic structures and tools, to items associated with the second World War.



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East Lothian is also situated along an historic invasion route from the north of England. As a result, there are numerous historic battle sites, encampments, castles and other fortifications throughout the area. Some of these reflect significant periods in European and Scottish political history as well as important phases of advancement in military technology. Numerous archaeological sites are found in the rural landscape of East Lothian from cropmark sites to earthworks and castles.

East Lothian contains many historic structures, conservation areas and designed landscapes. These reflect the historic status of the county as a country retreat from Edinburgh and the historic nature of its towns and villages. It has many historic structures and buildings which owe their origins to medieval market towns, 18th and 19th century farm steadings, and 20th century seaside resorts amongst other things. Many of these structures are listed and / or included in conservation areas or designed landscapes.

East Lothian has 291 Scheduled Monuments, 2,700 listed buildings, 30 conservation areas, 26 Gardens and Designed Landscapes and 4 of its historic battlefields are currently included on the national inventories. The Historic Environment Record records a further 7,500 known archaeological and historic sites. These include a further 4 historic battlefields as well as numerous designed landscapes not designated nationally. All the archaeological remains along with the historic nature of many of the towns and villages are integral elements of East Lothian's cultural heritage, and its sense of place and identity.

Key Messages: Cultural Heritage

In association with other plans, policies and strategies, the LDP can help preserve or, where appropriate, enhance East Lothian's historic environment. Although SM's, Listed Buildings and conservation areas are protected through legislative provision, the LDP can offer them further protection through its policies and proposals by avoiding inappropriate development in these protected areas and preventing indirect harmful affects, for example on their settings, occurring from developments in other locations. It can also, where appropriate, encourage the sensitive conversion, alteration, reuse and enhancement of certain historic assets as appropriate by managing the introduction of development with its criteria based polices.

3.2.7 Material Assets

Land Use

In 1996 East Lothian had 261ha of vacant and derelict land. By 2002 this figure had reduced to 94ha and by 2007 it had reduced further to 59ha. Of this 59ha of vacant and derelict land, 22ha (38%) was within urban areas on a total of 17 sites which are on average 1.3ha in size, representing around 1% of all such land in such areas in Scotland. The remaining 36ha (62%) was in the countryside on 10 sites that are on average 3.6ha in size, also representing around 1% of all such land in such areas in Scotland.

At 2002 the area of vacant land within urban areas was shown to be 29ha, but at 2009 this figure had reduced to only 4ha, representing a reduction of 86% compared to a reduction of 9% across Scotland. Likely due to economic conditions, no vacant or derelict land was brought back into use between 2008 and 2009. Of the areas in East Lothian which are within the 15% most deprived data zones in Scotland according to the Scottish Indices of Multiple Deprivation (SIMD), none of them have a vacant and derelict site within them.

There are currently 69 buildings at risk within the area[27]. These consist of a wide range of properties in different conditions, some fit for conversion to other uses with some occupied and some not, while others are small 'ornamental' buildings such a dovecots and gait piers. **Some of these buildings also have national heritage value, such as category A listed buildings, and all are at least locally important.** Most of these properties are located within the countryside with few in urban areas, and of those that are within settlements most tend to be associated with a previous community uses, such as leisure uses or places of worship etc.

Information from the 2013 housing land audit showed that there were 71 sites in the area available for housing development. These sites provide around 500ha of land for residential development. This land is capable of delivering around 6,300 dwellings, of which 1,600 is expected to be for affordable housing. Of this 500ha of land for residential development, around 449ha (92%) is greenfield and 38ha (8%) is brownfield. This reflects a historical prioritisation for the reuse of brownfield land and thus East Lothian's limited future supply of previously developed land and buildings, and consequent reliance on greenfield land to accommodate large scale development pressures. However, a significant allocation of previously developed land at Blindwells is made for the creation of a new settlement.

Minerals & Aggregates

[27] See Buildings at Risk Register online at https://www.buildingsatrisk.org.uk/

The British Geological Survey Minerals Plan for East Lothian notes a wide range of mineral deposits within the area, including sand and gravel deposits as well as building stone, rock aggregates (hardrock), limestone and shallow coal seams.

Bangley and Markle Mains quarries are for hard rock, Longyester and Skateraw are are for sand and gravel and Dunbar is for limestone used for cement manufacture. At Longyester sand and gravel quarry, reserves there are estimated to be sufficient for one year, although planning permission has been approved for an extension to these workings. Although Bangley hard rock quarry is currently inactive, it has a reserve of around 14 years remaining. Markle Mains hard rock quarry is active and it too has a reserve of around 14 years.

There are currently no operational coal mines of any kind in the area, although previous open cast operations have ceased at Blindwells, with British Geological Survey plans illustrating that site as a 'worked area'. The remaining areas underlain by coal are close to existing relatively tight settlement groups with attractive landscape settings.

Waste

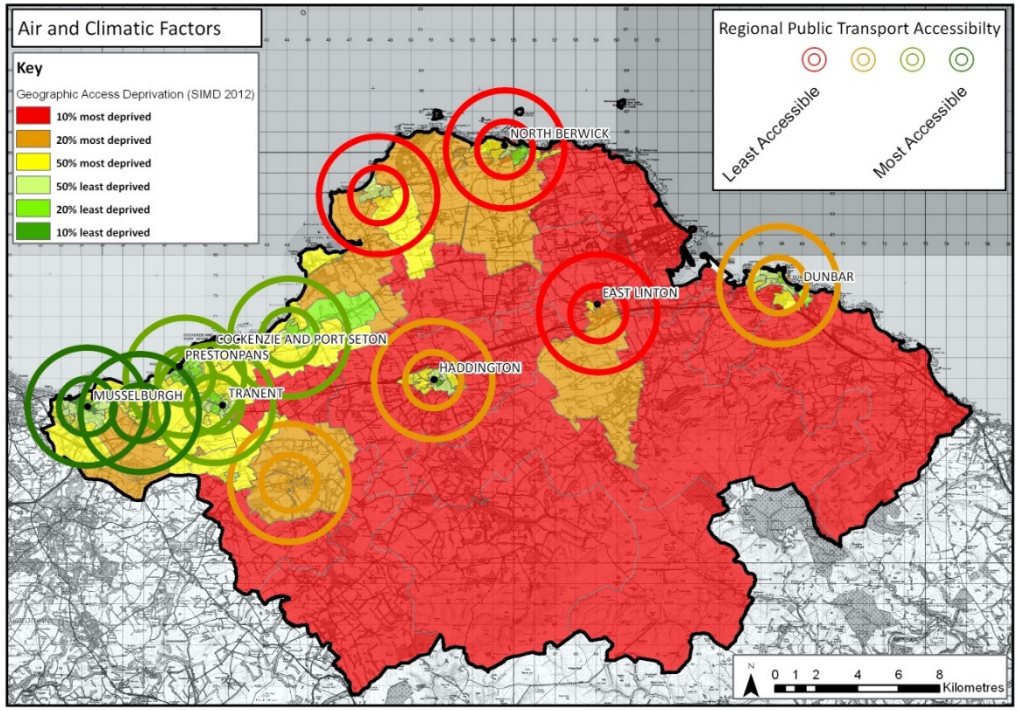
The first SEPA Waste Digest (1998) noted that with a population of 88,140 (around 38,900 households), total waste arisings in East Lothian were 52,515 tonnes, with 49,060 tonnes of household and commercial waste and 3,455 tonnes collected at civic amenity sites. Around 1.26 tonnes of waste was generated per household. In 2009 / 2010, the estimated 42,950 households generated 59,732 tonnes of household waste, while 5,924 tonnes of commercial waste and 296 tonnes of other waste was collected. 40.9% of all waste was recycled or composted. Total waste arisings were 65,953 tonnes. Around 1.39 tonnes of waste was generated per household.

If the GRO 2008 base population projection of 128,300 by 2033 is accurate, the continuation of the above trends would result in around 56,520 households generating 84,780 tonnes of household waste (+33%), at around 1.5 tonnes of waste per household.

The Strategic Transport Network

The A1(T), the East Coast Main Line and the North Berwick Branch Line are the main transport corridors through East Lothian. The A1(T) has a junction with the A720 Edinburgh City Bypass at Old Craighall and a number of interchanges along its length that provide access to settlements,

other destinations and routes. The A1 has also been improved with dualling of the A1 Expressway between Haddington and Dunbar, which has increased accessibility and reduced journey times for local road based transport. However, more could be done to improve cross border connections, including dualling the road to the Scotland – England border.



While East Lothian is relatively well served by the strategic transport network, particularly west / east, the west of the area is the most accessible part of the area. However, there is an underlying problem of lack of capacity in transport infrastructure and in local transport services, particularly those extending to the north and south. These factors are particularly relevant in view of anticipated population growth and because travel demand is expected to increase in the coming years, issues that will exist without factoring the impacts of planned growth that is yet to be delivered.

Trunk road and local road network capacity is already an acute problem particularly in the west of East Lothian. Existing constraints have been highlighted on the A1(T), in particular at Old Craighall Junction and generally at all interchanges west of the Gladsmuir Interchange. Transport Scotland is of the view that these capacity constraints alone will constrain any further development from being delivered in the area until solutions are found and are committed to be put in place. It is currently conducting a regional study to establish these solutions. However, funding and delivery mechanisms need to be identified and it is expected that developer contributions will have a significant role to play. It is anticipated that the findings of the regional study and others will inform the LDP on trunk road and local road network interventions and the need for developer contributions.

The capacity of Old Craighall junction is a particular issue which has the potential to impact on road safety. Transport Scotland has indicated that all improvements to the trunk road must be secured and that no development should commence until such time as an agreed funding mechanism or full funding is in place for as yet to be fully designed and costed projects. While Transport Scotland has suggested it would be willing to allow some development to come forward in advance of any interventions being completed, this is on the proviso that it can be satisfied that there is a funding mechanism in place that would allow capacity constraints to be overcome in the future as a result of the cumulative impact of development. Confirmation is required on the nature and costs of required trunk road and local road network interventions, the mechanism by which developer contributions are to be gathered and the organisations that will have responsibility for collecting these.

The rail network through East Lothian currently has limited capacity, with utilisation of the East Coast Main Line affecting scheduling for local services on it as well as those from the North Berwick Branch Line. Any confirmed longer term vision for high speed rail connections on other lines may release capacity on the East Coast Main Line. Currently, six rail halts are located on the main line at Musselburgh, Wallyford, Prestonpans, Longniddry, Drem and Dunbar, with North Berwick Station on the branch. There are also new station safeguards in the ELLP 2008 at Musselburgh (for a 'Parkway' station concept), East Linton and Blindwells. A bid is currently being progressed by the Council to seek part funding from the Scottish Government to deliver a new rail halt at East Linton, but at the time of writing there is no commitment of Government funding.

Notwithstanding this, local trains are often full at peak times: while additional carriages would help the situation this may require the prior lengthening of existing station platforms to accommodate longer trains as well as a need to expand station car parks. A route for Tram Line Three adjacent to the proposed Craighall Business Park in Musselburgh is also safeguarded in the City of Edinburgh Local Development Plan, although

little progress has been made on that project. Commuting bus services are busy at peak times and those to the city are more numerous and frequent in settlements in the west than those in the east, as Lothian Buses only operate in the west of East Lothian. While local bus services serve the main settlements as well as those in the countryside, their number, frequency and integration with other public transport modes could be improved. In a deregulated transport system the Council is limited in what it can do to assist service provision. First Buses decision in 2016 to withdraw local services highlights this situation.

East Lothian's transport network and services are experiencing capacity constraints which are compounded in the west by commuting travel patterns from the east causing issues 'down line'. These existing capacity constraints have been caused by the cumulative impact of population growth in, and commuting through and from, the area. Impacts are anticipated from further developments planned in East Lothian and the areas around it, requiring suitable interventions to minimise capacity constraints.

Water & Drainage Capacity

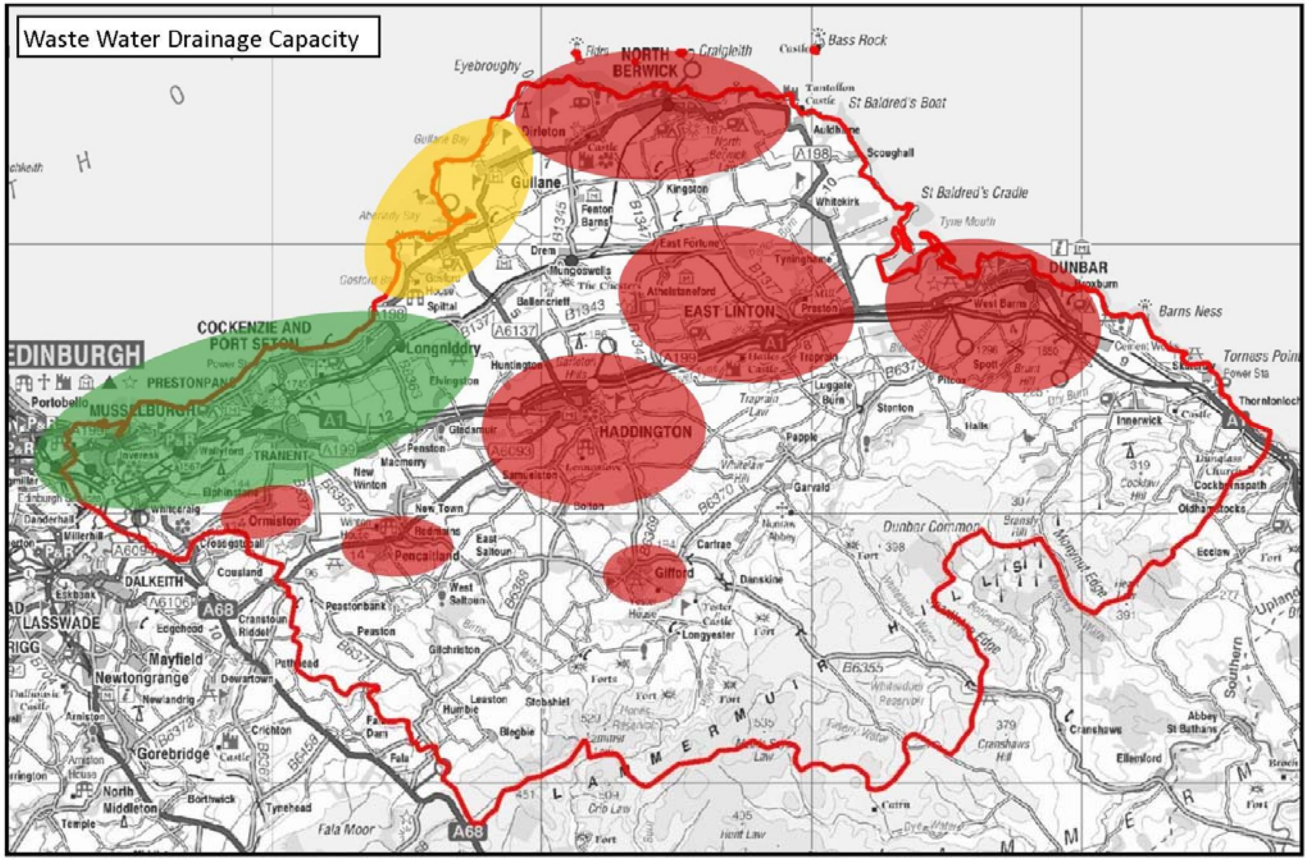
Whilst Scottish Water is funded to provide any strategic capacity that may be required for water supply / waste water treatment ('part 4' assets) to facilitate development, it is necessary to consider the timescale to deliver new strategic capacity to ensure that the provision of it is timed to enable development in the right place at the right time. The implications of this on any programme of development must therefore be considered. The consultation zones for Scottish Water strategic assets are provided in Table 5 below alongside their current capacity status.
Including all planned and committed development proposals, capacity exists at Scottish Water strategic assets serving settlements in the west of East Lothian. There are currently foul drainage constraints to further significant growth at Haddington, East Linton, Dunbar and North Berwick. While these constraints could be overcome with investment, this is not identified as a funding priority by Scottish Water at this time and it would require its 5 growth criteria to be met before such a growth project could be initiated.

TABLE 5: SCOTTISH WATER CONSULTATION ZONES / STRATEGIC ASSET CATCHMENTS AND CAPACITY STATUS

Catchment Area	Water Supply	Status	Waste Water	Status
Musselburgh / Wallyford / Whitecraig / Tranent	Rosebery / Glencorse / Castle Moffat	Capacity	Seafield WWTW	Available Capacity
Prestonpans / Cockenzie / Port Seton / Blindwells	Rosebery / Castle Moffat	Capacity	Seafield WWTW	Available Capacity

Ormiston	Rosebery	Capacity	Ormiston WWTW	Very Limited Capacity
Pencaitland	Rosebery	Capacity	Pencaitland WWTW	Very Limited Capacity
Elphinstone	Castle Moffat	Capacity	Ormiston WWTW	Very Limited Capacity
Haddington	Castle Moffat	Capacity	Haddington WWTW	Very Limited Capacity
Gifford / Bolton	Hopes	Capacity	Gifford WWTW	Very Limited Capacity
East Linton	Castle Moffat	Capacity	East Linton WWTW	Very Limited Capacity
Stenton	Castle Moffat	Capacity	Stenton WWTW	Limited Capacity
Dunbar	Castle Moffat	Capacity	Dunbar WWTW	Very Limited Capacity
West Barns / Dunbar	Castle Moffat	Capacity	West Barns Sep	Very Limited Capacity
Innerwick	Castle Moffat	Capacity	Innerwick WWTW	Limited Capacity
North Berwick / Dirleton	Castle Moffat	Capacity	North Berwick WWTW	Very Limited Capacity
Gullane / Aberlady	Castle Moffat	Capacity	Gullane WWTW	Limited Capacity
Athelstaneford	Castle Moffat	Capacity	Athelstaneford	Very Limited Capacity

Including all planned and committed development proposals, capacity exists at SW strategic assets serving settlements in the west of East Lothian. There are currently foul drainage constraints to further significant growth at Haddington, East Linton, Dunbar and North Berwick. While these constraints could be overcome with investment, this is not identified as a funding priority by SW at this time and it would require its 5 growth criteria to be met before such a growth project could be initiated.



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At North Berwick, as a consequence of the foul drainage needs of strategic housing allocations at Mains Farm and Gilsland, the town's Waste Water Treatment Works (WWtW) is very near capacity. A 10,000 population limit is set on the current WWtW which has a catchment that includes Dirleton. To increase population here, SEPA requires a step change in the type of infrastructure. Scottish Water suggest that a £15m –

£20m investment may be required. An increase in capacity at East Linton to accommodate an existing allocation at Orchardfield at its WWTW is subject to an Environmental Impact Assessment due to the existence of protected species in the area.

The other items of water/waste water infrastructure required to enable development include new water mains or treated water storage tanks (Part 1, 2 and 3 assets or the 'local network') and on site pipe work. These are the responsibility of developers to provide, although Scottish Water may make a contribution under the Reasonable Cost Contribution (RCC) provisions which in part act to mitigate such expense. Therefore, with the exception of Haddington, East Linton, Dunbar and North Berwick the water / waste water infrastructure issues in the area will be in relation to the Part 1 to 3 costs involved in mitigating any impact of the development on the local network. In some cases further investigation may be required in respect of water supply and / or a drainage impact assessment may be needed to ascertain impact of development on the local network.

Where there is no public water supply network within the vicinity there would be a need either for a private water treatment system or to lay a new water infrastructure to the existing public network, and early discussion with Scottish Water would be required. Where there is no public sewer network a private wastewater treatment system may be required. Early engagement with SEPA to discuss the specific requirements and approval of any private systems is essential; use of private wastewater treatment systems may not always be acceptable to SEPA.

Education

Ensuring the availability of sufficient education capacity is an essential part of the proper planning for new housing development. New housing places a demand for additional education capacity which can either be met by using available capacity at existing schools or, where none exists, by providing additional capacity either within an existing school or by providing a new school. Where no existing capacity is available the Council expects developers to fund that amount of additional capacity that arises as a direct result of their proposed development. Making use of existing capacity and the opportunities to make additional capacity available in an appropriate way are key drivers of any planning strategy for new housing.

The following is a summary of the current position with regard to education capacity in East Lothian. It is based on the catchments of the six existing secondary school clusters. The summary reflects how consideration has been given to how facilities might be able to accommodate

projected pupil rolls from existing housing sites and also how facilities are able to expand further beyond their current capacities / committed expansions in order to maximise the education capacity that could be made available within the area.

Musselburgh Cluster

The extent and appropriateness of any significant expansion to Musselburgh Grammar will have a major influence on the amount of new housing that may be accommodated within its catchment area. The school currently has a capacity of 1,350 pupils and a restricted campus, with space for P.E. in the curriculum currently provided off site at Pinkie Playing Fields. To accommodate existing housing commitments in the school catchment area would require the expansion of Musselburgh Grammar beyond its existing capacity.

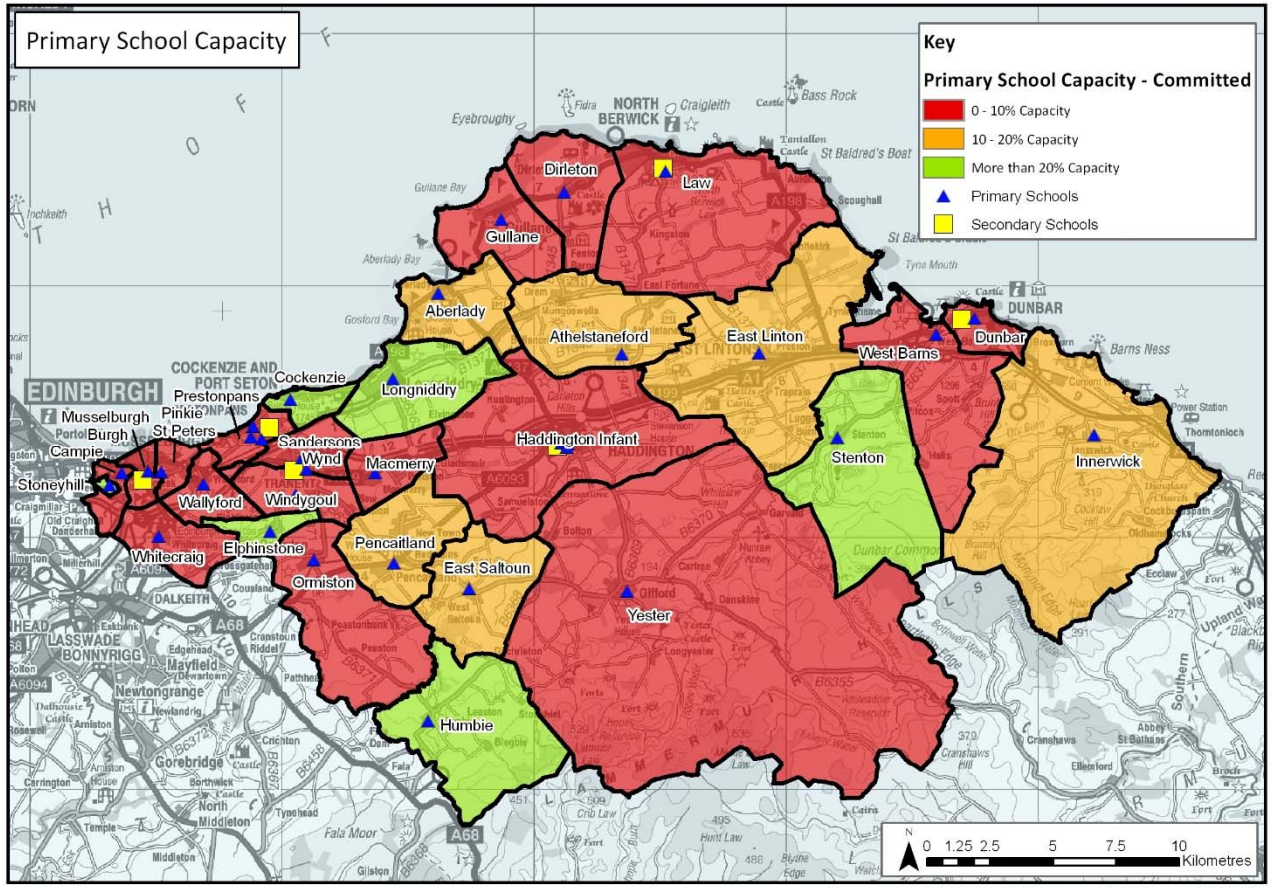
While there is physical potential for an increase in capacity at Musselburgh Grammar on its existing site, this is subject to an assessment of the impact any such expansion of this already large school might have on delivering educational outcomes. If the Grammar were not to be expanded beyond the capacity needed to accommodate existing housing commitments then, in the absence of any alternative means of further increasing secondary education capacity, this would prevent any further new housing allocations in this cluster.

The ability to provide additional primary school capacity in Musselburgh is also very restricted. Some very limited capacity is available in existing primary schools to the west of the town, but elsewhere in the settlement the capacity of existing facilities is projected to be reached as a result of natural change in the baseline pupils roll projections and / or existing housing commitments. Additionally, the existing primary schools are landlocked and their sites cannot expand further.

An expansion of the committed new Wallyford Primary School once in place may be possible. There would also be scope for a potential capacity increase at Whitecraig Primary School. If any significant amount of new housing were to be supported elsewhere in the cluster then this would likely require more new primary school(s).

Preston Lodge Cluster

Prestonpans' Preston Lodge High School has committed capacity which is sufficient to accommodate existing housing commitments in its catchment area. There may be potential for a further increase in capacity at Preston Lodge High School. Should any such additional capacity be provided, its provision and use would be dependent on a number of considerations: the education solution for the current allocation for Blindwells new settlement and any expansion of it, or if Preston Lodge were to be used to accommodate pupils from new development in Musselburgh, or if an expansion of an existing settlement in the Preston Lodge cluster were to be supported.



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Prestonpans Infant and Primary Schools are projected to reach capacity with current housing commitments and there is no scope for the further expansion of these facilities. Cockenzie Primary School has some available capacity as well as the potential for further modest expansion, and this school may also be seen as part of a short term education solution for Blindwells. Longniddry and St Gabriel's Primary Schools have a limited amount of available capacity and no potential for further expansion beyond their current size on their current sites.

Ross High Cluster

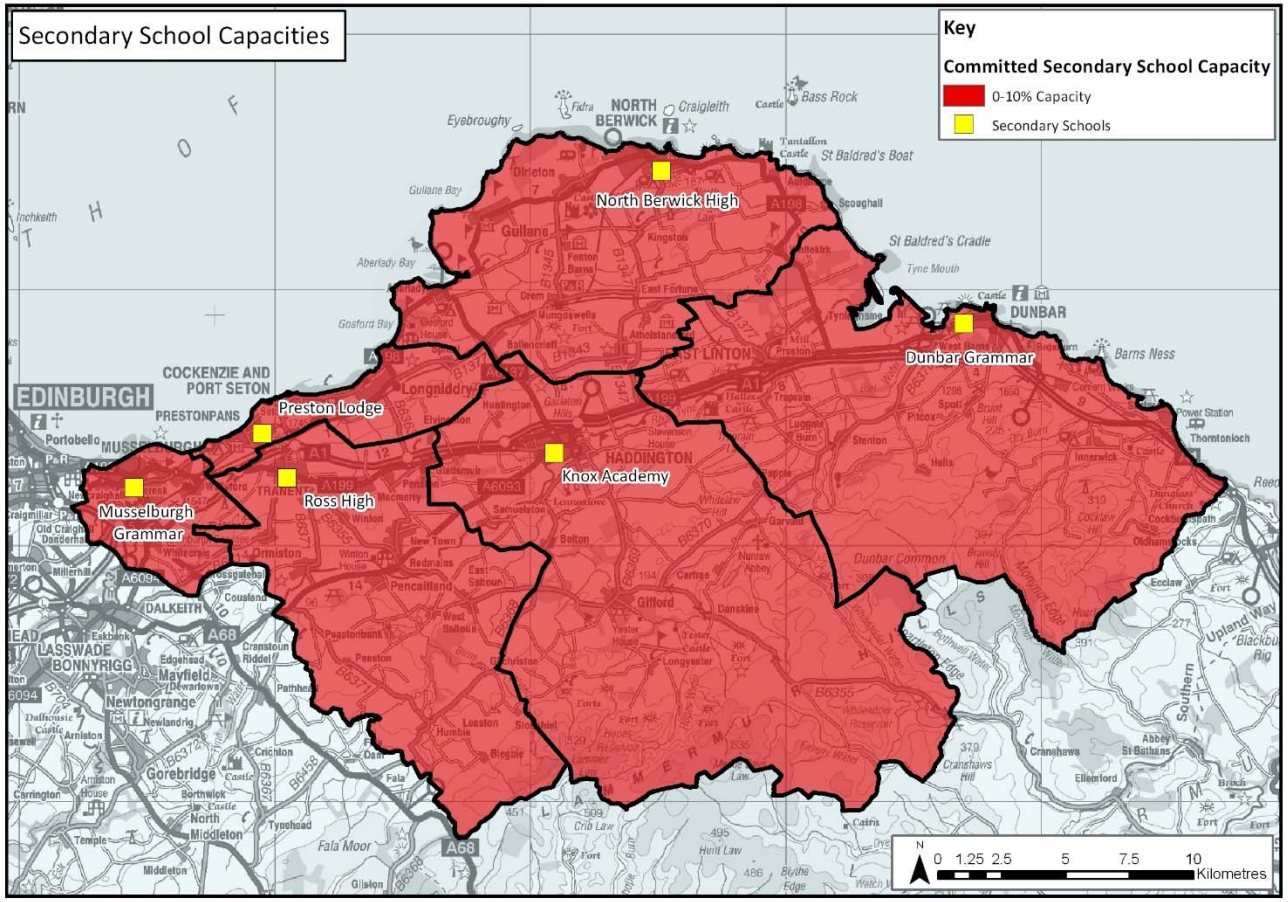
Tranent's Ross High has additional accommodation committed to provide further capacity to accommodate current housing commitments. There may be potential for a further expansion of this school's capacity, but the scope for this is constrained. This is principally due to the size of the existing campus and in part prevailing ground conditions. Windygoul Primary in Tranent has significant capacity issues that may require additional adjacent land to resolve. Sanderson's Wynd, Tranent, and Macmerry primary schools have the most potential for provision of additional capacity. Elsewhere, available primary school capacity and expansion potential is limited.

Haddington Cluster

Knox Academy has additional capacity programmed to expand to accommodate existing housing commitments and there may be some potential for further expansion beyond this. However, the situation at primary school level is very pressured. Haddington Infant and Kings Meadow primary schools have very limited capacity beyond current commitments and no scope for further expansion. St Mary's RC has no spare capacity and no potential for expansion. The catchment of the proposed Letham Mains Primary School relates only to the site of that development, but does have some expansion potential. Yester Primary also has some potential to be expanded.

Dunbar Cluster

Dunbar Grammar has a capacity increase programmed to provide pupil places to meet existing housing commitments. Beyond this, further capacity increase may be possible. Additional accommodation is also programmed for Dunbar Primary School to accommodate additional pupils. While further capacity beyond this may be possible at the facility, the pupil roll is already very large. Elsewhere, limited capacity is available at East Linton, Innerwick and Stenton. Some additional capacity provision may be possible at East Linton and Innerwick while West Barns primary school may be modestly expanded beyond what is needed to accommodate current commitments.



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North Berwick Cluster

North Berwick High School is to be expanded to accommodate existing commitments. Land on its western side is safeguarded for education purposes in the ELLP 2008: it would provide scope to provide additional capacity. Law Primary School is also to be expanded for existing commitments following realignment of Haddington Road, but may not be able to expand further. Other than Dirleton and Athelstaneford primaries, which have very limited capacity available and can't be expanded, other primary schools either have capacity available or are capable of some limited expansion.

Key Messages: Material Assets

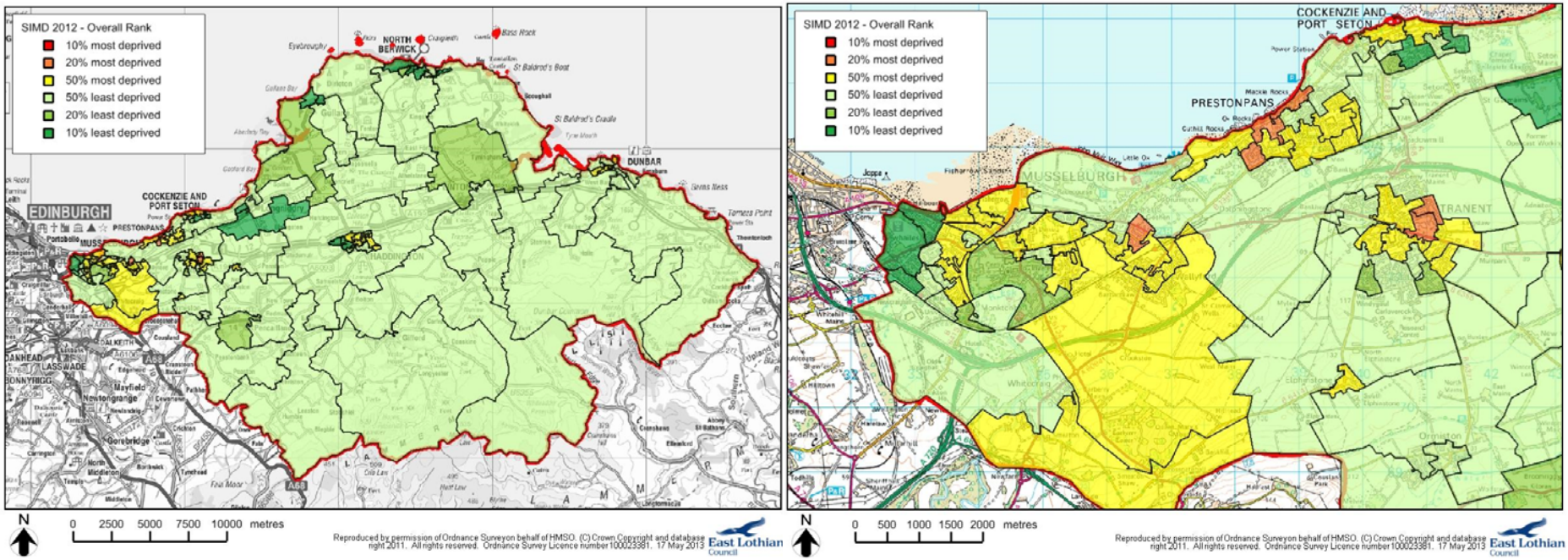
In association with other plans, policies and strategies, the LDP can help manage, maintain or promote the efficient, effective or appropriate use of material assets. It can do this by encouraging the efficient use of land, by promoting suitable development densities, by prioritising where possible and appropriate the development of brownfield / previously developed land and its remediation before development of greenfield land. It can seek to make best use of existing infrastructure and require / provide additional capacity / new facilities if necessary in association with new development. It can safeguard mineral resources, protect amenity and minimise landscape impact and require mitigation and restoration as part of proposals. It can help deliver waste management objectives by identifying suitable locations for facilities and by seeking related provision when managing the introduction of new development.

3.2.8 Population

Socio Economic Profile

At 2010 East Lothian had an estimated population of 97,500, with 46,800 males and 50,700 females. It had a working age population of 61,200 people (62%), with 29,600 males and 31,600 females. In terms of qualifications, 81% of the population has NVQ1 level and above (Scotland 80%), and 32% has NVQ4 and above (Scotland 35%). Based on 2009 SIMD data parts of Musselburgh, Prestonpans, Tranent and Haddington were among the 15% most deprived in Scotland due to health, employment, income, education, housing and crime; 2016 SIMD data show only parts of Prestonpans and Tranent were in the most deprived 20%, along with parts of Elphinstone

Of the working age population around 78% are economically active, with 80% of males and 76% of females. The profile of full time (65%) and part time (35%) employee jobs (excludes self-employed, government, trainees and HM Forces) is generally consistent with Scotland as a whole. The same applies to the positions held, of which 40% were managerial, professional and technical occupations, 24% were administrative, skilled trades and secretarial occupations, 17% were personal services, sales or customer services occupations, and 19% were machine operatives etc.



The Annual Business Inquiry shows that between 1998 and 2008 the area experienced growth in the service, construction and tourism sectors, but a decline in manufacturing. Out of work benefits issued in the area (JSA) in 2010 stood at 3.3%, below the Scottish figure of 4.3%.

The 2006 claimant count also showed that the area had a low unemployment rate at 1.7% and ranked 28th out of Scotland's 32 local authority areas, but by 2011 this figure had increased to 4.1% and it is now ranked 17th among them. At 2009 around 30,000 jobs were available in the area (for around 61,200 people of working age), resulting in a job density of 0.5, compared to the Scottish and GB average job density of 0.78. The 2011 Census indicated that of the 48,579 people aged 16 -74 in employment around 28,855 of them commute to work via car, van or motor cycle (around 31,000 from the 2001 Census). At 2010, 21,700 (50.5%) of 16 – 64 year olds in employment lived and worked in the East Lothian, with 21,000 people (48.8%) commuting out of the area for employment[28]; around 5,300 people commute into the area for work. This demonstrates the link between the size of the working age population, the availability of jobs in the area (job density) the commuting travel pattern and the capacity issues in the transport network.

By 2033 East Lothian's population is projected to increase by 33% to around 128,300[29]. It is expected to experience the highest rate of population growth in Scotland during this period. Around 30% of this increase is expected to be due to natural change, whereas 70% of it is expected as a result of net migration. The population is projected to grow across all age groups and this will directly increase demand for the associated infrastructure, facilities and services, such as education, transport and public transport, and health care etc. East Lothian is expected to experience the greatest increase of children in the 0-15 age group in Scotland at 38%. The working age population is also expected to increase at the highest rate in Scotland, with growth of 29%. The pensionable age population is expected to increase by 43%, while the amount of people over 75 is expected to increase by 95%.

Whilst East Lothian has a qualified labour force across all sectors, pockets of deprivation exist. There is also a mismatch between the size of the labour force and the availability of jobs in the area, which results in increased out commuting to find employment elsewhere. This is compounded by the relatively poor accessibility of the area via national and international modes of transport and thus its lesser appeal as an area for major businesses to locate, particularly when compared to other better connected locations in the city region to the west. Employment land take up is also low with many sites controlled by house builders.

[28] Annual Population Survey 2010: Local Area Labour Markets in Scotland (Part 4 Table 1.4)
[29] The General Registry Office for Scotland 2008-based Population Projections for Scottish Council Areas

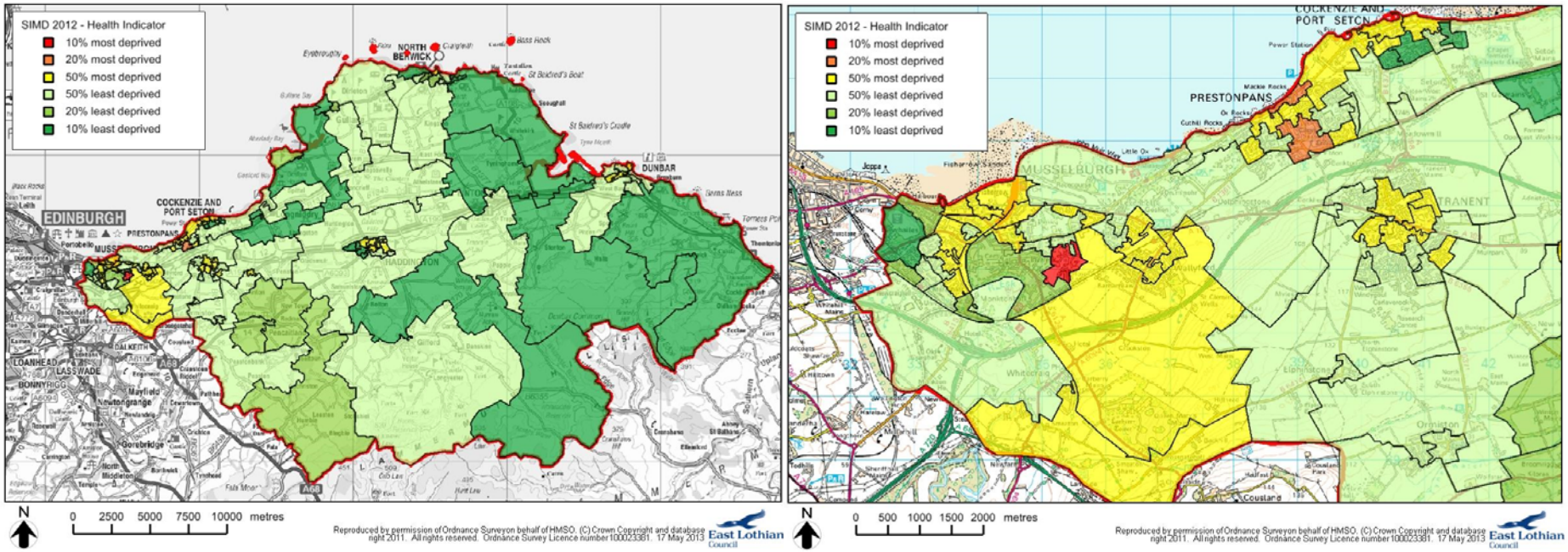
Key Messages: Population

In association with other plans, policies and strategies, the LDP can help maintain or enhance the quality of life for East Lothian's residents. Recent economic conditions have increased unemployment in the area and made jobs more difficult to find, particularly for those who do not have the ability to look for work elsewhere. This has compounded the inequalities gap, currently most apparent in the west of East Lothian. By directing development to appropriate locations, the LDP can help regenerate disadvantaged areas, integrate land use and transport, provide land for housing, including affordable housing, and promote housing nearby employment and community facilities. It can also promote a range of mixed uses in town centres and help maintain levels of service and infrastructure provision more widely, including for education. It can help provide opportunities for active travel and open spaces for recreation. The creation of such mixed communities can help maintain and encourage people to make positive lifestyle choices, generating health and community benefits.

3.2.9 Human Health

Life expectancy in East Lothian is greater than the average for Scotland with life expectancy at birth currently being 77.3 years for males and 81.2 for females[30]. Whilst life expectancy has increased over the past 10 years, the rate of increase (3.5% and 2.2% for males and females respectively) is slower than for Scotland as a whole (4.1% and 2.6% for males and females respectively). However, the East Lothian life expectancy figures conceal some stark variations in the area, with some areas having life expectancy below the Scottish average. For example, men in Wallyford are expected to live on average 72.8 years which is 7 years less than men in Gullane/Drem (79.9 years), while women in Tranent are expected to live for 76.6 years which is 8 years less than women in Longniddry/Aberlady (84.7 years).[31]

[30] GRO Scotland
[31] Information provided by NHS Lothian



Open space / Green space

East Lothian has 1,409ha of open space of different types. The areas Open Space Audit and Greenspace Mapping (2009) has informed a Draft Open Space and Sports Pitch Strategy (2011). It establishes a series of quantity, quality and accessibility standards for different types of open space in the area.

While East Lothian is generally well provided for in terms of open space, Dunbar and Tranent do not meet the *quantity* standard, Musselburgh Prestonpans and Tranent do not meet the *quality* standard and areas of Dunbar, Haddington North Berwick, Gullane and Tranent do not meet the *accessibility* standard. Improvements are needed in relation to the current resource and there is a need to consider growth in population and increase in demand. East Lothian is also to be a part of the CSGN, and its open spaces are to contribute towards CSGN objectives in terms of connectivity, cross boundary linkages and the maintenance and enhancement of green space networks.

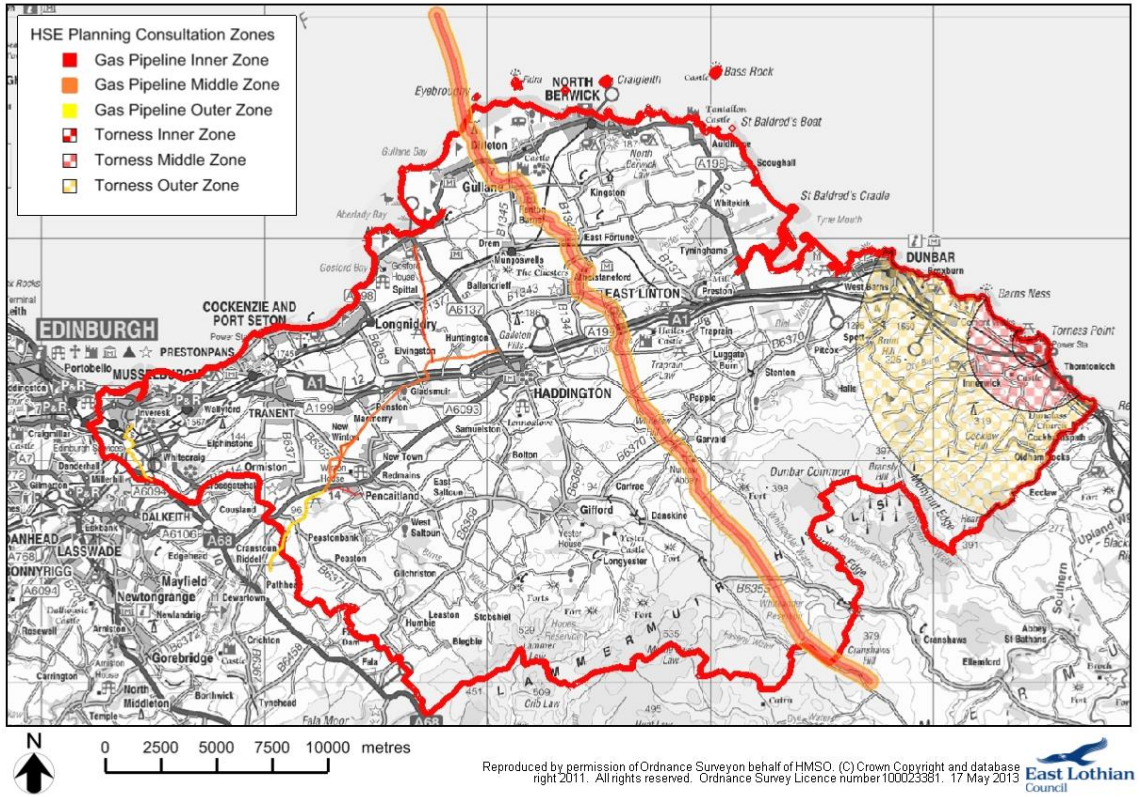
There is also over 317 km of Core Path in place in East Lothian, and 31km of "aspirational" Core Paths identified of which 126km is maintained by the Council. The designated Core Path Network connects 27 settlements within East Lothian and also connects with the adjoining Core Path Networks of the Scottish Borders, Edinburgh and Midlothian council areas. This network of paths provides significant opportunities for active travel throughout East Lothian and beyond.

Major Hazards

Council Directive 96/82/EC (Seveso 11) requires that land use policies take the objectives of preventing major accidents and limiting the consequences of such accidents into account. Whilst East Lothian has no Major Hazard Sites, as defined by the Health & Safety Executive, Torness Nuclear Power Station does lie within the area. There are also a number of Major Pipelines carrying gas throughout the area, and these and their associated safety zones are set out in Table 6 below.

TABLE 6: MAJOR PIPELINES

Pipeline Operator	Pipeline Location / Name	Inner Zone	Middle Zone	Outer Zone
National Grid Gas Plc	13 Feeder Drumeldrie / Simprim	105	350	370
Scotland Gas Network Ltd	Farimilehead / Dewarton Pathhead (Ref: LO1)	15	24	36
Scotland Gas Network Ltd	Pathhead / Pencaitland (L11)	15	26	37
Scotland Gas Network Ltd	Dewarton / Selkirk (Ref: L02 & L03)	15	27	36
Scotland Gas Network Ltd	Whitehill Farm / Musselburgh (Ref L05)	15	15	16
Scotland Gas Network Ltd	Pencaitland / Haddington (Ref: L06)	15	20	20
Scotland Gas Network Ltd	Gladsmuir / Aberlady (Ref: L07)	15	20	20
Scotland Gas Network Ltd	Supply to Pencaitland (L08)	15	15	15
Scotland Gas Network Ltd	Pencaitland to Penston (Ref: L12)	15	24	36
Scotland Gas Network Ltd	Penston to Merryhatton (Ref: 2773)	15	20	36



Noise

The Scottish Governments Noise mapping shows an average noise level for an average day in the year calculated on the basis of a 10m grid at a height of 4m above ground level as required by Directive 2002/49/EC. These maps are strategic and should be interpreted accordingly - i.e. they cannot be used for a PAN 1/2011: Planning & Noise assessment, and should not be taken to be fully representative of all local circumstances. They can however be used to indicate where noise levels are very likely to be an issue which requires further consideration in the preparation of local development plans and development proposals.

This noise mapping does not cover all of East Lothian, but it does extend some way in to the area from the west. Next to major transport corridors in East Lothian (e.g. A1(T) and the East Coast Main Rail Line) noise levels recorded were at around 65 – 70 dB(A), with levels around 60-65 dB(A) experienced on land immediately adjacent. Where transport routes converge, or are located close to one another, noise levels as high as 55-60 dB(A) were also recorded on land located between routes[32].

Key Messages: Human Health

In association with other plans, policies and strategies, the local development plan can help maintain, or provide opportunities to improve, human health. It can do this by helping prevent major accidents or limiting the consequences of such accidents by selecting appropriate locations for new development. It can help prevent exposure of people to unacceptable levels of noise by selecting appropriate locations for development and through criteria based policies which would require mitigation. It can safeguard amenity, air and water quality and protect and enhance open space in the area. It can help secure improved accessibility to open space, and seek the provision of new open space and recreational and active travel routes in and from development. It can promote the objectives of the Central Scotland Green Network (CSGN), and protect important CSGN features and promote the expansion of the network through East Lothian, including through and around new development sites.

3.2.10 Climatic Factors

The Climate Change Scotland Act has introduced legislation to reduce Scotland's greenhouse gas emissions by at least 80% by 2050 against the 1990 baseline. The Department for Energy and Climate Change (DECC) publishes detailed statistics at local authority level for consumption of electricity, gas, and fuel for road transport. For East Lothian, these show that at 2009:

1. 57,800 tonnes of fuel was used in road transport, of which 20,000 tonnes was for freight;

[32] http://www.scottishnoisemapping.org/public/view-map.aspx

2. Total gas consumption was 808.3 GWh, with average domestic consumption of 16,137 kWh per consumer and average commercial and industrial consumption of 567,262 kWh per consumer;
3. Total electricity consumption was 465.6 GWh, with average domestic consumption of 4,692 kWh per household, and 78,874 kWh per industrial or commercial consumer.

DECC also produce the *Carbon dioxide emissions within the scope of influence of Local Authorities,* which is a subset on the national and regional data produced by DECC. It removes emissions from motorways, diesel railways, land use, land use change and forestry, and EU Emissions Trading Scheme industrial installations, such as the cement works at Dunbar. Available data at 2009 estimates that per capita emissions in East Lothian are 6.5 tonnes of CO_2, which is slightly below the Scottish average of 6.8 tonnes of CO_2 per capita. This may be attributed to reasonable public transport links to Edinburgh, energy efficiency measures in private and social housing, improved recycling facilities and raised awareness of climate change through the various transition groups that have established in the county. The statistics on per-capita CO_2 emissions for East Lothian are presented in Table 7 below. Units are in kilotonnes of CO_2 unless otherwise stated.

TABLE 7: PER-CAPITA CO_2 EMISSIONS[33]

Year	Industry and Commercial	Domestic	Road Transport	Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)	% per capita reduction since 2005
2005	222.6	252.0	220.7	695.3	91.8	7.6	
2006	230.3	253.9	219.8	703.9	92.8	7.6	
2007	231.0	250.2	226.0	707.1	94.4	7.5	
2008	248.6	250.3	213.5	712.4	96.1	7.4	
2009	200.3	225.8	203.0	629.1	96.8	6.5	14.0%

AEA Microgeneration Index website monitors installed capacity of renewable energy, based on schemes that have applied for Feed-in Tariff accreditation. As at 30/6/11 within East Lothian there was 0.266 MWe installed in East Lothian. The breakdown was as follows:

[33] CO2 emission data from DECC, here: https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015 , mid year population estimates from National Records of Scotland

- 32.4% was from wind (87 kWe)
- 56.56% was from PV (150 kWe)
- 10.91% was from hydro (29 kWe)
- There was no anaerobic digestion or micro Combined Heat and Power

UK Climate Projections provides data on likely climate change under different scenarios. By 2050, under the medium emissions scenario, the central estimate for East Scotland is for:

- 2.3^{o}C rise in mean summer temperature
- 13% drop in mean summer precipitation
- 10% increase in mean winter precipitation
- 13.9 cm rise in sea level for Edinburgh

Key Messages: Climatic Factors

In association with other plans, policies and strategies, the LDP can contribute to the reduction of Scotland's greenhouse gas emissions by at least 80% by 2050 against the 1990 baseline, principally by integrating land use and transport as well as by helping to reduce the need to travel and distanced that need be travelled. It can help do this by providing opportunities for employment in East Lothian, by selecting locations for new development which are close to employment opportunities and that are accessible by a wide range of transport modes, favouring active travel and public transport and then other motorised vehicles. It can encourage appropriate renewable energy development in appropriate locations as well as the provision of low and zero carbon technologies in new development. It can help reduce energy consumption by design and in the layout of development. It can contribute to securing climate change adaptation and resilience by avoiding development in areas of flood risk and by preventing the risk of flood increasing as a result of new development, securing mitigation where necessary and appropriate. The contribution of the LDP to this objective is more likely to be significant when the impacts of its policies and proposals are considered cumulatively.

3.3 THE EXISTING HIERARCHY OF SETTLEMENTS & THEIR SURROUNDINGS

The information above relating to East Lothian is drawn on for each main settlement to provide a more refined context to the environmental baseline data. An overview of the environmental context and role of each main settlement in East Lothian is provided below; this is expanded on in the cluster based spatial analysis / site assessments (Appendices 5 – 10) that are published separately but also form part of this SEA.

3.3.1 Musselburgh Cluster, including Inveresk, Wallyford and Whitecraig (Appendix 5)

Musselburgh developed as a strategic crossing of the River Esk and has grown to become East Lothian's largest town. The land around it is underlain by the East Lothian and Midlothian coal fields. The Esk is prone to flooding. Musselburgh is the closest settlement to Edinburgh and is encircled by the Edinburgh Green Belt and prime quality agricultural land. Main routes of the local road network converge in Musselburgh. As a result High Street and North High Street suffer from high levels of through traffic. An Air Quality Management Area has been designated. However, the A1(T) bypasses the settlement to the south and Musselburgh is served by a rail halt on the East Coast Main Rail Line. Wallyford also benefits from a rail halt, and by virtue of its location it also serves east Musselburgh.

Musselburgh is a relatively prosperous settlement and it benefits from a harbour, river and coastal walks, attractive open spaces and cultural facilities, yet there are also areas of deprivation that would benefit from regeneration. It has an attractive historic core with many listed buildings and a conservation area. Inveresk has an extensive Roman history, a conservation area and many listed buildings. The area has good access to the strategic road and rail networks and it has the largest availability of employment opportunities and the greatest range and choice of commercial and retail offer of any East Lothian settlement. There are some existing large format commercial premises in Musselburgh town centre and a limited known opportunity to reuse brownfield land at the former Brunton Wireworks site, for which a masterplan has been prepared and is partially implemented. Notwithstanding this, the town's urban structure is otherwise well consolidated and presents few other meaningful additional brownfield sites.

In terms of the ELLP 2008, two strategic development sites in Musselburgh are allocated for development. The first is a 450 house allocation to the east at Pinkie Mains between two pre-existing areas of housing where it 'in-fills' the established settlement structure and defines a long-

term defensible green belt boundary to the south of the town. The second is for employment and institutional uses to the west, between the A1(T) and the East Coast Main Line, where it has extended the settlement boundary up to the A1(T). In this location the A1 could offer a long term defensible green belt boundary, but proposals for development in adjoining local authority areas in their emerging LDPs means the continued contribution of land between them towards green belt objectives is questionable. Any further significant growth of the town in this direction would be at the expense of green belt land to the west, and would coalesce Musselburgh with Edinburgh and Shawfair. Yet this land is also highly accessible and nearby Musselburgh rail halt.

Musselburgh is constrained from any further expansion to the north by the coast (including the SPA and SSSI designations). To the south and east further expansion of Musselburgh is also currently constrained by green belt so as to retain key views as well as the identity and setting of neighbouring settlements, and this also acts to prevent their physical and visual coalescence. However, land to the east of Musselburgh is nearby Wallyford rail halt and there may be regeneration opportunities there. Any further strategic development to the east of Musselburgh is unlikely to be realised without substantial, comprehensive and long term planned greenfield development into the countryside and green belt.

The former mining community of Wallyford is currently the subject of significant regeneration proposals including 1450 new homes, community facilities and environmental improvements. A planning permission for that development has been renewed and this proposal is intended to help bring about the regeneration of that settlement. The eastern side of the River Esk, extending from St Michaels church at the north through Inveresk to the A1 and beyond, is constrained by a series of Scheduled Monuments. Additionally, much of Musselburgh, Inveresk and the surrounding landscape, including Wallyford and Whitecraig, are covered by the designation for the Battle of Pinkie Cleugh. Much of the land between these settlements is also important to their setting and separate identities. Land to the west of Whitecraig and to the east of the current (PROP MH9) Wallyford allocation may have some capacity for development without undermining green belt objectives.

Musselburgh is an important local service hub to nearby settlements, including the former mining communities of Whitecraig and Wallyford. This is particularly true in terms of the provision of secondary education and access to other public services. While Wallyford benefited from a strategic regeneration proposal in the ELLP 2008 Whitecraig remained in need of some renewal. Musselburgh and the small settlements around it do experience expenditure leakage to other settlements and centres. This is compounded by the A1(T) which has bypassed these settlements and shortened journey times to other centres.

3.3.2 Prestonpans Cluster, including Cockenzie, Port Seton and Longniddry (See Appendix 6)

Prestonpans, Cockenzie and Port Seton are a cluster of coastal settlements that together present East Lothian's second largest concentration of population after Musselburgh. Historically, these settlements were a mix of mining and fishing communities. While these industries have long since gone or reduced in importance, references to their origins remain in their harbours, the Wagon Way (former mineral railway) and the mining museum amongst other assets. However, these settlements may have more scope to capitalise on their coastal location and historic assets. Again, they are otherwise bounded by areas of prime quality agricultural land.

The designation for the battle of Prestonpans covers large areas of these settlements and extends from the coast in the north to Tranent in the south. The historic cores of Prestonpans, along High Street and around the Market Cross, contain a number of listed buildings. In Port Seton the buildings at Elcho Place, Wemyss Place and Gosford Road form a cluster of Listed Buildings associated with model housing for fishermen.

The former Cockenzie Power Station site its surrounding open space and its landscaped and concealed coal handling yard retain physical and visual separation between these settlements and prevent their coalescence. Strategic housing land allocations have been completed at Cockenzie and Prestonpans and a further strategic site continues to complete to the west of that town. There is a new supermarket at Mid Road, Prestonpans. These settlements do have areas of deprivation, particularly Prestonpans, and could in some locations benefit from environmental improvement and regeneration. This could help reinforce their separate identities and reinstate their bonds with their past and the coast.

Prestonpans benefits from a rail halt and it and the surrounding settlements have access to the strategic road network and are well served by bus. However, these settlements are constrained from further strategic growth by the value of maintaining their separate identities, by the alignment of the East Coast Main Rail Line and by the presence of historic battlefields and green belt. Current land allocations, including the new settlement at Blindwells, are likely to increase demands on the local road network and nearby existing trunk road interchanges.

Longniddry is located to the east of Cockenzie and Port Seton. It is a popular location, being close to beaches and countryside. It developed during the early 19th century along Main Street (A198). The village has a number of buildings of interest and some are listed, but its character is defined by more recent residential development. A masterplan and design code, inspired by the Garden Cities movement and modernist architecture, were prepared in the early 1960s. It covered 56ha of land between Kings Road and the railway line. Only the north-eastern corner

was built to the design code. The rest was developed by volume house builders. The settlement structure is well consolidated with few meaningful brownfield opportunities. It has a range of facilities and good transport links, including a rail halt. Further expansion is constrained by the golf course, Longniddry Dean and Gosford Estate. The railway line in particular presents a challenge to community integration and movement for any southern expansion. Longniddry is surrounded by prime quality agricultural land.

These linear costal settlements are compact with their scale in keeping with that character. Spread throughout this cluster of settlements are small scale employment opportunities and a limited local retail and commercial offering. All of these settlements experience expenditure leakage to other centres.

3.3.3 Tranent Cluster, including Macmerry, Ormiston and Pencaitland (See Appendix 7)

Tranent is East Lothian's second largest town. This former mining community continues to regenerate, but pockets of deprivation exist in its north eastern area. The town sits on the Tranent Ridge overlooking the coastal plain, and extends southwards over its down slope. It is surrounded by prime quality agricultural land and countryside designations to the north, east and south. The Edinburgh Green Belt is nearby to the west. The northern half of the town is included in the battlefield designation for the Battle of Prestonpans as is some undeveloped land to the north between the urban edge and the A1(T). This undeveloped land also provides a setting for the historic core of Tranent at Church Street which also contains a number of listed buildings.

While the town's northern edge is exposed to views from the main transport corridors, an adequate setting and landscape treatment has been retained by the strategic housing allocations. Their associated landscape treatment has now been completed at this settlement edge. Another strategic housing development continues to complete to the south. It infills two stretches of ribbon development along Elphinstone Road and Pencaitland Road. Consequently, that expansion is well contained. Tranent's urban structure is well consolidated and presents few meaningful brownfield development sites. As such, any further strategic development opportunities are unlikely to be realised without substantial, comprehensive and long term planned greenfield development into the countryside. Tranent itself offers little in the way of large scale employment opportunities, and the commercial and retail offering is limited, with few large format retail premises in the town centre. However, a new supermarket has been built to the east of the town centre. Tranent High Street, while being a designated conservation area, would benefit

from further environmental improvement and a significant reduction in through traffic. This would help improve the performance and appeal of the town centre as well as air quality at High Street, which is being monitored.

Tranent has good access to the strategic road network and is well served by bus. It offers small local employment opportunities and small scale convenience and comparison shopping provision. The town experiences expenditure leakage to other centres. This is compounded by the A1(T) which has bypassed the settlement and shortened journey times to other centres. However, the only reasonable opportunities for further large scale retail development are likely to be out of centre / town which would draw trade from High Street. While High Street is a conservation area, few buildings along it are listed. This may present opportunities to assemble and adapt them to accommodate larger format operators or other uses / infrastructure. The town offers a service hub to the smaller settlements and rural communities around it such as Ormiston, Elphinstone and Pencaitland.

3.3.4 Haddington Cluster, including Rural Hinterland (See Appendix 8)

Haddington is located centrally within East Lothian and developed on low-lying land beside a strategic crossing of the River Tyne. This feature is an intrinsic part of the landscape setting of the settlement. The Tyne is prone to flooding. The strategic housing land allocation at Letham Mains has largely met the boundaries within which the landscape character and setting of the town can be conserved, and there is now limited scope for further development without compromising the town's historic character and setting.

Although not East Lothian's largest settlement, Haddington is a Royal Burgh and East Lothian's administrative centre. It benefits from riverside walks and attractive parks and gardens, and its setting includes designed landscapes and golf courses. The town is also surrounded by prime quality agricultural land. The Council Headquarters is located here and there are employment opportunities in industrial estates and at other office locations in and on the edge of town. Haddington has pockets of deprivation. It no longer has a rail halt, and the former Longniddry to Haddington branch line is now a Core Path leading to Longniddry rail halt. However, the town is well served by bus, particularly to the west.

Haddington's urban structure is well consolidated with few meaningful brownfield sites. It has many listed buildings and contains an outstanding conservation area at its centre. These characteristics mean there is little adaptability in the historic core to accommodate new large format commercial opportunities, with further constraints in this regard generated by the number of listed buildings and the pends and vennels between

them that make up the towns historic plan form that is centred on Court Street, High Street, Market Street and Sidegate. While Haddington does offer some medium scale retail and commercial premises in its town centre, any new opportunities are likely only to be found on the town's edge or out of town, where landscape impact will be a key consideration and constraint. An out-of-centre supermarket has been granted planning permission on brownfield land at Gateside Commerce Park.

Haddington is an important hub for the smaller settlements and rural communities around it, including Gifford and Garvald. Its influence may also extend north to include some costal settlements, such as Aberlady (its former harbour), Gullane and Dirleton, as well as east to East Linton and west to Pencaitland. As with other settlements, Haddington experiences expenditure leakage to other centres.

3.3.5 Dunbar Cluster, including West Barns and East Linton (See Appendix 9)

Dunbar, with its associated communities of West Barns and Belhaven, is the most easterly of the main towns. The introduction of the A1 Expressway as well as a degree of enhancement of its local rail services has increased its accessibility and desirability as a place to live. This coastal town benefits from harbours (still in active fishing use), cliff top walks, open spaces and beaches.

Dunbar has many listed buildings and a conservation area designation and its urban structure is well consolidated. These characteristics mean there is little adaptability in the existing urban area to accommodate large scale development, although there remains scope for some sensitive infill development within parts the town centre.

The battlefield designations for Battles of Dunbar I and II cover part of the town. The area around Victoria Harbour and Dunbar Castle is included in the designations for Battle of Dunbar I, while the south eastern side of the town is encompassed by the designation for the Battle of Dunbar II. The settlement is also surrounded by prime quality agricultural land.

Since the 1990s, Dunbar has seen major expansion to the south of the East Coast Main Line with supporting community and education facilities delivered. Yet the town is now perhaps reaching the limit of its logical extent. Any further strategic development is unlikely without further planned encroachment into open countryside, where landscape impact and settlement coalescence with consequent erosion of settlement identity will be key issues.

The strategic employment allocation in the south-east of the town that accompanies this housing is yet to be taken up for employment uses, and there has been some loss of this employment land to other uses. Large scale housing allocations to the south of the town were followed by demand for retail developments, with a new supermarket, a garden centre and a pub/restaurant developed on a part of a site formally allocated for employment. The remaining employment land continues to be under pressure to accommodate uses other than employment.

Dunbar offers local employment, retail and commercial opportunities, and provides a local service hub for the small settlements and communities around it, including Whitekirk, Tyninghame, West Barns, Belhaven, East Linton, Innerwick and Oldhamstocks. A Townscape Heritage Initiative and Town Scheme has promoted substantial environmental and property improvement in the town centre, yet there is scope for further property improvement. As with other settlements, Dunbar experiences expenditure leakage to other centres.

3.3.6 North Berwick Cluster (See Appendix 10)

North Berwick is an attractive coastal town complete with historic core, harbour, beaches, attractive open spaces and surrounding golf courses and coastal walks. These features combine to make it a popular destination for day trip and short stay overnight tourism, particularly in summer months. In the past, the town has expanded with housing and retail development to the east.

North Berwick is surrounded by prime quality agricultural land and its urban structure is well consolidated with little scope for brownfield development. It has many listed buildings and an extensive conservation area designation, and little adaptability in the existing urban structure. In terms of the ELLP 2008, strategic land allocations seek to expand North Berwick to the south. Development will be well-related to the education and community facilities there, while retaining development within the capacity of the landform as well as protecting the setting of North Berwick Law. The Law is a Scheduled Ancient Monument as well as a SSSI, and these designations will necessitate that the setting of this important asset continue to be properly considered. Planning permission has also been granted for housing at Ferrygate to the west of North Berwick.

North Berwick's branch railway line to the west severs north south movements through the town and separates existing residential areas to the north-west from the education and community facilities to the south. Through traffic is generated in the town centre as a result. There is no

other vehicular route through the town connecting the B1347 and A198. The Ware Road Bridge offers the only existing crossing point of the rail line between residential areas to the north and community facilities to the south. The bridge is narrow and unsuitable for significant levels of vehicle movement, although it offers a vehicular, pedestrian and cycle connection between housing areas and community facilities.

North Berwick offers local employment, commercial and retail opportunities in line with its size. It acts as a local service hub for residents of nearby coastal and inland settlements such as Aberlady, Gullane, Dirleton, Whitekirk and Tyninghame, as well as the small countryside communities such as Athelstaneford. Available employment land in the town is now limited and consideration needs to be given to how and where the supply can be increased, although some provision has been made for employment at part of the ELLP 2008 allocation at Mains Farm to the south of the town.

In common with other East Lothian settlements, North Berwick experiences expenditure leakage, yet any further retail and / or commercial opportunities are only likely to be realised at the edge of or out of town and landscape impact will be a key consideration and constraint. Any further strategic development is unlikely to be realised without substantial, comprehensive and long term planned encroachment into the countryside.

3.3.7 Blindwells (See Appendix 7)

Blindwells is the site for a new settlement to be built on land formerly worked as an open cast coal mine. The site offers scope to reuse previously developed land with degraded landscape character that benefits from good access to the strategic transport network and can be well served by public transport. It is currently intended that its phased development be from west to east. This is to ensure this previously developed land is remediated and developed before any greenfield land to the east is used.

The former mine workings also extend further east than the boundaries of the ELLP 2008 allocation. The former mining area was classified as prime quality agricultural land and has been restored to that quality. The land surrounding the site, including to the east of the former mine, is also prime quality agricultural land. Part of the Blindwells site also lies within the battlefield designation for the Battle of Prestonpans. To the north east of the site is the attractive landscape setting of and around the listed building of St Germains House.

The Blindwells site is located centrally in East Lothian between the settlements of Tranent, Prestonpans, Cockenzie / Port Seton and Longniddry. The ELLP 2008 allocation included approximately 1,600 homes with 10 ha of employment land, but the SDP has a vision for the further expansion of Blindwellls and the feasibility of this was to be tested in preparation of the LDP.

The land for any such expansion would be to the east of the area allocated in the ELLP 2008, between the East Coast Main Line, the sensitive landscape at and around St Germains House and the A1(T). Mitigation of landscape impacts and retaining a setting for existing settlements and creating a suitable and attractive setting for any expansion of the new settlement will be key considerations in the planning of this site and the wider area. This would be to retain a sense of identity for existing communities and to help create one for the new settlement. The new settlement is to be a mixed community. The current intention for the existing allocation is that it be served by its own education, community and commercial facilities commensurate with its size. New education catchments and community services clusters are established. Planning policy currently directs that any level of retail provision at the new settlement shall serve only a local catchment, with the amount restricted to that necessary to provide for the needs of the population generated by the current allocation.

However, Blindwells will be located between regenerating settlements with well consolidated urban structures. Should Blindwells expand, it could become a settlement that has a scale that could serve a wider are in term of retail, commercial leisure and community services provision. If the allocation at the new settlement is to expand further, options concerning the intended role and function of the settlement in the network and hierarchy of settlements and centres should be considered through the LDP process, including the scale and types of land uses it should contain and how these would be accessed and phased.

3.4 SUMMARY – INTERRELATIONSHIPS

Although in a close relationship with Edinburgh and other parts of the city region, East Lothian offers something different through its wide variety of high quality built and natural heritage and its countryside and coast. These provide an abundance of leisure and tourism opportunities, all within easy access of the city. It is in high demand as a place to live, work, recreate and visit. However, these characteristics that attract people to East Lothian are at risk of being lost if the introduction of new development is not managed with care and sensitivity.

Continued agricultural activity reflects the quality of agricultural land available. However, East Lothian's economic base is changing. Mining, fishing and manufacturing are diminishing sectors while the service sector and tourism activity are growing. Small to medium size enterprise is a strength in the area. However, when compared to other parts of the city region in terms of connections and relative accessibility via national and international modes of transport, East Lothian is currently a less preferential location for attracting large scale economic development and employment opportunities. Employment land delivery, and with it the provision of new jobs, is a significant issue. This is particularly so given the increasing population and need for housing. The attractiveness of the area as a place to live influences the availability of land, including allocated land, for economic development – much of it is owned or controlled by those wishing to build homes rather than provide employment opportunities. This is a significant challenge to bringing about an increase in the job density of the area and realising associated benefits, including helping to address the commuting travel pattern and associated CO_2 emissions.

East Lothian has been the subject of strategic development pressure for many years, mainly because it is part of the Edinburgh Housing Market Area. This has resulted in the expansion of settlements, with those in the west drawing closer together and those in the east near the limit of what can be achieved in the way of expansion without changing significantly their character and setting. Accommodating the SDPs additional housing requirements in East Lothian requires very careful consideration of the environmental and infrastructure opportunities and constraints in the area as well as the resources available for plan implementation. Consideration also needs to be given to the way the housing market operates across East Lothian, with greater capacity in the west than the east. There is a need to deliver new homes, including affordable homes, where there is greatest need and demand. Regeneration opportunities should be promoted as well as sustainable transport options. There is a need to reduce the need to travel as well as travel distances and minimise associated $C0_2$ emissions. Other important factors will be consideration of the existing settlement pattern in the area, the form and structure of towns as well as the future form of the green belt. Whilst the development of previously developed land should be prioritised, significant amounts of greenfield land will be required to meet the SDPs development requirements given the lack of brownfield land available.

In East Lothian the availability of jobs relative to the population (job density) is lower than in other local authority areas and the rest of Scotland. While many people are attracted to live in East Lothian, around half of its residents elect to travel out of the area to access the wider range of jobs (often higher value), goods and services on offer elsewhere in the city region. Whilst many of the area's residents are highly qualified, there are some areas of deprivation, and regeneration opportunities continue to exist, particularly in the west of East Lothian. The west of East Lothian

is also its most accessible part in terms of connections to the wider city region, including in terms of digital connectivity. High speed digital networks (240 MB and above) are programmed for expansion across almost all of East Lothian by 2018. This means that 90% of properties will be served by this broadband speed and all remaining properties (likely in the countryside) are programmed to have at least 2 MB provision in the same period.

East Lothian has six main towns and many smaller settlements of different character. The main towns act as service hubs for the smaller satellite settlements around them and each has its own role in the hierarchy of settlements / centres. The historic nature of the settlements means they are well consolidated and this influences the type and scale of new development, including commercial and retail development, that can be accommodated within them and their historic town centres. Overall, East Lothian settlements experience expenditure leakage to other settlements and centres elsewhere in the city region. An emerging issue is how any additional retail provision ought to be accommodated in the area in view of its growing population.

The above issues combine to restrict access to housing, jobs and other opportunities for some residents as well as generate commuting travel patterns and associated CO_2 emissions. They also influence the need for affordable housing, transport network capacity issues, demand for and limited capacity in public transport and other services and car based commuting. The trend towards travelling longer distances (and possibly online retailing) has also influenced shopping habits, impacting on the role, vitality and viability of East Lothian's town centres and the range of amenities available locally.

Demands are also being placed on facilities and infrastructure to ensure adequate local service provision and infrastructure capacity. Some water and drainage capacity exists in the west, however, infrastructure capacity is lacking in many areas and needs to be provided. In view of the scale of growth the area has accommodated, the lack of available education capacity is now a significant constraint on new development. Significant investment will be required in order to overcome these constraints, at a time when the restricted availability of funds limits the delivery of the increased infrastructure capacity.

3.5 KEY ENVIRONMENTAL ISSUES

Table 8 below provides a summary of East Lothian's key environmental issues by SEA objective as relevant to the emerging LDP.

Table 8: Key Environmental Issues	
Objective	**Issues**
Biodiversity, Flora, Fauna	• the cumulative impact that bringing forward additional development land could have on East Lothian's extensive international, national and local nature conservation designations, particularly the Firth of Forth and the Forth islands SPAs and including that which is not subject to statutory protection and outwith designated sites; • new development could have an impact on protected species, e.g. bats, badgers and water voles &c; • the need to encourage the creation of and enhance biodiversity and ecological networks~~;~~ • ~~the need to encourage~~ through the creation of green networks to contribute to the delivery of a wider CSGN~~and habitat connectivity etc.~~;
Population	• the need to provide housing land, including affordable housing, and promote regeneration and reduce inequalities; • there is a need to balance the requirement for, and location of, new housing against the availability and provision of employment opportunities to help redress the current significant levels of out-commuting from East Lothian, particularly by less sustainable forms of transport; • the need to secure the development of sustainable mixed communities that are accessible, well-designed, as self-contained as possible, and have an appropriate range of housing and local employment, social and community facilities and infrastructure etc.;
Human Health	• the need to ensure that new development can be well-connected into walking and cycling networks so that increased physical activity and active travel can be promoted, including through the green network; • the need to secure the proper provision of greenspace and sports pitch provision in new development so people can make positive life style choices; • the traffic impacts of new development including noise or air quality related impacts, and the need to select locations for new development which minimise the need to travel and are accessible to public transport, thereby minimising emissions (particularly in Tranent and Musselburgh town centres) and that do not increase flood risk;
Soil	• the need to deliver additional development land, particularly housing, may have an impact on soils that have an important role in water quality, flood prevention and biodiversity;

	• it is unlikely that East Lothian's development requirements can be delivered without some impact on its supply of greenfield land and prime quality agricultural land and on other carbon rich and rare soil types;
Water	• the requirement to identify additional land for development while seeking to avoid land which is liable to flood or the development of which would increase flood risk elsewhere, recognising the relationship between this and maintaining human health; • the need to mitigate the impacts of flooding and to adapt to and be resilient to future flood risk; • the requirement to consider aspects of the water environment - for example, pressures relating to sewage disposal, water resources or potential physical changes to the water environment - that may be affected by the LDP;
Air	• the need to provide for additional development while ensuring that its traffic / air quality impacts are minimised, including on human health, by choosing locations which integrate land use and transport and minimise the need to travel and are accessible via public transport and active travel options; • in particular, to ensure that new development is planned alongside measures that seek to manage Air Quality within acceptable limits at Musselburgh and Tranent;
Climatic Factors	• to ensure that the traffic impacts of new development are minimised by choosing locations which minimise the need to travel as well as the distance that need be travelled and are accessible to public transport, thereby minimising additional greenhouse gas emissions; • to ensure that East Lothian's settlements are resilient to the impacts of a changing climate, including rising sea levels, drier summers, wetter winters, and an increased frequency of heavy rain events;
Material Assets	• the need to minimise the loss of greenfield land and to maximise the reuse of existing buildings and previously developed land as well as make an efficient use of land if developed; • recognise that potential mineral reserves in East Lothian, particularly coal that could be extracted by opencast means, often occur in populated areas set within an open, attractive landscape where the intervisibility and proximity of workings and settlements would be a significant landscape and visual impact and amenity issue; • constraints generated by the lack of available infrastructure capacity; • the need to ensure the reduction, reuse and recycling of waste;
Cultural Heritage	• to accommodate additional development requirements while preserving and enhancing historic environment features including their settings, and ensuring that the impact on the cultural heritage of East Lothian's towns, villages and rural areas is minimised including that which is not subject to statutory protection and outwith designated sites;

Landscape	• to accommodate development requirements while minimising any adverse visual and landscape impact; • to minimise the impact of new development on the landscape and the setting of communities and to avoid settlement coalescence where possible and appropriate; • to accommodate additional development while respecting the form and identity of existing settlements and the settlement pattern; • to conserve or enhance important areas of green space and prevent town cramming.

4 EVOLUTION OF THE BASELINE WITHOUT THE LDP

In the absence of the LDP it is likely that changes to the environmental baseline would occur due to natural processes and human activity unrelated to the LDP strategy. The existing environmental issues described in the previous section would persist. In addition, due to higher tier PPS as well as PPS that operate at the same level as the LDP, the pressures for future development would continue, yet there would be no land use plan to guide the location of it and to co-ordinate the delivery of related infrastructure in an up to date policy context through which any mitigation could be procured – related considerations include:

- Out of date policy context may not properly reflect the approach of current natural and cultural environmental protection regime objectives and requirements, and protection for local non-statutory features may not exist;
- A missed opportunity to promote appropriate locations for and deliver development requirements in a way that would benefit the area and its residents in the long term;
- Lack of up-to-date development plan coverage may result in planning by appeal;
- Inability to promote development in the right place at the right time alongside adequate supporting infrastructure and service provision.

The role of the LDP in respect of contributing to each of the SEA Objectives is described in Key Messages in Section 3 above. This role mainly relates to the LDPs ability to influence through its spatial strategy where new development should happen and how, and where it should not happen. In addition, its criteria based policies can be used to secure appropriate mitigation where the principle of development is acceptable.

Also highlighted above are the key environmental issues facing the area under each of the SEA Objectives in view of the continuing need to accommodate development. Table 9 below identifies key potential changes to the environmental baseline for each of the SEA Objectives if the local development plan were not prepared.

TABLE 9: POTENTIAL CHANGES TO THE ENVIRONMENTAL BASELINE WITHOUT THE LDP	
SEA Objective	**Evolution of baseline without the LDP**
Biodiversity, Flora, Fauna	In the case of international and national sites and species, these would be protected by higher level plans policies and strategies. Other ~~These~~ natural heritage assets would not be as well protected, particularly in the case of local sites. As such, these other assets may be lost or irrevocably damaged. Opportunities to promote habitat creation, connectivity and to support biodiversity would also be reduced.
Population	Opportunities and outcomes associated with creating mixed communities, promoting regeneration and providing opportunities for housing, including affordable housing, and employment in a way that is integrated with transport, particularly public transport, and active travel would be reduced.
Human Health	Related opportunities to maintain or provide opportunities to improve human health would be reduced. These include maintaining or enhancing air quality, ensuring acceptable levels of noise as well as ensuring access to open spaces, active travel and leisure opportunities and to seek provision of community facilities locally.
Soil	The policy framework to prioritise use of brownfield land and to ensure development of greenfield land is minimised would not be as clear. The same issues would also apply to ensuring that the loss of prime quality agricultural land and the disturbance of carbon rich / rare soils is minimised. In addition, the ability to promote an efficient use of land, for example in terms of the density of development, would also be reduced.
Water	There would be an increased risk that development may take place in areas of flood risk and / or increase the risk of flooding elsewhere, and that resilience to flood risk would be reduced in new development. The ecological and morphological status of the water environment may deteriorate with opportunities for improvement reduced.

Air	The opportunity to maintain or enhance air quality by selecting appropriate locations for new development and by integrating land use and transport would be reduced. The same principles would apply in terms of the plans criteria based policies that can seek to manage the introduction of mixed land uses and to protect amenity.
Climatic Factors	Related opportunities to reduce Scotland's greenhouse gas emissions by at least 80% by 2050 against the 1990 baseline would be reduced. The plan can help achieve this by encouraging renewable energy development and low and zero carbon technologies in appropriate locations, and by integrating land use and transport including in the design of new development.
Material Assets	Opportunities to manage, maintain or promote the efficient, effective or appropriate use of material assets would be reduced. Such assets include land, buildings and infrastructure, minerals and aggregates, and the ability to make provision for the appropriate treatment of waste.
Cultural Heritage	Cultural heritage assets **and their settings** would not be as well protected, conserved or where appropriate enhanced, and may be lost or irrevocably damaged as a result. Opportunities for an appropriate reuse, conversion or enhancement of cultural heritage assets may also be reduced, **as would the opportunity to promote the historic environment, such as battlefields**.
Landscape	If the local development plan were not implemented the opportunity to sensitively integrate new development and to manage landscape change and urban renewal would be reduced, with related objectives undermined.

5 THE STRATEGIC ENVIRONMENTAL ASSESSMENT

Section 14 (1) and (2) of the Environmental Assessment (Scotland) Act 2005 requires the significant environmental effects of the LDP to be assessed, including its preferred approach and any reasonable alternatives. The assessment must relate to the effects of the PPS on the SEA objectives scoped into the assessment, consistent with Section 14(3) and Schedule 3 (6) and (7) of the Act. The assessment is to relate to the likely environmental effects of the PPS on the SEA objectives. The assessment of the PPSs effects, when taken together, is to be used to evaluate if the effects of the PPS will be significant. The characteristics of the effects to be reported include: positive and negative effects; permanent and temporary effects; short, medium and long-term effects; and secondary, cumulative and synergistic effects. Consistent with Schedule 3 (8) and (9) respectively mitigation and monitoring measures are identified and summarised in the Sections 6 and 7 below.

5.1 BACKGROUND & METHODOLOGY

This ER of the LDP can only report on the likely significant environmental effects of the LDP as currently known or predicted. Importantly, as there is a requirement to prepare the LDP, the assessment should be based on a comparison between the approaches that could have been followed; an assessment against a continuation of current baseline conditions would be inappropriate. The LDP can follow different approaches as directly informed by the scope for this provided by the approved SDP, to which the LDP must conform. **The SEA of the proposed LDP approach is a comparative assessment against alternatives set out in the Main Issues Report (MIR). Reflecting the MIR consultation responses, in some cases the proposed LDP follows an approach that was identified as a 'reasonable alternative' by the MIR. The options not progressed from the MIR in the development of the Proposed LDP are shown 'greyed out' so this comparative assessment can take place.** This section describes the proposed LDP approach and, where relevant, the Reasonable Alternative as set out in the MIR, and reports SEA findings in respect of each.

The role of SEA is to predict (identify and describe) and evaluate (make a judgement on the significance of) the environmental effects of the LDP approach and any 'reasonable alternative'. This is done in the context of the SEA objectives scoped into the assessment. The assessment method is based on a series of assessment questions that relate to each of the SEA objectives - these are presented at Appendix 2. Assessment questions that relate to options for the location of new development are termed 'Strategic Options'. Assessment questions on how the introduction of new development will be managed are termed 'Policy Approaches'. Assessment questions that have been used in the site assessments are termed 'Development Sites' (the full site assessments are at Appendices 5 – 10). The assessment questions are framed to help predict and evaluate the significance of the environmental effects on each SEA objective and to identify if the approach would be a 'move away from or towards' them. To ensure the assessment is consistent the questions take their lead from the SEA objectives, but to ensure proportionality they become more focused and detailed to suit the different stages of assessment – e.g. broad brush questions are posed in respect of the strategy options for the LDP, whereas more focused questions are used in the assessment of candidate development sites.

As the LDP has been developed the policy approaches have become clearer, and can feature in the SEA of the LDP approach, including as 'assumed mitigation'. The full list of LDP policies and how they relate to the SEA objectives and assessment questions is set out at Appendix 4. This categorisation of policies provides the structure for considering their environmental effects on the SEA objectives. Whilst it is possible to consider the role of the LDP policies, this has not been possible in respect of the approaches that have not progressed from MIR to the Proposed LDP; as such, the assessment of those options remains as presented at MIR stage.

The assessment questions are used as prompts to consider and predict the effects of the strategy or policy approaches on SEA objectives, and to evaluate if they would be significantly positive or negative. The other effects considered include permanent and temporary effects; short, medium and long term effects; and secondary, cumulative and synergistic effects (hereafter referred to as 'cumulative effects'). The assessment of cumulative effects considers how a primary effect on one SEA objective may affect others – e.g. increasing the distance travelled may have a negative effect on population because people need to travel further and longer to access jobs and services, and may also generate other negative effects on other SEA Objectives in respect of Air (increased emissions), Climatic Factors (increased $C0_2$ emissions) and Human Health (increased particulate matter).

Importantly, the prediction and evaluation of effects in SEA do not need to be expressed in quantitative terms, as qualitative predictions based on expert opinion and professional judgement are equally valid[34]. Qualitative predictions and evaluations are made in this assessment. The environmental effects are expressed as Very Positive (++), Positive (+), Neutral (0), Negative (-), Very Negative (- -) or where it has not been possible to predict and / or evaluate an effect Uncertain (?). Cumulative effects have been predicted, and where a series of individual effects are predicted to combine to become 'significant' this evaluation is also based on expert opinion and professional judgment. Explanations have been provided to ensure that the judgments made in the assessment are transparent. This is an established and accepted method for SEA.

Once the environmental effects are predicted and evaluated, measures that as far as possible mitigate significant negative effects have been identified where possible, consistent with the requirements of Schedule 3 (8) of the Act. The context for future monitoring of those effects has been established using a series of SEA indicators related to the SEA objectives, consistent with Schedule 3 (9) of the Act. However, it has not

[34] Scottish Government SEA Tool Kit paragraph 9.3.5

always been possible to select indicators that will monitor changes that are a direct result of the LDP. Mitigation and monitoring measures are discussed further in Sections 6 & 7.

KEY TO ASSESSMENT FINDINGS	SCORE / SYMBOL
Very Positive	++
Positive	+
Neutral	O
Negative	-
Very Negative	- -
Uncertain	?

The draft aims and objectives for the LDP have been assessed to ensure that, acting together, they strike an appropriate balance between the need to promote sustainable economic growth in conformity with the SDP while ensuring an appropriate degree of protection, conservation and enhancement of the environment. A similar exercise has been carried out in relation to the options for the spatial strategy, for the candidate development sites, and for the new and emerging policy issues including where little or no direction is provided by the approved SDP such as in relation to the policy approach to managing development in the countryside. The SEA has been used to help inform LDP objectives, the spatial strategy, development sites and the policy approaches that have been selected to conform to the approved SDP, in light of reasonable alternatives. A full assessment has been carried out to ensure the SEA was truly open to a range of approaches and therefore to avoid the need to prepare and publish another Proposed LDP and SEA Draft ER should changes need to be introduced at a later stage in the plan making process.

As noted above this SEA ER does not and should not assess detailed policy wording since this is not its role; instead, the SEA ER considers the broad direction of where development should and should not occur as well as the general thrust of policy, for example, if the general presumption against new build housing in the countryside will have a positive or negative effect on the environment. It is these high level principles that are subject to SEA. However, the policies may provide 'assumed mitigation' to some predicted environmental effects, and where this will be the case it is indicated in the SEA. For example, consistent with higher tier policy on cultural heritage, LDP policy must ensure that views to and from and / or the setting of a listed building will be conserved, and where appropriate enhanced, by development proposals. This

ER signposts where such 'assumed mitigation' is relevant in evaluating the significance of predicted environmental effects. These mitigation measures will be included in the policies of the LDP and / or in any associated Supplementary Guidance to conform to higher tier PPS's.

The Scottish Governments SEA Toolkit and Guidance advises that SEA is best done systematically. For this reason the assessment of the LDP has been done by separating it into its component parts, using assessment questions relevant to each part to conduct the assessment. This ER reports on the predicted environmental effects of the LDP approach and reasonable alternative(s) to each part of LDP as set out in the MIR – i.e. the LDP aims and objectives, the spatial strategy, the candidate development sites and policy areas.

This approach ensures that the methods used are proportionate to the different parts of the LDP being assessed. The SEA of the LDP is reported in this ER in the following sub-sections:

1. The Objectives for the LDP;
2. The LDP Spatial Strategy and Reasonable Alternatives;
3. LDP Policy Approaches and Reasonable Alternatives ; and
4. Proposed Sites (reported by cluster area in Site Assessments – see Appendices 5 - 10).

When taken together these four sections of the SEA provide the assessment of the overall emerging spatial strategy of the LDP, and its reasonable alternatives – i.e. the objectives, strategy, policies and proposals that will guide the future use and development of land and buildings, and that will ensure there are appropriate opportunities to allow the right type of development to happen in the right place at the right time, while preventing inappropriate development from happening. The SEA findings are provided in the tables below.

5.2 DRAFT OBJECTIVES, PROPOSED SPATIAL STRATEGY APPROACHES & REASONABLE ALTERNATIVES

The paragraphs below discuss the LDP aims and objectives and the tables display the outputs of the SEA of them.

5.2.1 The Draft Aims and Objectives for the LDP

The aims and objectives for the LDP do not specify any particular approach to accommodating development requirements, or provide a policy basis against which development proposals will be assessed. However, they do set out 'core values' for the LDP, consistent with higher tier PPS's. They must also complement other relevant PPS's, including East Lothian Councils Single Outcome Agreement, and should help influence the spatial strategy, policy approach and site selection. The objectives for the LDP, acting together, should strike an appropriate balance between the need to promote development in conformity with the SDP, including any suitable small scale development opportunities, whilst ensuring protection, conservation and enhancement of the environment. No alternative approach has been identified or assessed.

LDP APPROACH: AIMS & OBJECTIVES	**Aims and Objectives:** To recognise that East Lothian is part of the wider city region and has a significant role to play in accommodating and providing for the city region's as well as its own economic, population and household growth in a sustainable way; To identify locations where development of different types associated with these aims should take place, where relevant within the appropriate timescales, as well as where development should not occur; To provide an appropriate framework of policies and proposals that can promote and manage development in the area towards these aims whilst securing the right development in the right place and that do not allow development at any cost. **Objectives and Outcomes:** Promote sustainable development; Help grow the economy, increase housing supply and reduce inequalities; Protect and enhance the area's high quality environment and its special identity; Ensure adequate infrastructure capacity and an appropriate use of resources.

SEA TOPIC	BIODIVERSITY	POPULATION	HEALTH	WATER	SOIL	AIR	CLIMATE	ASSETS	HERITAGE	LANDSCAPE
QUESTION	B1	P1	H1	W1	S1	A1	C1	M1	H1	L1
SCORE	++	++	++	++	-	++	++	++	++	++
COMMENT	The LDP aims are clear that the spatial strategy should recognise that there is need and demand for development in East Lothian and a need to accommodate strategic and local development requirements in a sustainable way. To this end the LDP spatial strategy needs to be clear where development should and should not take place and its polices should manage the introduction of development in accordance with these aims. The assessment of the LDP objectives against the SEA objectives is described below: - The LDP objectives seek to ensure that the area's significant international, national and local cultural and natural heritage assets are protected, and where appropriate conserved and / or enhanced, including biodiversity, flora and fauna, water and air quality. Development is also to be directed to appropriate locations, and be designed to be resilient to the effects of climate change and flood risk. **Development Briefs will be used**									

	incorporating Green Network measures to help secure these objectives. **Overall, very positive effects are predicted for biodiversity, heritage, water and air quality**; - In respect of soils, although the LDP seeks to prioritise the re-use of brownfield land, there are very few brownfield development opportunities in comparison to the scale of development requirements that need to be met. As such, a significant amount of greenfield land will need to be used, resulting in soil loss and sealing etc. The impacts are unavoidable and irreversible. Overall, negative effects are predicted for soils; - The LDP objectives seek to provide opportunities for economic growth and job creation as well as housing, including affordable housing, in appropriate locations. They also seek to promote regeneration and the creation of mixed communities with employment and housing co-located beside areas for leisure and recreation and other services and amenities. The LDP objectives recognise the important role that town centres and other mixed use areas have in providing services locally. They also seek to protect town centres from inappropriate development and seek to identify where and how appropriate new beneficial development opportunities may be realised. The diversification of the rural economy is encouraged with support for appropriate economic development and tourism, while the pressures for housing, particularly affordable housing, and the need to maximise the use of appropriate traditional buildings, is also recognised. **Overall, very positive effects are predicted for population**; - The LDP objectives seek to integrate land use and transport by finding locations for new development that reduce the need to travel and also encourage active travel opportunities. The LDP objectives also promote regeneration and the creation of mixed communities and seek to ensure that the design of new development reflects the sense of place and identity of the local area, and is properly integrated with its surroundings and contributes to wider sustainability and place making objectives, including the creation of the Green Network. Development Briefs and Supplementary Planning Guidance incorporating Green Network measures will be used to help secure these objectives. **Overall, very positive effects are predicted for Human Health**; - The LDP objectives seek to ensure that new development, and the locations and way in which it is delivered, contributes to climate change and regeneration objectives, the need to minimise travel and green house gas emissions as well as energy consumption and waste. The LDP objectives also seek to provide for appropriate renewable energy generation opportunities, to direct development to appropriate locations and to ensure the design of new development reflects the need to be resilient to the effects of climate change and manages flood risk. **Overall, a very positive effects on Climatic Factors is predicted**; - The LDP objectives seek to make efficient use of land, buildings and infrastructure. The development of brownfield land is to be prioritised over greenfield land where possible, but it is recognised that the nature of East Lothian and scale of development requirements to be met will likely require significant amounts of greenfield land to be used. The LDP objectives also seek to integrate land use and transport by finding locations for new development that minimise the need to travel and that are well-served by a range of transport modes, particularly public transport as well as active travel opportunities. They also seek to ensure that all new development is capable of being served by available infrastructure capacity, or that this can be provided to allow the development to take place. The LDP objectives seek to ensure best use of existing digital networks and promote the expansion of them throughout the area. They also seek to minimise energy consumption, safeguard mineral deposits and reduce waste arising. **Overall, a very positive effects on Material Assets is predicted**;

	- The LDP objectives seek to ensure new development is located in such a way that it respects the character, appearance and amenity of the area, including its settlements and their settings. They also seek to ensure that new development reflects the sense of place and identity of the local area, and is properly integrated with its surroundings in terms of movement, form and appearance, while contributing to wider sustainability and place making objectives. **Overall, a very positive effect on landscape is predicted**.
MITIGATION	The adoption of an appropriate LDP spatial strategy, policies and proposals.
MONITORING	Adoption of the plan following examination with an appropriate spatial strategy and planning policies. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Sustainability & Climate Change

The Town and Country Planning (Scotland) Act 1997 as amended by the Planning etc. (Scotland) Act 2006, Section 3E, requires planning authorities to carry out their development planning functions with the objective of contributing to sustainable development.

SPP states that all planning decisions should contribute to the reduction of greenhouse gas emissions in line with the commitment to reduce these by 42% by 2020 and 80% by 2050[35] - i.e. against the 1990 baseline. Sustainability is therefore a theme that is already embedded in the SDP's spatial strategy and policy approach and is not a separate policy area.

The LDP policies and proposals must confirm to the SDP, including its requirement to prioritise certain locations for strategic development over others. The SDP also requires the LDP to respond to climate change by promoting mitigation, adaptation, appropriate design, regeneration and by encouraging the use of sustainable building materials[36]. It is to contribute to sustainable development by having regard to guidance set out in SPP[37], consistent with Section 3E of the Town and Country Planning (Scotland) Act 1997 (as amended)[38].

There is a specific requirement in SPP, consistent with Section 72 of the Climate Change (Scotland) Act 2009, incorporated into Section 3F of the Town and Country Planning (Scotland) Act 1997[39] (as amended), that the LDP include policies requiring all development to be designed to ensure

[35] Climate Change (Scotland) Act 2009
[36] SESplan SDP Policy 1B
[37] Scottish Government SPP paragraphs 19
[38] Scottish Government Circular 6/2013 Development Planning paragraph 12 - 14
[39] Scottish Government Circular 6/2013 Development Planning paragraph 12 - 14

new buildings avoid a specified and rising proportion of the projected greenhouse gas emissions through low and zero-carbon generating technologies.

The LDP should also facilitate flood risk schemes, avoid development in areas of flood risk as well as any susceptible to coastal erosion, and contain policies and proposals that conform to the SDP including with respect to development design and development density.

LDP APPROACH	**Promote sustainability and climate change adaptation:** embed the principles of sustainable development in the LDPs spatial strategy, policies and proposals to ensure it promotes and will manage development in the interests of sustainable economic growth.

SEA TOPIC	**BIODIVERSITY**			**POPULATION**			**HEALTH**				**WATER**		**SOIL**		**AIR**			**CLIMATE**			**ASSETS**				**HERITAGE**	**LANDSCAPE**			
QUESTION	**B1**	**B2**	**B3**	**P1**	**P2**	**P3**	**H1**	**H2**	**H3**	**H4**	**W1**	**W2**	**S1**	**S2**	**A1**	**A2**	**A3**	**C1**	**C2**	**C3**	**M1**	**M2**	**M3**	**M4**	**H1**	**L1**	**L2**	**L3**	**L4**
SCORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMMARY	0			0			0				0		0		0			0			0				0	0			
COMMENT	- The impact of the proposed approach is neutral on all SEA objectives because it is to be embedded in the LDP spatial strategy and its policies and proposals. It is in the assessment of the LDP spatial strategy and its policies and proposals where the SEA will be most relevant in identifying significant positive or negative environmental effects. There is no alternative to this approach.																												
MITIGATION	The adoption of an appropriate LDP spatial strategy, policies and proposals.																												
MONITORING	Adoption of the plan following examination with an appropriate spatial strategy and planning policies. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.																												

Development Locations

The approved SDP requires the spatial strategy of the previous Development Plan to be carried forward. The spatial strategy of ELLDP 2008 identified 6 main growth opportunities in the area where new housing and employment land is to be provided close to one another, including

at a new settlement at Blindwells. The ELLP 2008 makes provision for settlement expansion where infrastructure solutions have been found and where landscape capacity allows. Blindwells new settlement is a medium to long term opportunity with significant growth potential.

With good economic conditions all of East Lothian has proven marketable as a location for housing development, but less desirable as a location for economic development and significant job creation when compared to other better connected areas to the west of the city region: this may be compounded as distance from the city increases.

The strategy of the ELLP 2008 was selected so the benefits of a successful and growing city region could be spread and shared among East Lothian's communities and to encourage regeneration where appropriate. This sharing of growth throughout East Lothian has led to a strategy of 'dispersed' strategic and smaller scale sites allocated for housing and economic development. Under that strategy Blindwells was to be subservient to the existing main settlements. However, the 'dispersed' strategy has resulted in some existing land allocations being more distant than others from where mobile demand for housing originates, as well as from the existing main centres of employment and other identified locations with greatest potential for significant job creation and economic development in the wider city region.

The long term intentions of the ELLP 2008 strategy remain valid, and the SDP requires existing land allocations to be carried forward in to the LDP. A main strategy issue for the LDP therefore is if it should continue to follow a strategy that '**disperses**' housing and economic development across the area, or if an alternative more '**compact**' approach should be followed, at least in the short to medium term. To meet the SDPs development requirements for the period up to 2019 and 2019 to 2024, these are the two spatial strategy options that could have guided how the search for new land needed to meet the requirements set by the SDP for East Lothian be carried out in this area.

The LDP follows a compact spatial strategy.

LDP STRATEGY APPROACH	**Compact Growth:** Focus the search for new housing and economic development land on main settlements in the west of the Strategic Development Area, closest to the origin of demand adjacent to the city, and then consider main settlements further east. Land may also be identified at settlements outwith the Strategic Development Area if required.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	++	++	++	++	+	++	++	0	0	0	0	-	0	-	++	++	-	?	?	-	o	o	o	o	o	-	+	-
SUMMARY	++			++			++				0		-		-			-			-				o	-			

COMMENT

- **In terms of development locations**, discussion with SNH on focusing development in the west suggested that the LDP strategy could be accommodated without causing significant harm to the Firth of Forth SPA. This has been the subject of more detailed assessment and the assessment of proposed sites under the Habitats Regulations/Appropriate Assessment. Where required policy, proposal or site specific mitigation has been identified, and for some sites project level EIA and HRA will be required for some proposals. **In terms of managing the introduction of new development**, LDP Policy NH1: Protection of Internationally Designated Sites; Policy NH2: Protection of Sites of Special Scientific Interest and Geological Conservation review Sites; Policy NH3 Protection of Local Sites and Areas; Policy NH4: European Protected Species; Policy NH5: Biodiversity and Geodiversity Interests, Including Nationally Protected Species; Policy NH6: Geodiversity Recording and Alternative Exposures; Policy NH7: Protecting Soils; Policy NH8: Trees and Development all seek to protect, conserve or where appropriate enhance biodiversity, flora and fauna. Similar secondary and synergistic benefits could be expected from the operation of LDP Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; Policy NH12: Air Quality. Additionally, Policy DP1: Landscape Character; Policy DP2: Design; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to natural heritage. With site briefs and appropriate master planning and delivery, the LDP strategy offers scope for mitigation and the improvement and strategic enhancement of the Green Network, active travel routes, woodland planting, open space provision and habitat connectivity in the west of East Lothian. **Overall, very positive effects are predicted for biodiversity, population and aspects of human health.**
- **In terms of development locations**, the strategy would contribute to the regeneration of communities in the west of East Lothian, which are currently the most deprived areas in the county. The proposed strategy would also deliver affordable housing in an area of need, and where there is a significant volume of demand for new housing. It would also promote affordable housing in other areas of East Lothian where there is a more acute need for affordable housing. The west of East Lothian is the most accessible and well served part of the area. This part of the area also has good public transport connectivity to amenities in the wider city region, meaning that the distance travelled is reduced when compared with other parts of East Lothian. All of these factors could also help to minimise transport based CO_2 emissions. **In terms of managing the introduction of new development**, general urban development policies (Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity) recognise the importance of vibrant town centres and maintaining access to local service provision and protecting amenity, particularly residential amenity. Policies on the approach to planning for employment (particularly Policy EMP1: Business and Employment Locations' Policy EMP2: Operational Harbours) and tourism (particularly Policy TOUR4: Hotels and Guest Houses) seek to ensure that jobs can be retained and created in appropriate locations or premises. Policies on the approach to planning for housing (Policy HOU1: Established Housing Land; Policy HOU2: Maintaining an Adequate 5-year Effective Housing Land Supply; Policy HOU3: Affordable Housing Quota; Policy HOU4: Affordable Housing Tenure Mix; and on

	specialist housing provision and other specific needs (Policy HOU5: Residential Care and Nursing Homes – Change of Use; Policy HOU6: Residential Care and Nursing Homes – Location; Policy HOU7: Housing in Multiple Occupation; Policy HOU8: Gypsy / Traveller's Sites) seek to ensure that housing opportunities, including affordable and housing for specialist and specific needs can be provided. Policies on the approach to education, community and health care facilities (Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals) seek to ensure that education and community facilities are safeguarded and will be expanded to accommodate the demand generated by new development if required. Policies on open space and play provision (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites) seek to ensure existing open space and play facilities will be protected or enhanced to accommodate new development if required and that new open space or play facilities of different types will be provided in association with new development if required. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to population. **Overall, very positive effects are predicted for population.** - **In terms of development locations**, there are uncertain impacts in terms of air quality and noise. **In terms of managing the introduction of new development**, higher tier plans, polices or strategies (such as PAN 1/2011: Planning and Noise) and LDP policies would require these impacts to be mitigated, particularly LDP Policy NH12: Air Quality and Policy NH13: Noise. An air quality management strategy will be prepared to complement the LDP. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to relevant aspects of human health. It may be that project level EIA would also be required for some proposals. A neutral impact on these aspects of human health is predicted. **Overall, a very positive effect on human health is predicted.** - **In terms of development locations,** the proposed strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. **In terms of managing the introduction of new development**, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective too. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to the water environment. It may be that project level EIA or specialist studies (water and drainage impact assessment / flood risk assessment etc.) would be required for some proposals, and the LDP identifies the need for these where known at this stage. **Overall, a neutral effect on the water environment is predicted.** - **In terms of development locations,** given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The west of East Lothian contains a significant proportion of East Lothian's prime quality agricultural land with the area around Musselburgh being predominantly Grade 1. However, there is a balance to

	be struck between the loss of prime quality agricultural land and the accessibility, regeneration and other positive effects of the compact spatial strategy. Wherever possible, the re-use of previously developed land will be promoted, for example at Blindwells **(if Blindwells is capable of expansion, further previously developed as well as greenfield land would be used)**. **In terms of managing the introduction of new development**, the policies of the LDP will ensure that land is developed in the most efficient way, through for example promoting higher density development in appropriate locations, in accordance with LDP Policy DP3: Housing Density. The proposed strategy would also seek to minimise the loss of prime quality agricultural land and carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils. **Overall, a negative effect on soils is predicted.** - **In terms of development locations,** while overall CO_2 emissions and transport based particulate matter is likely to increase as a result of overall growth requirements in the area, the proposed strategy would focus development in the most accessible parts of East Lothian and where there is good public transport accessibility and good local access to facilities, services and employment. This will promote the use of public transport and thus help minimise the need to travel by car as well as air quality impacts and CO_2 emissions. However, there are currently air quality issues in Musselburgh and concerns in Tranent. Any impact of additional development on air quality will require mitigation, and the impact of the proposed strategy may be more acute in certain locations, such as Musselburgh High Street. A strategy to manage air quality in Musselburgh has been developed alongside the LDP strategy, to ensure that the mitigation takes into account the likely cumulative impact of the LDP. This issue has been considered in parallel with the transport mitigation measures, including those on the road network as well as for public transport including rail (to help promote modal shift and minimise other road based transport). **In terms of managing the introduction of new development**, LDP Policy NH12: Air Quality will help ensure air quality is maintained or enhanced as appropriate. LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vice versa. It may also be that project level EIA or specialist studies or plans (e.g. Travel Plans in line with Policy T1: Development Location and Accessibility) would also be required for some proposals. **Overall, a negative effect on Air and Climatic Factors is predicted.** - **In terms of development locations,** accommodating the SDP development requirements will require additional land to be developed. In view of the lack of brownfield land available in the area the release of greenfield land is needed. Prioritising the redevelopment of land and making an efficient use of it, for example through developing at higher density in line with LDP Policy DP3: Housing Density, will help reduce impacts. **In terms of managing the introduction of new development** and maintaining adequate infrastructure and services, a series of transport policies and proposals (Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; Proposal T3: Segregated Active Travel Corridor; Policy T4: Active travel Routes and Core Paths as part of the Green network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points; Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; Proposal T15: Old Craighall Junction Improvements; Proposal T16: A1 Junction Improvements at Queen Margaret Drive Interchange; Proposal T17: A1(T) Interchange Improvements; Proposal T18: Land Safeguard for Trunk Road Interchange at Adniston and Eastern Tranent By-pass; Policy T19:

	Transport Improvements to Musselburgh High Street; Proposal T20: Transport Related Air Quality measures: Relocation of Bus Stops; Proposal T21: Musselburgh Urban Traffic Control System; Proposal T22: Reopen Link to Vehicular Access at Queen Margaret drive / Whitehill Farm Road. Proposal T23: Transport Improvements A198 and Meadowmill Roundabout; Proposal T24: Land safeguard for A198 / B1361 Meadowmill Roundabout Improvements; Proposal T25: Land Safeguard for Dualling of A198 and Reconfiguration of Bankton Interchange; Policy T26: Transport Improvements to Tranent Town Centre; Proposal T27: Tranent Town Centre One-way System; Proposal T28: Junction Improvements at Elphinstone Road and Edinburgh Road all seek to provide for improvements to the trunk and local road networks and to the rail network to accommodate the demands of new development. Policies on the approach to education, community and health care facilities (Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals) all seek to ensure that education and community facilities are safeguarded and will be expanded to accommodate the demand generated by new development if required. Policies on open space and play provision (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites) seek to ensure existing open space and play facilities will be protected or enhanced to accommodate new development and that new open space or play facilities will be provided in association with new development. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to material assets. Policies of the LDP ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management (these are dealt with separately under the relevant part of the assessment). It may be that project level EIA is required for some proposals. **Overall, a negative effect on Material Assets is predicted;** - **In terms of development locations,** there are a range of cultural heritage assets in the area such as listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields that will be taken into account, including their settings. Legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the LDP would ensure those impacts are appropriately mitigated. **In terms of managing the introduction of new development** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will help secure related objectives. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework will all seek high quality design, including in relation to cultural heritage. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish project level mitigation. **Overall, a neutral effect on heritage is predicted.** - **In terms of development locations, a**ccommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The proposed strategy approach would continue to focus the majority of East Lothian's population in the west and consolidate the existing settlement patter. However this could lead to the coalescence of settlements or impact upon

	their landscape settings. Yet there may be significant opportunities to strategically mitigate this impact and improve important areas of open space and the green network in this area by implementing national policy objectives such as the CSGN. Relevant LDP Policies include Policy DC7: Development in the Edinburgh Green Belt; Policy DC8: Countryside Around Towns; Policy DC9: Special Landscape Areas; Policy DC10: The Green Network and Policy DC6: Development in the Coastal Area. These policies acting together will seek to direct development to the most appropriate locations and resist it in inappropriate locations. Policies of the LDP will also ensure development of appropriate types and scales can take place within the countryside (this is dealt with separately under the other relevant part of this assessment). **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This included assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites. The following mitigationis included/expected, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level **HRA (signposted in the LDP for certain proposals) or** EIA or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**Dispersed Growth:** Seek to share and spread additional development across East Lothian by focusing on the main settlements within the SDA. Land may also be identified at settlements outwith the SDA if required.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	+	+	+	+	0	+	+	0	0	0	0	-	0	-	+	+	- -	?	?	-	0	0	0	0	0	+	-	0
SUMMARY	+			+			0				0		-		-			- -			-				0	-			
COMMENT	- The alternative strategy may result in a greater scale of development in the main pink footed goose area than the proposed strategy. **This may have more potential to harm the integrity of the Firth of Forth SPA than the proposed approach. However,** this would need to be confirmed through more detailed assessment and the scoping in of particular sites under the Habitats Regulations/Appropriate Assessment. Sites have been screened under the Habitats Regulations as part of the SEA site assessment process. The site specific outcome is at this stage uncertain, and it may be that project level EIA would be required for some proposals. However, it is potentially more likely that negative effects will result from the development of certain sites in the east than the west of the area. Notwithstanding this, with appropriate site design and delivery, this strategy approach offers scope for selective delivery of the Green Network, as well as open space provision to help improve habitat connectivity in East Lothian. It could have positive impacts on biodiversity, flora and fauna and human health. Yet given the more dispersed nature of the alternative strategy, opportunities for creating networks and improving habitat connectivity and woodland planting may be significantly reduced in comparison to the proposed strategy. **Overall, positive effects are predicted for biodiversity, population and associated aspects of human health.** - The strategy may have the effect of diverting development away from areas in greatest need of regeneration in the west of East Lothian, and would instead focus on areas where limited regeneration potential exists, if any. Although the strategy would provide affordable housing in a range of locations across East Lothian, it may reduce the amount of affordable housing that could be provided in areas with most population and housing need and demand. Although this strategy would seek to direct development towards settlements with existing facilities and services, it may have the effect of directing development to less accessible parts of East Lothian, particularly in terms of public transport accessibility and access to employment opportunities in the wider city region. This may not minimise related CO_2 emissions. **Overall, positive effects are predicted for population.** - There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. An air quality management strategy is likely to be needed to complement LDP strategy. It may be that project level EIA would be required for some proposals. **Overall, a neutral effect on human health is predicted.** - The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. It may be that project level EIA or specialist studies (water and drainage impact assessment / flood risk assessment etc.) would be required for some proposals. **Overall, a neutral effect on the water environment is predicted.**																													

	- Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The alternative strategy would not result in the loss of carbon rich or rare soils. Wherever possible, the re-use of previously developed land will be promoted through the strategy, for example at Blindwells. Additionally, the policies of the plan will ensure that land is developed in the most efficient way, through for example through promoting higher density development in appropriate locations. The alternative strategy would also seek to minimise the loss of carbon rich or rare soils as would the policies of the plan. **Overall, a negative effect on soils is predicted.** - While overall CO_2 emissions and transport based particulate matters are likely to increase as a result of overall growth requirements in the area, the alternative strategy would not focus development in the most accessible parts of East Lothian. It would likely result in higher CO_2 emissions and particulate matter than the proposed strategy as it would direct development to less accessible locations and would likely increase the need to travel by car. The more dispersed strategy would also likely increase the distance travelled to access higher level facilities, services and employment opportunities in the wider city region. This would not minimise air quality impacts and CO_2 emissions. **Importantly, based on findings from the Scottish Governments SPACE Tool (see Appendix 3), the alternative dispersed strategy is predicted to result in increased emissions from transport energy use of 7,500 tCO_2eq (tonnes of CO_2 equivalent) per annum (base date 2014), when compared to the proposed strategy. <u>This represents an increase of over 52%.</u>** However, a more dispersed strategy may reduce the impact in certain locations, such as Musselburgh High Street. There is currently an air quality issue in Musselburgh and emerging air quality issues in Tranent and any impact of additional development on air quality will require mitigation. A strategy to manage air quality in Musselburgh ought to be developed alongside the LDP development strategy, to ensure that the mitigation takes into account the likely impact of the LDP strategy. It may be that project level EIA would be required for some proposals. **Overall, a negative effect on Air and a very negative effect on Climatic Factors is predicted.** - In view of the lack of brownfield land available in the area the release of greenfield land is needed. Prioritising the redevelopment of land and making an efficient use of it, for example through developing at higher density, will help reduce impacts. Policies of the LDP will also ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. It may be that project level EIA would be required for some proposals. **Overall, a negative effect on Material Assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish mitigation. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The strategy may help reduce risk of coalescence of settlements in the west, yet it could impact upon the landscape settings of other existing settlements in the east. However there may be opportunities to mitigate this impact and improve important areas of open space and the green network by implementing national policy objectives such as the Central Scotland Green Network, although the dispersed nature of the alternative strategy would make delivery of a well connected network more challenging. It may be that project level EIA or specialist studies

	(e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan will help avoid significant environmental effects where possible. This will include assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These assessments / strategies will also be used to assist in the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis. However, as the plan preparation process progresses, and if significant environmental effects are anticipated, either on a cumulative or on a site by site basis, it will be important that SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees

MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Town Centres

Scottish Planning Policy requires Development Plans to identify a network of town centres, commercial centres, local centres and neighbourhood centres as appropriate and seek to specify the role of certain centres. Development Plans may also establish a hierarchy of centres within the network – e.g. identify a primary centre and / or main town centres that are supported by other local centres etc. The SDP identifies a hierarchy of strategic centres, none of which are in East Lothian. It requires the LDP to identify the network of town and other centres in its area. Once this network is established, a sequential approach to the selection of locations for new retail and commercial leisure proposals is to be followed, consistent with SPP[40] and Policy 3 of the SDP. The LDP should identify a network and hierarchy of centres and their role and function. A key task in this will be to consider if there is any merit in introducing any new centre at Blindwells that could remould and complement the current network and hierarchy.

LDP STRATEGY APPROACH	**Promote a new town centre at Blindwells and also maintain current network and hierarchy of town centres:** Depending on the outcome of work on the expansion of Blindwells, a new higher order town centre or a new town centre may be promoted there, if the scale and nature of growth and access solutions justify and support this. A location would need to be found in the centre of the Blindwells Development Area. The current hierarchy and network of town centres would also be retained. New local centres may also be supported at selected new locations too, if appropriate. In relation to existing town centres the sequential approach would be followed.

[40] Scottish Government SPP paragraph 62-69

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	++	0	++	?	?	?	?	0	0	-	0	-	+	+	-	?	?	+	0	++	0	0	+	+	+	0
SUMMARY	0			++			?				0		-		-			-			++				0	+			

COMMENT

- No direct impact on biodiversity, flora and fauna identified arising specifically from this strategy option. The same is true in relation to open space, habitat and green networks and woodland areas. **In terms of managing the introduction of new development**, the policies of the plan will protect, conserve or enhance biodiversity, flora and fauna as appropriate. **Overall, a neutral effect is predicted in relation to biodiversity.**
- **In terms of the location of new development**, the proposed approach would focus on maintaining the vitality and viability of existing town centres and seek to provide a new town centre at Blindwells. This would be based on a retail capacity assessment, which would seek to ensure that other town centres were not undermined. There may also be scope for new local centres at other select locations. By focusing provision of the majority of additional services, jobs and amenities to meet the associated demands of the growing population at a single new town centre at Blindwells the level of provision there may be enhanced than if this were distributed among existing communities. This is on the basis that existing communities would be able to access such a new town centre via public transport and active travel routes. With an enhanced level of provision at Blindwells, the proposed approach may help contribute to the regeneration of nearby communities in the west of East Lothian, which are currently the most deprived in the county. This would help ensure local access to such services and amenities to those communities in particular. The west of East Lothian is its most accessible part and has good public transport connectivity with the rest of the area and further afield. Offering a wide range of amenities at Blindwells may reduce the need to travel outwith East Lothian to access a location with a wider range of town centre facilities, meaning travel distances may be reduced. All of these factors would help minimise CO_2 emissions. **In terms of managing the introduction of new development**, general urban development policies Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity recognise the importance of vibrant town centres and maintaining access to local service provision as well as protecting amenity, particularly residential amenity. They also recognise the importance of allowing appropriate residential development in such areas. The proposed approach would not impact the provision of affordable housing per se (other than allowing for an increase in the supply of housing, including affordable housing, if appropriate). **Overall, a very positive effect on population is predicted.**
- **In terms of the location of new development**, while accessibility to any new town centre at Blindwells from the wider area would be good, its relationship to open space, active travel routes and green networks is a matter for detailed master plan work. On the basis that provision of facilities locally may result in more active travel, including potentially from surrounding communities, there may be minor health related benefits. **In terms of managing the introduction of new development**, there are unknown impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall an uncertain effect on human health is predicted.**
- **In terms of the location of new development**, the proposed strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. There are flooding issues associated with the Seton Burn and Blindwells; groundwater flood risk is currently controlled but climate change and reliance on pumping may challenge this long term. **In terms of**

	managing the introduction of new development, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective too. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. **Overall a neutral effect on the water environment is predicted.** - **In terms of the location of new development**, given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. However, the provision of a new town centre or town centre of a higher order at Blindwells (PROP BW2) may allow demand for additional retail facilities for the growing population to be provided in a single location instead of potentially many separate greenfield ones on the periphery of existing settlements; overall, this may help minimise the amount of greenfield land developed. Wherever possible, the re-use of previously developed land will also be promoted through the strategy, for example a new town centre at Blindwells may come forward on previously developed land. The proposed strategy would also seek to minimise the loss of prime quality agricultural land and carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils **when managing the introduction of new development**. **Overall, a negative effect on soils is predicted.** - **In terms of the location of new development**, there are currently air quality issues in Musselburgh and concerns in Tranent and any impact of additional development on air quality will require mitigation. Dense Town Centre development could possibly lead to deterioration of air quality However, the impact of this aspect of the strategy on air quality in those towns is uncertain. While particulate matter is likely to increase as a result of the strategy overall, a new town centre in an accessible location providing retailing facilities outwith settlements affected by poor air quality may help provide an alternative location to access town centre facilities for the growing population and thus help mitigate existing air quality issues. This would also be supported by the provision of other local centres where appropriate, in line with Policy T2: Town and Local Centres. This may reduce travel from the area to access such facilities and therefore reduce transport based CO_2 emissions and particulate matter. **In terms of managing the introduction of new development**, Policy NH12: Air Quality will ensure that air quality is maintained and where relevant enhanced with new development. **Overall, negative effect on Air is predicted.** - **In terms of the location of new development**, while CO_2 emissions are likely to increase as a result of the growing population, the proposed strategy will focus a new town centre in a highly accessible part of East Lothian, where there is good public transport accessibility and good local accessibility with the opportunity to extend this into the Blindwells site (See Transport Proposals and Safeguards PROP T13: East Coast Main Line: Four Track Section and New Rail Station and Vehicular Overbridge and PROPT18: Land Safeguard for Trunk Road Interchange at Adniston and Eastern Tranent By-pass). A new town centre at Blindwells may also help minimise the need to travel by car all well as overall travel distances. This could also be supported by the provision of other local centres where appropriate. All of these factors would help minimise CO_2 emissions. **In terms of managing the introduction of new development**, LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vice versa. **Overall, a negative effect on climatic factors is predicted.** - **In terms of the location of new development**, policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. Importantly, the strategy approach would ensure the concentrated provision of additional facilities

	to meet the demand of the growing population and may help secure the critical mass of development needed to provide a wide range and choice of goods and services in a single location and therefore compete with such locations outwith East Lothian. This would also ensure an appropriate and efficient use of land. **In terms of managing the introduction of new development,** LDP Policy T1: Town Centre First Principle would ensure that the vitality and viability of existing town centres is not harmed. **Overall, a very positive effect on material assets is predicted.** - **In terms of the location of new development**, there are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. Legislation and higher level policies prevent these assets being compromised. **In terms of managing the introduction of new development,** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will assist in securing related objectives too. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - **In terms of the location of new development**, accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. However, the proposed strategy would provide a new town centre as part of Blindwells – i.e. as part of a wider development proposal. This would also help minimise the landscape impact of introducing additional town centre facilities for the growing population by providing them a single location instead of many separate locations on the edges of existing settlements. Additionally, parts of the Blindwells area have been previously developed and have little intrinsic landscape quality, and there is no landscape designation in this area. **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a positive effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate

	3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**Maintain current network and hierarchy of town centres**: The current network and hierarchy of town centres and one proposed local centre at Wallyford and one proposed local centre at Blindwells (current allocation) would be retained. New local centres at other selected locations may also be supported, if appropriate. In relation to town centres the sequential approach would be followed.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	+	0	+	?	?	?	?	0	0	- -	0	- -	+	++	- -	?	?	+	0	+	0	0	0	+	-	0
SUMMARY	0			+			?				0		- -		-			- -			+				0	?			
COMMENT	- No direct impact on biodiversity, flora and fauna identified arising specifically from this alternative strategy option and so a neutral impact has been noted. The same is true in relation to open space, and habitat and green networks. **Overall, a neutral effect is predicted in relation to biodiversity.** - The alternative approach would focus on maintaining the vitality and viability of existing town centres. This would be based on a retail capacity assessment, which would establish the potential scope for additional retail / commercial leisure proposals in those areas. This would ensure local access to such services and amenities and potentially help reduce the need and distance that need be travelled. However, due to the consolidated nature of existing town centres the scope for them to accommodate new facilities is limited. This may mean that to enhance provision at existing towns out of centre sites may be needed, consistent with the sequential approach, resulting in trade diversion from existing town centres. Distributing the provision of the additional services, jobs and amenities to meet the demands of the growing population among existing town centres is also likely to dilute the range of such amenities available at any one location, meaning the opportunities for regeneration may not be maximised and that existing East Lothian town centres may not be able to compete with locations elsewhere in the city region that have a wider range of such amenities on offer. Even with the provision of additional facilities at existing towns, and if this were to result in a diluted range of amenities, there is likely to continue to be significant travel demand to access other locations with a wider range of such amenities available at other locations outwith East Lothian. This could mean that travel distances are not reduced and that CO_2 emissions are not minimised. The alternative strategy would not impact on the provision of affordable housing. **Overall, a positive effect on population is predicted.** - On the basis that provision of facilities more locally may result in more active travel, there may be health related benefits but it is uncertain if people would choose to make shopping trips in this way. There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall an uncertain effect on human health is predicted.** - The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. There are flooding issues associated with the Seton Burn and Blindwells; groundwater flood risk is currently controlled but climate change and reliance on pumping may challenge this long term. **Overall a neutral effect on the water environment is predicted.** - Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. Additionally, the policies of the plan will ensure that land is developed in the most efficient way, through for example promoting higher density development in appropriate locations. However, a wider distribution of town centre uses to meet demands of the growing population may result in an increased land take for the provision of such facilities. The alternative approach would																													

	wherever possible re-use previously developed land, for example a new town centre at Blindwells may come forward on previously developed land. The alternative strategy would also seek to minimise the loss of carbon rich or rare soils. **Overall, a very negative effect on soils is predicted.** - There are currently air quality issues in Musselburgh and concerns in Tranent and any impact of additional development on air quality will require mitigation. However, the impact of this aspect of the alternative strategy on air quality in those towns is uncertain. While particulate matter is likely to increase overall, if travel demand to access the wider range of amenities available elsewhere in the city region continues it is likely that through traffic will increase in locations where air quality concerns currently exist, potentially exacerbating existing air quality issues. However, provision of facilities at existing settlements may also reduce trips. This could also be supported by the provision of other local centres where appropriate. **Overall, a negative effect on air is predicted.** - While CO_2 emissions are likely to increase as a result of the growing population, the alternative strategy may result in continued travel demand to access the wider range of amenities available elsewhere in the city region. This means that overall travel distances may not be reduced and that CO_2 emissions may not be minimised. However, the provision of other local centres where appropriate may help minimise travel demand to a degree. **Overall, a very negative effect on climatic factors is predicted.** - Policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. Importantly, the strategy approach would ensure the provision of additional facilities to meet the demand of the growing population and this would also ensure an appropriate and efficient use of land, although under this approach the range of facilities that could be provided may be diluted. **Overall, a positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The alternative strategy would provide additional town centre facilities for the growing population in many separate locations potentially on the edges of existing settlements, which can be sensitive areas in landscape terms and important to the setting of settlements. The landscape impact of this may be more significant than if a single location were able to provide for this development. **Overall, an uncertain effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan will help avoid significant environmental effects where possible. This will include assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These assessments / strategies will also be used to assist in the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis. However, as the plan preparation process progresses, and if significant environmental effects are anticipated, either on a cumulative or on a site by site basis, it will be important that SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites once these are finalised. Building on mitigation set out for the strategy options above, at this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy:

	1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as retail impact assessments, flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Planning for Employment

The approved SDP requires that East Lothian's 76ha employment land supply be maintained[41]. It identifies four strategic employment sites in East Lothian[42]. These are the existing sites at Craighall Business Park at Musselburgh, and other sites at Blindwells, Macmerry and Spott Road Dunbar[43]. The LDP may consider if there are any circumstances where mixed use development on strategic employment sites, including support and ancillary services to employment uses, could be accepted in principle. Although normally to be resisted, opportunities to create mixed communities with housing and retail development alongside strategic employment opportunities may also be considered in the preparation of the LDP. There is scope for non-strategic employment proposals to be removed, added and / or promoted for other uses. Existing strategic employment proposals and / or new strategic employment proposals can be made to be more flexible concerning the mix of land uses that can be developed. For all employment sites alternative policy approaches may be followed, including in relation to existing operational employment areas. However, 76ha of employment land must be retained in the area.

LDP STRATEGY APPROACH	**Promote mixed use strategic and local employment sites**: Maintain the quantity of the current employment land supply.

SEA TOPIC	**BIODIVERSITY**			**POPULATION**			**HEALTH**				**WATER**		**SOIL**		**AIR**			**CLIMATE**			**ASSETS**				**HERITAGE**	**LANDSCAPE**			
QUESTION	**B1**	**B2**	**B3**	**P1**	**P2**	**P3**	**H1**	**H2**	**H3**	**H4**	**W1**	**W2**	**S1**	**S2**	**A1**	**A2**	**A3**	**C1**	**C2**	**C3**	**M1**	**M2**	**M3**	**M4**	**H1**	**L1**	**L2**	**L3**	**L4**
SCORE	0	0	0	++	?	++	0	0	0	0	0	0	-	0	-	++	++	++	0	0	++	0	0	0	0	0	?	?	?
SUMMARY	0			++			0				0		-		-			-			++				0	-			
COMMENT	- **In terms of the location of new development,** no direct impact on biodiversity, flora and fauna identified as arising specifically from this strategy option. The same is true in relation to open space, habitat and green networks and woodland areas. **In terms of managing the introduction of new development,** the LDP policies will seek to ensure that biodiversity, flora and fauna is protected, conserved and where appropriate enhanced. **Overall, a neutral effect is predicted in relation to biodiversity and related human health considerations.** - **In terms of the location of new development,** the proposed approach would seek to promote a wider mix of appropriate land uses on suitable and highly accessible employment sites where appropriate. **In terms of managing the introduction of new development,** where mixed use proposals are promoted, an objective would be to secure the servicing and release of the land for employment use, and to ensure that no harmful																													

[41] SESplan SDP paragraph 93 - 96 and Policy 2
[42] SESplan SDP Figure 8
[43] SESplan SDP Economy Technical Note paragraph 5.3

	impact on amenity would result. This approach could help increase the availability of land which is free of constraints for economic development and facilitate job creation to increase job density in the area. This could also help contribute to regeneration objectives. **Overall, a very positive effect on population is predicted.** - **In terms of the location of new development,** on the basis that provision of jobs locally may result in more active travel, there may be minor health related benefits. **In terms of managing the introduction of new development,** there are unknown impacts in terms of air quality and noise**,** the plan's policies would require these impacts to be mitigated. **Overall a neutral effect on human health is predicted.** - **In terms of the location of new development**, the proposed strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. **In terms of managing the introduction of new development**, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective too. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. **Overall a neutral effect on the water environment is predicted.** - **In terms of the location of new development,** given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. However, the proposed approach would seek to make best use of land already allocated for development to assist in facilitating sustainable economic growth and job creation. This may help minimise the amount of greenfield land needed to accommodate the area's development requirements. Wherever possible, the re-use of previously developed land will also be promoted. The proposed strategy would also seek to minimise the loss of prime quality agricultural land and carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils **when managing the introduction of new development**. **Overall, a negative effect on soils is predicted.** - **In terms of the location of new development,** there are currently air quality issues in Musselburgh and Tranent and any impact of additional development on air quality will require mitigation. However, the impact of this aspect of the strategy on air quality in those towns is uncertain. While particulate matter is likely to increase as a result of the strategy overall, providing new jobs for the growing population throughout the area on mixed use sites, including on strategic sites, may help to significantly reduce the need to travel as well as distance than need be travelled to access employment opportunities once in place. This in turn may help minimise levels of through traffic in areas where air quality is a concern. **In terms of managing the introduction of new development**, Policy NH12: Air Quality will ensure that air quality is maintained and where relevant enhanced with new development. **Overall, a negative effect on Air is predicted.** - **In terms of the location of new development,** while CO_2 emissions are likely to increase as a result of the growing population, the proposed strategy should assist in enabling the development of employment land and job creation in the area and increase job density where there is good public transport accessibility and good local accessibility. All of these factors would help minimise need as well as the distance travelled and thus CO_2 emissions. **In terms of managing the introduction of new development**, LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vise versa. **Overall, a negative effect on climatic factors is predicted.**

	- **In terms of the location of new development,** policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. **In terms of managing the introduction of new development,** Policy EMP1: Employment Locations would help ensure land is available and can be developed for the creation of additional jobs for the growing population. **Overall, a very positive effect on material assets is predicted.** - **In terms of the location of new development,** there are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. Legislation and higher level policies prevent these assets being compromised. **In terms of managing the introduction of new development,** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will assist in securing related objectives too. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - **In terms of development locations**, accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. However, the proposed strategy would provide a new town centre as part of Blindwells – i.e. as part of a wider development proposal. This would also help minimise the landscape impact of introducing additional town centre facilities for the growing population by providing them a single location instead of many separate locations on the edges of existing settlements. Additionally, parts of the Blindwells area have been previously developed and have little intrinsic landscape quality, and there is no landscape designation in this area. However, the approach will need to be addressed through the design process and until then the effects will be uncertain. **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate

	3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**Maintain strategic employment sites for employment and only promote mixed use local employment sites:** Maintain the quantity of the current employment land supply. Retain all existing strategic employment sites as they are. Only review the contribution that existing non-strategic employment sites make to the supply.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	+	?	+	0	0	0	0	0	0	-	0	-	+	+	+	0	0	+	0	0	0	0	0	?	?	?
SUMMARY	0			+			0				0		-		-			-			+				0	-			

COMMENT

- No direct impact on biodiversity, flora and fauna identified as arising specifically from this alternative strategy option. The same is true in relation to open space, habitat and green networks and woodland areas. **Overall, a neutral effect is predicted in relation to biodiversity and related human health considerations.**
- The alternative approach would seek to retain strategic employment sites for employment use, and promote a wider mix of appropriate land uses only on suitable and highly accessible local employment sites where appropriate. In the case of strategic employment sites, these would remain allocated for employment use. Whilst this may maximise the amount of economic development and jobs that could be created in the area, it is unlikely that strategic sites would be developed for that purpose in the short term in view of the constraints to the development of such land. It may be that this approach would to some extent constrain economic development and job creation in the short term. Where mixed use proposals are promoted on local employment sites, an objective would be to secure the servicing and release of the land remaining for employment use. This approach could help increase the availability of some land which is free of constraints for economic development and facilitate job creation to increase job density in the area. This could also help contribute to regeneration objectives, but strategic employment sites may remain undeveloped so the opportunity for regeneration may be diluted. Any mixed use proposals may include housing, including affordable homes, but this is not certain as uses other than housing may be proposed as part of the mix of uses. **Overall, a positive effect on population is predicted.**
- On the basis that provision of some jobs locally may result in some active travel, there may be very minor health related benefits. There are unknown impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall a neutral effect on human health is predicted.**
- The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.**
- Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. However, the approach would seek to make best use of land already allocated for development, or review the contribution that allocated employment land not able to assist in facilitating sustainable economic growth and job creation can make to the strategy. This may help minimise the amount of greenfield land needed to accommodate the area's development requirements. Wherever possible, the re-use of previously developed land will also be promoted. The strategy and policies would seek to minimise the loss of carbon rich or rare soils. **Overall, a negative effect on soils is predicted.**
- There are currently air quality issues in Musselburgh and Tranent and any impact of additional development on air quality will require mitigation. However, the impact of the alternative strategy on air quality in those towns is uncertain. While particulate matter is likely to increase as a result

	of the strategy overall, providing new jobs for the growing population locally on mixed use sites may help reduce the need to travel as well as distance than need be travelled to access employment opportunities once in place. This in turn may help minimise levels of through traffic in areas where air quality is a concern, although if the ability to deliver strategic employment sites is less the opportunity to reduce the need to travel as well as travel distances may be reduced. **Overall, a negative effect on Air is predicted.** - While CO_2 emissions are likely to increase as a result of the growing population, the proposed strategy should assist in enabling the development of employment land and job creation in the area and increase job density where there is good public transport accessibility and good local accessibility, albeit that the scope for this may be reduced should strategic employment sites not be developed. All of these factors would help minimise CO_2 emissions. **Overall, a negative effect on climatic factors is predicted.** - Policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. Importantly, the strategy approach would help ensure some land is available and can be developed for the creation of additional jobs for the growing population. **Overall, a positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. However, the alternative strategy would provide land for economic development locally as part of a mixed development proposal. This could help minimise the landscape impact of accommodating development requirements and creating job opportunities the growing population by providing them in a few select locations instead of many separate locations (albeit that strategic employment sites could not contribute to this under the alternative approach) but this is dependent on site selection and the impact is uncertain. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan will help avoid significant environmental effects where possible. This will include assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These assessments / strategies will also be used to assist in the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis. However, as the plan preparation process progresses, and if significant environmental effects are anticipated, either on a cumulative or on a site by site basis, it will be important that SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites once these are finalised. Building on mitigation set out for the strategy options above, at this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs /** masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs /** masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as retail impact assessments, flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Planning for Housing

The SDP's approach to planning for housing is to set a housing requirement. The LDP must make enough housing land available that can be developed to meet the requirement. In East Lothian's case this is 6,250 homes to 2019 and a further 3,800 homes in the period 2019 – 2024. Overall, the housing requirement for the area is 10,050 homes to 2024.

LDP STRATEGY APPROACH	**Plan for a longer term housing strategy:** Conform to the approved SDP and identify land which is able to be developed to deliver 6,250 homes to 2019 and a further 3,800 homes in the period 2019 – 2024, but do not limit the scale of land release to that which is needed to meet only those requirements. An effective five year housing land supply would be maintained at all times. The approach would also seek to find land within which an expanded Blindwells could be developed, subject to appropriate phasing and comprehensive solutions being agreed, otherwise potential expansion land would be safeguarded.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	++	++	++	++	++	++	++	0	0	0	0	- -	0	- -	++	++	- -	0	0	++	0	++	0	0	0	-	-	0
SUMMARY	++			++			+				0		- -		-			-			++				0	-			

COMMENT

- **In terms of the location of new development,** discussion with SNH on focusing development in the west suggested that the strategy could be accommodated without causing significant harm to the Firth of Forth SPA. The strategy has been the subject of more detailed assessment and the assessment of proposed sites under the Habitats Regulations/Appropriate Assessment. Where required policy, proposal or site specific mitigation has been identified. This includes PROP MH16: Levenhall Links to Prestonpans: Area for Habitat Improvement which states that the Council will manage an area of land to improve the availability of suitable habitat for qualifying interests of the Firth of Forth SPA. Project level **HRA will be** required and EIA may be required for some proposals on some sites. With appropriate masterplanning and delivery, the long term strategy offers significant scope for identifying significant and strategic opportunities for improvement and enhancement of the Green Network, active travel, woodland planting, open space provision and habitat connectivity in East Lothian as part of the approach to planning for new housing. **In terms of managing the introduction of new development**, the policies of the plan will protect, conserve or enhance biodiversity, flora and fauna as appropriate. **Overall, very positive effects are predicted for biodiversity, population and certain aspects of human health.**
- **In terms of the location of new development,** the longer term approach to planning for housing seeks to promote a wider mix of appropriate land uses including housing on suitable and highly accessible strategic sites where appropriate. **In terms of managing the introduction of new development**, where mixed use proposals are promoted, as part of creating mixed communities the policies of the LDP seek to secure where appropriate the servicing and release of land for other uses too, including for economic development to facilitate job creation and to increase job density in the area in close proximity to new housing; to increase the availability of affordable housing; to provide community services and facilities and to contribute to regeneration objectives. Realising the full potential of Blindwells will be particularly important in this regard.

	Provision of community infrastructure and services may also be better planned for as part of a longer term strategy, since it would be clearer what level of demand and hence capacity and facilities would be required. Funding requirements and solutions, as well as delivery mechanisms (including the need for any new land that would be required as part of the strategy to provide additional facilities for service provision in the longer term) may become clearer as part of a longer term strategy. **Overall, a very positive effect on population and certain aspects of human health and material assets is predicted.** - **In terms of the location of new development,** in terms of the other aspects of human health considered, there are uncertain impacts on air quality and noise. **In terms of managing the introduction of new development**, LDP Policies NH12: Air Quality and NH13: Noise would require these impacts to be mitigated and so a neutral impact on these is predicted. **Overall, a positive effect on human health is predicted.** - **In terms of the location of new development**, the LDP strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. There are flooding issues associated with the Seton Burn and Blindwells; groundwater flood risk is currently controlled but climate change and reliance on pumping may challenge this long term. **In terms of managing the introduction of new development**, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective too. The plan's policies will also ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. **Overall a neutral effect on the water environment is predicted.** - **In terms of the location of new development**, given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The LDP strategy would require more development land than the minimum necessary to meet the SDP's known development requirements. Yet that additional land could contribute towards meeting signposted need and demand for housing in the area. Wherever possible, the re-use of previously developed land will also be promoted and an efficient use of land will be sought, for example through setting density targets for new housing development through LDP Policy DP3: Housing Density. The LDP strategy would also seek to minimise the loss of prime quality agricultural land and carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils **when managing the introduction of new development**. **Overall, a very negative effect on soils is predicted.** - **In terms of the location of new development**, while particulate matter is likely to increase as a result of the strategy overall, there are currently air quality issues in Musselburgh and Tranent and any impact of additional development beyond the SDP's requirements on air quality will also require mitigation. The Musselburgh Air Quality Strategy has been drawn up to address some of the air quality problems. However, as part of a longer term strategy there is the opportunity to think of longer term solutions as part of the mitigation. Importantly, as part of a longer term approach larger mixed communities may be created on strategic sites with other benefits in terms of the strategic integration of the green network and active travel options through such sites to help reduce the need to travel and distances travelled as well as encouraging alternative modes of transport. **In terms of managing the introduction of new development**, Policy NH12: Air Quality will ensure that air quality is maintained and where relevant enhanced with new development. **Overall, a negative effect on Air is predicted.**

	- **In terms of the location of new development**, while CO_2 emissions are likely to increase as a result of the growing population, the LDP strategy would seek to accommodate more homes than the minimum required by the SDP. However, the strategy would also seek to increase population density where there is good public transport accessibility and good local accessibility. A longer term approach may also help to justify the creation of larger more self contained mixed communities, where homes and jobs as well as other services and amenities are located side by side, thereby reducing the need to as well as distance that need be travelled. A longer term approach may also help identify the need for and justify a step change in public transport infrastructure and service provision to serve the growing population. All of these factors would help minimise CO_2 emissions. **In terms of managing the introduction of new development**, LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vise versa. **Overall, a negative effect on climatic factors is predicted.** - **In terms of the location of new development**, policies of the LDP ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The longer term strategy would help ensure land is available and can be developed for the creation of infrastructure and facilities for the growing population. Importantly, a longer term approach may also allow the infrastructure planning for the area to be aligned better with the development strategy. In particular it may help to clearly identify the need for, justify and provide time to find funding solutions and delivery mechanisms that can achieve a step change in the nature of infrastructure provision in line with the growth in population. Although greenfield land would be developed, it would be developed in such a way that could help ensure an efficient use of land, and could be used to help better integrate land use and transport, particularly public transport. **Overall, a very positive effect on material assets is predicted.** - **In terms of the location of new development,** there are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. Legislation and higher level policies prevent these assets being compromised. **In terms of managing the introduction of new development,** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will assist in securing related objectives too. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - **In terms of the location of new development,** accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed in the area. However, the proposed strategy would provide more land than the minimum required to accommodate the SDP's development requirements so the impact would increase. This may mean that settlements develop closer together and that changes to the existing settlement pattern would arise. However, appropriate site selection, master planning and other policy initiatives, including the CSGN, could help minimise the landscape impact of this significantly. Additionally, a longer term approach may allow a few select locations to be the focus of future development, infrastructure provision, investment and funding solutions instead of many separate locations. As such, cumulative impact may be reduced, but this is dependent on site selection and infrastructure solutions and the impact is uncertain. **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing

	Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This included assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These assessments / strategies were used to assist in the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees

MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**Plan to meet known housing requirements:** Conform to the approved SDP and identify land which is able to be developed to deliver 6,250 homes to 2019 and a further 3,800 homes 2019 – 2024 prioritising locations within the SDA, but limit the scale of land release in so far as possible to that which is needed to meet only those requirements. An effective five year housing land supply would be maintained at all times. The approach would seek to find land within which an expanded Blindwells could be developed, subject to appropriate phasing and comprehensive solutions being agreed, otherwise potential expansion land would be safeguarded.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTIONS	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	+	+	+	+	+	+	+	?	?	0	0	-	0	-	+	+	-	0	0	+	0	+	0	0	0	-	-	0
SUMMARY	+			+			+				0		-		-			-			+				0	-			

COMMENT	- Early discussion with SNH suggests that the alternative approach could be accommodated without causing significant harm to the Firth of Forth SPA. However, this needs to be confirmed through more detailed assessment and the scoping in of proposed sites under the Habitats Regulations/Appropriate Assessment. Candidate sites have been screened under the Habitats Regulations as part of the SEA site assessment process and will be included in HRA as appropriate. The site specific outcome is at this stage uncertain. However, with appropriate master planning and delivery, the alternative strategy offers opportunities for improvement and enhancement of the Green Network, active travel, woodland planting, open space provision and habitat connectivity in East Lothian as part of the approach to planning for new housing, albeit to a lesser extent than if a longer term strategic approach were to be followed. **Overall, positive effects are predicted for biodiversity, population and certain aspects of human health.** - The alternative approach to planning for housing would seek to promote a mix of appropriate land uses including housing on suitable and highly accessible sites where appropriate. Where mixed use proposals are promoted, as part of creating mixed communities, an objective would be to secure the servicing and release of land for other uses too, including for economic development to facilitate job creation and increase job density

	in the area in close proximity to new housing. This could also help increase the availability of affordable housing and contribute to regeneration objectives. Realising the full potential of Blindwells will be particularly important in this regard. Provision of community infrastructure and services would also be required. However, it may be more difficult to establish appropriate infrastructure requirements and to deliver them if the approach to assessing likely demand is focused only on the short to medium term. **Overall, a positive effect on population and certain aspects of human health and material assets is predicted.** - In terms of the other aspects of human health considered, there are unknown impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall, a positive effect on human health is predicted.** - The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. There are flooding issues associated with the Seton Burn and Blindwells; groundwater flood risk is currently controlled but climate change and reliance on pumping may challenge this long term. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.** - Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. Under the alternative strategy the land release would be limited to that necessary to meet the SDP's known development requirements. Wherever possible, the re-use of previously developed land will be promoted and an efficient use of land will be sought, for example through setting density targets for new housing development. The alternative strategy would also seek to minimise the loss of carbon rich or rare soils. **Overall, a negative effect on soils is predicted.** - While particulate matter is likely to increase as a result of the strategy overall, there are currently air quality issues in Musselburgh and Tranent and any impact of development to meet the SDP's requirements on air quality will require mitigation as part of any air quality management strategy. The integration of the green network and active travel options through such sites may help encourage alternative modes of transport. **Overall, negative effect on air is predicted.** - While CO_2 emissions are likely to increase as a result of the growing population, the alternative strategy would also seek to increase population density where there is good public transport accessibility and good local accessibility. In the creation of larger more self sufficient mixed communities, homes, jobs as well as other services and amenities can be located side by side, thereby reducing the need to as well as distance that need be travelled. However, it may be difficult to justify a step change in public transport infrastructure and service provision to serve the growing population in comparison to a longer term approach. All of these factors would help minimise CO_2 emissions. **Overall, a negative effect on climatic factors is predicted.** - Policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The alternative strategy would help ensure land is available and can be developed for the creation of additional infrastructure and facilities for the growing population, but the absence of a longer term view may mean opportunities for longer term efficiencies may be overlooked. The alternative strategy would also ensure an efficient use of land, but perhaps to a lesser extent than may be possible under the proposed approach since sub-optimal infrastructure solutions may result. **Overall, a positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where

	development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed in the area. The alternative strategy would minimise the amount of land provided to accommodate the SDP's development requirements so landscape impact in the short to medium term may be reduced. However, in to the longer term landscape impact may be greater as opportunities to plan longer term are lost; site selection based on short to medium term requirements only may close opportunities to lessen cumulative landscape impact in the longer term, including in terms of advance structural planting. However, this is dependent on site selection and masterplan and delivery solutions and the impact is uncertain. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan will help avoid significant environmental effects where possible. This will include assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These assessments / strategies will also be used to assist in the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis. However, as the plan preparation process progresses, and if significant environmental effects are anticipated, either on a cumulative or on a site by site basis, it will be important that SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites once these are finalised. Building on mitigation set out for the strategy options above, at this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as retail impact assessments, flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Green Belt

Edinburgh Green Belt boundaries are to be defined by the LDP, ensuring that the strategic growth requirements of the SDP can be accommodated. It does not follow that green belt boundaries need to be modified in East Lothian, however, directing growth beyond the green belt, particularly housing, would increase distance between new homes and the origin of demand as well as do the same in relation to their proximity to the existing main centres of employment. This in turn may generate a need to commute longer distances, including by private car, and increase $C0_2$ emissions. These matters need to be considered as part of the spatial strategy and when selecting development sites.

LDP STRATEGY APPROACH	**Modify the boundaries of the Edinburgh Green Belt:** Only release land from the Green Belt for built development if it is justified by a need to accommodate strategic development and it would direct development to more suitable sites; if the coalescence of settlements would be a consequence, then this will only be supported if the advantages of the site in question clearly outweigh those of other sites *and* the resultant loss of settlement identity that would arise from its development; and if new long term and defensible Green Belt boundaries could be defined.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4

SCORE	?	++	++	++	++	++	++	++	?	?	0	0	-	0	-	++	++	-	0	0	++	0	++	0	0	0	-	-	0
SUMMARY	++			++			+				0		-		-			-			++				0	-			

COMMENT

- **In terms of the location of new development,** discussion with SNH on focusing development in the west suggested that the strategy could be accommodated without causing significant harm to the Firth of Forth SPA. This has been the subject of more detailed assessment and the assessment of proposed sites under the Habitats Regulations/Appropriate Assessment. Where required policy, proposal or site specific mitigation has been identified, and for some sites it may be that project level EIA **and HRA** would be required for some proposals. However, with appropriate master planning and delivery, the strategy offers significant scope for identifying significant and strategic opportunities for improvement and enhancement of the Green Network, active travel, woodland planting, open space provision and habitat connectivity as part of the development of sites. **In terms of managing the introduction of new development**, the policies of the plan will protect, conserve or enhance biodiversity, flora and fauna as appropriate. **Overall, very positive effects are predicted for biodiversity, population and certain aspects of human health.**
- The LDP strategy approach allows the release of suitable and highly accessible strategic sites from the green belt where appropriate. As part of considering green belt land release the ability to assist regeneration objectives was another consideration, since there are communities within the current green belt that offer regeneration potential. As part of this another objective is to create mixed communities and to secure the servicing and release of land for other uses too, including for economic development to facilitate job creation and increase job density in the area. This should also help increase the availability of affordable housing and further contribute to regeneration objectives. In addition, parts of the current green belt are also highly accessible and well served by a range of public transport modes. This, in combination with the proximity of and good accessibility to services, facilities and employment locally and in the wider city region, means that there are also opportunities to reduce travel distances and CO_2 emissions. Opportunities for improved access to the countryside for recreation and for active travel may also result. **Overall, a very positive effect on population and certain aspects of human health and material assets is predicted.**
- **In terms of the location of new development** and its effect on other aspects of human health considered, there are unknown impacts in terms of air quality and noise. **In terms of managing the introduction of new development**, LDP Policies NH12: Air Quality and NH13: Noise require these impacts to be mitigated and so a neutral impact on these is predicted. **Overall, a positive effect on human health is predicted.**
- **In terms of the location of new development**, the LDP strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. **In terms of managing the introduction of new development**, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) help secure this objective too. The plan's policies aim to ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. **Overall a neutral effect on the water environment is predicted.**
- **In terms of the location of new development**, given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. However, the LDP strategy would result in the development of land in the green belt, much of which is prime quality agricultural land. However, an efficient use of land will be sought, for example through setting density targets for new housing development through Policy DP3: Housing Density. The strategy also seeks to minimise

	the loss of prime quality agricultural land and carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils **when managing the introduction of new development**. **Overall, a negative effect on soils is predicted.** - **In terms of the location of new development**, while particulate matter is likely to increase as a result of the strategy overall, there are currently air quality issues in Musselburgh and Tranent and any impact of additional development on air quality will also require mitigation. Importantly, mixed communities may be created on strategic sites with other benefits in terms of the integration of the green network and active travel options through such sites to help reduce the need to travel and distances travelled as well as encouraging alternative modes of transport. In addition, parts of the green belt are highly accessible by a range of transport modes, including public transport, and are in close proximity to a range of local services, amenities and facilities as well as those on offer in the city region more widely. This could help reduce the need to travel as well as the distances that need be travelled and therefore help reduce emissions and particulate matter. **In terms of managing the introduction of new development**, Policy NH12: Air Quality will ensure that air quality is maintained and where relevant enhanced with new development. **Overall, a negative effect on air is predicted.** - **In terms of the location of new development**, while CO_2 emissions are likely to increase as a result of the growing population, the LDP strategy seeks to increase population density where there is good public transport accessibility and good local accessibility as well as to introduce new development nearer to existing employment, services and amenities in the wider city region. It may also help to justify the creation of larger more self sufficient mixed communities, where homes and jobs as well as other services and amenities are located side by side, thereby reducing the need to as well as distance that need be travelled. All of these factors would help minimise CO_2 emissions. **In terms of managing the introduction of new development**, LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vice versa. **Overall, a negative effect on climatic factors is predicted.** - **In terms of the location of new development**, policies of the LDP ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The LDP strategy would focus the release of land from the green belt in highly accessible locations. This would help ensure an efficient use of land and existing infrastructure and could be used to help better integrate land use and transport, particularly public transport. **Overall, a very positive effect on material assets is predicted.** - **In terms of the location of new development**, there are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. **The impacts of settlement coalescence on the character and identify of settlements and on features such as non-inventory designed landscapes or other non-designated sites will also be considered.** **In terms of managing the introduction of new development,** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will assist in securing related objectives too. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.**

	- **In terms of the location of new development**, accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed in the area. However, the LDP strategy will mean that settlements develop closer together and that changes to the existing settlement pattern would arise. However, the implication of proposals to release land from the green belt in adjoining local authority areas may mean that the importance of some areas of land in East Lothian to maintaining green belt objectives is questionable in landscape terms. Appropriate site selection and master planning could help minimise landscape impact significantly, particularly if consideration is given to such mitigation on a strategic basis – e.g. how its provision might be co-ordinated across local authority boundaries and delivered strategically as part of other policy initiatives including the CSGN. In this way cumulative impact may be reduced and wider benefits secured, such as improving access to the countryside for recreation and enhancing active travel opportunities, but this is dependent on site selection, master planning and infrastructure solutions and the impact is uncertain. **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites;; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**Do not modify the boundaries of the Edinburgh Green Belt:** Promote no change to green belt boundaries and make no change to the uses and type of development that would be considered appropriate in the Green Belt.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	+	+	+	+	+	+	+	0	0	0	0	-	0	- -	+	+	- -	0	0	+	0	+	0	0	0	+	-	0
SUMMARY	+			+			+				0		-		- -			- -			+				0	-			
COMMENT	- Early discussion with SNH suggests that the SDP's development requirements could be accommodated in East Lothian without causing significant harm to the Firth of Forth SPA. However, this needs to be confirmed through more detailed assessment and the scoping in of proposed sites under the Habitats Regulations/Appropriate Assessment. Candidate sites have been screened under the Habitats Regulations as part of the SEA site assessment process and will be included in HRA as appropriate. Whilst land within the green belt is not recognised as having a very strong connection to the SPA, due to the more dispersed settlement pattern in the east of East Lothian areas of countryside particularly to the north are recognised as key feeding grounds for protected species and therefore important to the overall integrity of the SPA. The site specific outcome of																													

	any related assessment is at this stage uncertain, yet it may be that unacceptable impacts may be found. With appropriate master planning and delivery, the alternative approach offers scope for improvement and enhancement of the Green Network, active travel, woodland planting, open space provision and habitat connectivity as part of the development of appropriate sites, albeit to a lesser extent than if a more compact strategic approach were to be followed. **Overall, positive effects are predicted for biodiversity, population and certain aspects of human health.** - The alternative approach would allow the release of suitable and accessible sites for development outwith the green belt where appropriate. However, the ability to assist regeneration objectives, provide housing including affordable housing as well as employment opportunities and to improve the range of facilities and amenities would be diluted where regeneration potential and a significant need and demand for housing and need for employment opportunities exist. In addition, although some land out with the current green belt is highly accessible and well served by a range of public transport modes, this is to a lesser extent than some land within the current green belt. This, in combination with the distances between the wider range of services, facilities and employment in the wider city region and land beyond the green belt in East Lothian means opportunities to improve active travel and reduce travel distances and CO_2 emissions would also be diluted. **Overall, a positive effect on population and certain aspects of human health and material assets is predicted.** - In terms of the other aspects of human health considered, there are unknown impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. A neutral impact is predicated in relation to these issues. **Overall, a positive effect on human health is predicted.** - The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.** - Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The alternative strategy would result in the development of prime quality agricultural land, although beyond the green belt in some locations the quality of prime agricultural land is categorised as being of lower quality. Whilst this may help avoid the loss of the best prime quality agricultural land, the selection of sites cannot be informed on this basis alone. Notwithstanding this, an efficient use of land will be sought, for example through setting density targets for new housing development. The alternative strategy and policies would also seek to minimise the loss of carbon rich or rare soils. **Overall, a negative effect on soils is predicted.** - While particulate matter is likely to increase as a result of the strategy overall, there are currently air quality issues in Musselburgh and Tranent and any impact of additional development on air quality will require mitigation. Importantly, while some land outwith the green belt is highly accessible by a range of transport modes and to a range of local services, amenities and facilities, distributing development beyond the green belt will likely increase the distances that need be travelled to access the wider range of jobs, facilities and employment opportunities available elsewhere in the wider city region. This could increase through traffic in areas where air quality is or is an emerging concern. Consequentially, the alternative strategy may have an increased impact on air quality. **Overall, very negative effect on air is predicted.** - While CO_2 emissions are likely to increase as a result of the growing population, the alternative strategy would seek to increase population density where there is good public transport accessibility and good local accessibility, yet it would distribute new development farther from locations that are the most accessible in East Lothian and also form the existing employment, services and amenities available in the wider city region. This

	is likely to increase the need to as well as distance that need be travelled. All of these factors would not help to minimise CO_2 emissions. **Overall, a very negative effect on climatic factors is predicted.** - Policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The alternative strategy would focus the release of land in highly accessible locations out with the green belt, although there is land which is more accessible within the green belt. This would help ensure an efficient use of land and existing infrastructure and integrate land use and transport, particularly public transport. **Overall, a positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed in the area. However, whilst the alternative strategy would allow the separate identity of settlements to be protected, it would mean that settlements beyond the green belt would need to be expanded and it is likely that significant changes to their form and structure would be required. However, appropriate site selection and master planning could help minimise landscape impact significantly, particularly if consideration is given to how this might be delivered as part of other policy initiatives including the Central Scotland Green Network. In this way landscape impact may be reduced and wider benefits secured, such as improving access to the countryside for recreation and enhancing active travel opportunities, but this is dependent on site selection, master planning and infrastructure solutions and the impact is uncertain. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan will help avoid significant environmental effects where possible. This will include assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These assessments / strategies will also be used to assist in the site selection process and to help identify any necessary mitigation on a cumulative and site by site basis. However, as the plan preparation process progresses, and if significant environmental effects are anticipated, either on a cumulative or on a site by site basis, it will be important that SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites once these are finalised. Building on mitigation set out for the strategy options above, at this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies** **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as retail impact assessments, flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Countryside Around Towns

The SDP supports the creation of other countryside designations which would perform a similar role to a Green Belt designation, such as Countryside Around Town (CAT) designations[44]. The LDP can consider and justify if there is a role for any such designation in its area, what this may achieve and where any such designations would be applied. In these circumstances, opportunities to contribute to the objectives of the CSGN are also to be identified.

[44] SESplan SDP Policy 13 and paragraph 132.

LDP STRATEGY APPROACH	**Introduce Countryside Around Town designations:** This designation has been applied where the setting and identity of settlements or landscape features not in or adjacent to the green belt merit protection from significant built development.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTIONS	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	++	++	++	0	0	0	0	++	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	++	++	++	++
SUMMARY	++			0			+				0		0		0			0			0				+	++			

COMMENT

- The LDP strategy approach identifies significant and strategic opportunities for the protection and enhancement of areas or landscape features which are important, for example to the setting of settlements and / or important landscape features. The policy also supports other polices and strategies, for example those in respect of the CSGN, core paths and active travel / countryside recreation, as well as any woodland planting strategies, open space provision, flood risk mitigation and avoidance and habitat connectivity. **Overall, very positive effects are predicted for biodiversity and certain aspects of human health.**
- The LDP strategy approach would have a neutral impact on regeneration objectives and the availability of affordable housing, and of itself it is unlikely to increase access to local services and facilities. **Overall, a neutral effect on population is predicted.**
- In terms of the other aspects of human health considered, there are neutral impacts in terms of air quality and noise. **Overall, a positive effect on human health is predicted.**
- Whilst the LDP strategy approach could be combined with consideration of areas of flood risk, for example to help ensure that development on functional flood plains is avoided, other plan policies would be the primary vehicle to ensure that the risk of flooding is not increased as a result of new development in the area. Other plan policies would also ensure that the ecological status of the water environment is maintained or enhanced. (Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; Policy NH9: Water Environment (including Advice Box 6);) **Overall a neutral effect on the water environment is predicted.**
- Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The primary purpose of this LDP policy is landscape based, although it may lead to the protection of some prime quality agricultural land from built development. Other policies would seek to minimise the loss of prime quality agricultural land, carbon rich or rare soils Policy NH7: Protecting Soils. **Overall, neutral effect on soils is predicted.**
- It is unlikely that the LDP strategy approach would have any impact on air quality. **Overall, a neutral effect on air is predicted.**
- It is unlikely that the LDP strategy approach would have any impact on climate, although it may be combined with other policies such as on flooding (Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; Policy NH9: Water Environment (including Advice Box 6); as explained above. **Overall, a neutral effect on climatic factors is predicted.**

	- It is unlikely that the LDP strategy approach would have any significant impact on material assets, although it may help to encourage the redevelopment of brownfield land. **Overall, a neutral effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. Whilst legislation and higher level / other plan policies (Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies) will prevent these assets being compromised, the LDP strategy approach combines with these other policies to give added protection to some cultural heritage assets. **The impacts of settlement coalescence on the character and identify of settlements and on features such as non-inventory designed landscapes or other non-designated sites will also be considered.** **Overall, a positive effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed. However, the approach means that some areas important to the character and appearance of the area and its settlements and landscape features are protected. The same is true in terms of avoiding the coalescence of some settlements beyond the green belt. It will manage windfall development by steering development to locations which are less sensitive in landscape and / or environmental terms. The approach might be usefully co-ordinated with other policy initiatives including the CSGN. In this way impact may be reduced and wider benefits secured. **Overall, a very positive effect on landscape is predicted.**
MITIGATION	None
MONITORING	Adoption of the LDP with such new policy designations

MIR REASONABLE ALTERNATIVE	**Do not Introduce Countryside Around Town designations.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	-	0
SUMMARY	0			0			0				0		0		0			0			0				-	-			
COMMENT	- Natural heritage sites will benefit from specific policy protection so the absence of a Countryside Around Town or Important Countryside designation would have a neutral impact on biodiversity. **Overall, a neutral effect on biodiversity is predicted.**																												

	- The alternative approach would have a neutral impact on regeneration objectives and the availability of affordable housing and opportunities to combine with the open space network and Central Scotland Green Network would be lost. **Overall, a neutral effect on population is predicted.** - In terms of the other aspects of human health considered, there are neutral impacts in terms of air quality and noise. **Overall, a neutral effect on human health is predicted.** - Other plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.** - Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. Other plan policies would also seek to minimise the loss of carbon rich or rare soils. **Overall, neutral effect on soils is predicted.** - It is unlikely that the alternative approach would have any impact on air quality. **Overall, a neutral effect on air is predicted.** - It is unlikely that the alternative approach would have any impact on climate. **Overall, a neutral effect on climatic factors is predicted.** - It is unlikely that the alternative approach would have any impact on material assets. **Overall, a neutral effect on material assets is predicted.** - Although many cultural heritage assets already benefit from policy protection, there are some which remain unprotected and which would benefit from some protection, such as non inventory designed landscapes. **Overall, a negative effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed. However, this alternative approach offers no designation for the protection of areas which are important to the setting of settlements and / or important landscape features. The assessment of an areas importance would need to be on a case by case basis, but this would not acknowledge that, in the Councils view, it would be better to offer some clarity on where development should and should not occur. This is a particular issue in view of Policy 7 of the SDP. There would be benefit in a local policy which seeks to highlight in advance areas important to the character of the settlement and local area to help steer windfall development, whether brought forward under policy 7 or not, away from areas important to the character of a settlement or the local area. **Overall, a negative effect on landscape is predicted.**
MITIGATION	None
MONITORING	None

Central Scotland Green Network (CSGN)

In relation to the Central Scotland Green Network (CSGN), the LDP is to support this national development and seek synergy between it and other initiatives that may be promoted by the LDP or more widely, such as by Scottish Natural Heritage, the Forestry Commission as well as SESplan. The LDP must support GSGN objectives, and identify opportunities to further its extension. There may be synergies between CSGN objectives, the green belt and any Countryside Around Town designations.

LDP STRATEGY APPROACH	**General strategy supported by Supplementary Planning Guidance:** Illustrate CSGN objectives on a general strategy plan for the LDP. Use LDP policies and proposals to provide protection to existing features that contribute to CSGN objectives in this strategy area, and seek to further the extension of them and, wherever possible, make connections between them, including in the development of sites. In addition, supplementary planning guidance will be prepared to explain how CSGN objectives will be delivered.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	++	++	++	++	++	++	++	++	0	0	0	0	0	0	0	++	++	++	0	++	++	0	++	0	0	0	++	++	++
SUMMARY	++			++			++				+		0		++			++			++				0	++			

COMMENT

- The LDP approach offers scope for identifying significant and strategic opportunities for improvement and enhancement of the Green Network, active travel, woodland planting, open space provision, habitat connectivity and nature conservation interests. The addition of supplementary planning guidance will also help detail how this might be achieved as part of the development of sites. It may also be used to identify priority projects for which funding / assistance can be sought and therefore assist to deliver aspects of green network creation or improvement. **Overall, very positive effects are predicted for biodiversity, population and certain aspects of human health.**
- The LDP strategy approach would promote the creation of a green network and assist regeneration objectives, particularly in the west of East Lothian where most regeneration potential exists. The green network also provides opportunities to improve access to the countryside for recreation and for active travel routes to be created, and thus to reduce travel distances and CO_2 emissions, and improve human health. **Overall, a very positive effect on population and certain aspects of human health and material assets is predicted.**
- In terms of the other aspects of human health considered, there are neutral impacts on noise and air quality. **Overall, a very positive effect on human health is predicted.**
- The Central Scotland Green Network could improve habitats with benefits for the ecological quality of the water environment, as well as enhancing its recreational value and helping to manage flood risk by safeguarding some areas from built development and also allowing them to become multifunctional green spaces. However, other plan policies would ensure that the risk of flooding is not increased. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a positive effect on the water environment is predicted.**
- There are neutral impacts on prime agricultural land and carbon rich and rare soils. **Overall, a neutral effect on soils is predicted.**
- The integration of the green network and its open space and active travel options could help reduce the need to travel and distances travelled as well as encouraging alternative modes of transport. This could help reduce particulate matter. **Overall, a very positive effect on air is predicted.**
- While CO_2 emissions are likely to increase as a result of the growing population, the creation of the green network will improve active travel routes and provide improved access to open space and recreational opportunities locally and thereby reduce the need to as well as distance that need

	be travelled. All of these factors would help minimise CO_2 emissions. In addition, the greening of the area, particularly through woodland planting, will help to lock carbon and reduce atmospheric concentrations of CO_2. **Overall, a very positive effect on climatic factors is predicted.** - Policies of the LDP ensure minerals safeguarding (Policy MIN1: Protection of Mineral Reserves; Proposal MIN2: Safeguarding Oxwellmains Quarry; Proposal MIN3: Safeguarding Longyester and Skateraw Sand and Gravel Quarries; Proposal MIN4: Safeguard Bangley and Markle Mains Hard Rock Quarries; Policy MIN5: Mineral Resources) where appropriate, appropriate infrastructure provision (Policy DEL1: Infrastructure and facilities provision, Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; (Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green Network Strategy; Proposal T5: Cycle Route Network, and sustainable waste management (Policy W1: Waste Management Safeguards). The creation of the green network will assist in creating multi-functional green spaces and thus will help ensure an efficient use of land and existing infrastructure and could be used to help better integrate land use and transport, particularly active travel. The existence of a multifunctional green network is also a significant material asset in its own right. **Overall, a very positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. Legislation and higher level policies prevent these assets being compromised. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed. However, contribution to the CSGN will help to reduce the cumulative impact of development in the area and also secure wider benefits, such as improving access to the countryside for recreation and enhancing active travel opportunities. **Overall, a very positive effect on landscape is predicted.**
MITIGATION	None
MONITORING	Adoption of the LDP with such new strategy and policy approach, including supplementary planning guidance. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**General strategy with no supplementary planning guidance:** Illustrate CSGN objectives on a general strategy plan for the LDP. Use the policies and proposals of the LDP to provide protection to existing features that contribute to CSGN objectives, and seek to protect and further the extension of these features and, wherever possible, make connections between them, including in site development.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	+	+	+	+	+	+	+	+	0	0	0	0	0	0	0	+	+	+	0	+	+	0	+	0	0	0	+	+	+
SUMMARY	+			+			+				0		0		+			+			+				0	+			

COMMENT	- The approach offers scope for identifying significant and strategic opportunities for improvement and enhancement of the Green Network, active travel, woodland planting, open space provision, habitat connectivity and nature conservation interests, although the lack of detailed supplementary guidance could compromise how this might be delivered, including as part of the development of sites, or when seeking funding / assistance to deliver aspects of green network creation or improvement. **Overall, positive effects are predicted for biodiversity, population and certain aspects of human health.** - The approach would promote the creation of a green network and assist regeneration objectives, particularly in the west of East Lothian where most regeneration potential exists. The green network also provides opportunities to improve access to the countryside for recreation and for active travel routes to be created, and thus to reduce travel distances and CO_2 emissions, and improve human health, although the lack of detailed supplementary guidance could compromise how this might be delivered. **Overall, a positive effect on population and certain aspects of human health and material assets is predicted.** - In terms of the other aspects of human health considered, there are neutral impacts on noise and air quality. **Overall, a positive effect on human health is predicted.** - The Central Scotland Green Network could incorporate areas of flood risk, safeguard them from built development and also allow them to become multifunctional green spaces, although the lack of detailed supplementary guidance could compromise how this might be delivered. However, other plan policies would be the main vehicle to ensure that the risk of flooding is not increased. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.** - There are neutral impacts on prime agricultural land and carbon rich and rare soils. **Overall, a neutral effect on soils is predicted.** - The integration of the green network and its open space and active travel options could help reduce the need to travel and distances travelled as well as encouraging alternative modes of transport, although the lack of detailed supplementary guidance could compromise how this might be delivered. **Overall, positive effect on air is predicted.** - While CO_2 emissions are likely to increase as a result of the growing population, the creation of the green network will improve active travel routes and provide improved access to open space and recreational opportunities locally and thereby reduce the need to as well as distance that need be travelled. All of these factors would help minimise CO_2 emissions. In addition, the greening of the area, particularly through woodland planting, will help to lock carbon and reduce atmospheric concentrations of CO_2, although the lack of detailed supplementary guidance could compromise how this might be delivered. **Overall, a positive effect on climatic factors is predicted.** - Policies of the LDP will ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The creation of the green network will assist in creating multi functional green spaces and thus will help ensure an efficient use of land and existing infrastructure and could be used to help better integrate land use and transport, particularly active travel. The existence of a multifunctional green network is also a significant material asset in its open right, although the lack of detailed supplementary guidance could compromise how this might be delivered. **Overall, a positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where

	development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed in the area. However, Central Scotland Green Network will help to reduce the cumulative impact of development in the area and also secure wider benefits, such as improving access to the countryside for recreation and enhancing active travel opportunities, although the lack of detailed supplementary guidance could compromise how this might be delivered. **Overall, a positive effect on landscape is predicted.**
MITIGATION	None
MONITORING	Adoption of the LDP with such new strategy and policy approach. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Development in the Countryside and on the Coast

The approach to the management of development in the countryside and on the coast is not a matter covered by the policies of the SDP. However, it notes there is a need to reconcile the potentially competing demands for appropriate rural development and to maintain and enhance the character and of appearance of East Lothian's countryside and coastal areas. SPP provides the national policy position on appropriate approaches to development in such areas. Policies managing development in these areas need to acknowledge the wide range of development and activities that should and should not take place. They must balance the competing demands for development whilst guarding against inappropriate development while maintaining and enhancing the character and appearance of the countryside and coast.

LDP STRATEGY APPROACH	**Generally as per the approach of the ELLP 2008, but be less restrictive to very small scale solely affordable housing proposals in the countryside in very limited circumstances**: Generally maintain the policy approach of the ELLP 2008. The LDPs proposals map should define significantly constrained coastal areas as well as those parts of the coast which are unspoiled. A presumption against development on the unspoiled coast would be introduced. A reference will be made to the need to minimise the loss of rare or carbon rich soils. Alter ELLP Policy DC1 to allow potential opportunities for very small scale new build affordable housing proposals in the countryside where they are a logical addition to existing small scale and more remote rural settlements and if no alternative and appropriate opportunities exist within the settlement. Limitations are placed on the number and scale of such proposals that may be supported. Replacement dwellings will also be considered in certain circumstances. Detailed policy criteria are also introduced.

	However, the approach to the principle of such new build housing proposals within the green belt or within any designated Countryside Around Town area continues to be one of resistance.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	++	- -	?	0	0	0	0	0	- -	- -	0	- -	- -	- -	0	0	+	0	0	0	0	-	0	0	0
SUMMARY	0			+	-		0				0		- -		-			-			+				0	-			
COMMENT																													

- The LDP strategy approach to managing development in the countryside or on the coast (Policy DC1: Rural Diversification; Policy DC2: Conversion of Rural Buildings to Housing; Policy DC3: Replacement Dwellings in the Countryside; Policy DC4: New Build Housing in the Countryside; Policy DC5: Housing as Enabling Development; Policy DC6: Development in the Coastal Area; Policy DC7: Development in the Edinburgh Green Belt) would have no direct impact on sites designated for their nature conservation interest, although a presumption against development in areas defined as constrained / unspoiled coast in places coincides with such designated sites. If a proposal in the countryside or on the constrained / unspoiled coast may impact **directly or indirectly** on a protected site this would need to be assessed against other relevant policies of the LDP. (Policy NH1: Protection of Internationally Designated Sites; Policy NH2: Protection of Sites of Special Scientific Interest and Geological Conservation review Sites; Policy NH3 Protection of Local Sites and Areas; Policy NH4: European Protected Species; Policy NH5: Biodiversity and Geodiversity Interests, Including Nationally Protected Species; Policy NH6: Geodiversity Recording and Alternative Exposures; Policy NH7: Protecting Soils; Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; Policy NH8: Trees and Development; **Overall, neutral effect is predicted for biodiversity.**
- The LDP strategy approach to development in the countryside or on the coast is intended to allow development which would contribute to the diversification of the rural area and economy. The LDP strategy approach allows small scale affordable housing proposals, replacement dwellings and housing as enabling development to come forward in the countryside or on the coast in some limited additional circumstances such as where this would secure a positive primary land use, effect landscape improvement or fund the restoration of cultural or natural heritage features. This could help increase the availability of housing, including affordable housing as well as employment uses and jobs within the countryside. However, the vast majority of the East Lothian countryside or its coastal areas is not highly accessible, with a limited range of public transport options. Under the LDP strategy approach the additional affordable housing development (albeit likely to be a limited increase) within the countryside or on the coast is likely to mean an increased need to travel to access services, amenities and employment for those residents. **Overall, both positive and negative effects on population are predicted.**
- In terms of the other aspects of human health considered, because development in the countryside or on the coast is not planned there are unknown impacts in terms of access to open space, sports facilities or the core path network as well as in relation to impacts on air quality and

	noise, although plan Policies NH12: Air Quality and NH13: Noise would require any such effects to be mitigated. **Overall, a neutral effect on human health is predicted.** - The LDP strategy approach to managing development in the countryside or on the coast would have no direct impact on areas of flood risk. Other plan policies would ensure the risk of flooding is not increased as a result of new development in the area and also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.** - The LDP strategy approach to development in the countryside or on the coast seeks to minimise the loss of prime quality agricultural land and rare or carbon rich soils. It is inevitable that if appropriate development is to be supported in the countryside or on the coast that some prime quality agricultural land or carbon rich or rare soils may be lost, although with a minor relaxation of the policy to modestly increase the scope for new build affordable housing, replacement dwellings and housing as enabling development the impact of the alternative approach on soils is likely to be greater. **Overall, a very negative effect on soils is predicted.** - The LDP strategy approach to development in the countryside or on the coast is likely to lead to an increase in people travelling by car, considering the less frequent public transport services in these locations, and also to travelling longer distances to access services, amenities and employment. The impact of this is likely to be increased vehicle emissions and particulate matter, and a negative impact on air. However, the actual amount of development anticipated is not significant. **Overall, negative effect on air is predicted.** - Development in the countryside or on the coast is likely to lead to people travelling by car, considering the less frequent public transport services available in these locations, and also to travelling longer distances to access services, amenities and employment. This would increase CO_2 emissions. **Overall, a negative effect on climatic factors is predicted.** - The LDP strategy approach to development in the countryside or on the coast strongly supports the reuse of buildings worthy of retention, thereby making an efficient use of land and prioritising the use of brownfield land before greenfield. It also requires that appropriate infrastructure provision must be available or secured. However, a minor relaxation of the policy to modestly increase the scope for new build affordable housing, replacement dwellings and enabling housing development is likely to undermine this aspect of the policy and result in the development of more greenfield land. Other polices of the LDP ensure minerals safeguarding (Policy MIN1: Protection of Mineral Reserves; Proposal MIN2: Safeguarding Oxwellmains Quarry; Proposal MIN3: Safeguarding Longyester and Skateraw Sand and Gravel Quarries; Proposal MIN4: Safeguard Bangley and Markle Mains Hard Rock Quarries; Policy MIN5: Mineral Resources) where appropriate and sustainable waste management (Policy W1: Waste Management Safeguards; Policy W2: Waste Management Developments). **Overall, a positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields, many of which are in the countryside or on the coast. Legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan (Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies) would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.**

	- The LDP approach to development in the countryside or on the coast would require that in all cases the landscape impact of the proposed development is minimised, that development reflects the character and quality of place and is compatible with its surroundings. These requirements can be used to ensure that significant built or natural heritage features or the setting of settlements or coastal character is not harmed. Proposals are to be integrated in to the landscape by utilising existing landscape features to secure this. However, with a minor relaxation of the policy to modestly increase the scope for new build housing in appropriate locations, replacement dwelling or housing as enabling development the impact of the proposed approach on landscape may be slightly greater, despite the provisions of the policy that seek to guard against landscape impacts. This is coupled with the likelihood that the current policy's emphasis on the reuse / redevelopment of existing vernacular buildings would be undermined as scope for new build affordable housing is introduced. This is because increasing the availability of any alternative housing in the countryside (in this case affordable housing) could reduce the incentive to reuse existing vernacular buildings. Policy requiring development in coastal locations to respect the particular coastal location is likely to have a positive effect on landscape. **Overall, a negative effect on landscape is predicted.**
MITIGATION	Reference included to minimising the loss of rare or carbon rich soils in plan policies (see LDP Policy NH7: Protecting Soils).
MONITORING	The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

MIR Reasonable Alternative	**Maintain current policy approach to development in the countryside and define coastal areas with significant constraints and that are largely unspoiled:** Generally maintain the current policy approach. However, the LDPs proposals map should define significantly constrained coastal areas as well as those parts of the coast which are unspoiled. A presumption against development on the unspoiled coast would be introduced. A reference will be made to the need to minimise the loss of rare or carbon rich soils. Clarification that occupancy restrictions would normally dealt with by planning condition would also be introduced.

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	+	+	-	?	0	0	0	0	0	-	-	0	-	-	-	0	0	++	0	0	0	0	+	0	+	0
SUMMARY	0			+			0				0		-		-			-			++				0	+			
COMMENT	- The current approach to managing development in the countryside or on the coast would have no direct impact on sites designated for their nature conservation interest, although a presumption against development in areas defined as constrained / unspoiled coast is likely to coincide with such designated sites. If a proposal in the countryside or on the constrained / unspoiled coast may impact **directly or indirectly** on a protected site, this would need to be assessed against other relevant policies of the LDP. **Overall, neutral effect is predicted for biodiversity.**																												

	- The current approach to development in the countryside or on the coast is intended to allow developments which would contribute to the diversification of the rural area and economy, including agricultural, horticultural forestry uses or countryside recreation. Other business uses are also acceptable in the countryside or on the coast, but in some cases as operational requirement for such a location must be demonstrated. There are very few areas in the countryside or on the coast where regeneration is needed, but the current approach would allow appropriate development to take place. Although only supported in very specific and limited circumstances, housing can come forward in the countryside or on the coast and this could help increase the availability of affordable housing. However, the vast majority of the East Lothian countryside and coastal areas are not highly accessible, with a limited range of public transport options. Development within the countryside or on the coast is likely to increase the need to travel to access services, amenities and employment. **Overall, a positive effect on population is predicted.** - In terms of the other aspects of human health considered, because development in the countryside or on the coast is not planned there are unknown impacts in terms of access to open space, sports facilities or the core path network as well as in relation to impacts on air quality and noise, although plan policies would require any to be mitigated. **Overall, a neutral effect on human health is predicted.** - The current approach to managing development in the countryside or on the coast would have no direct impact on areas of flood risk. Other plan policies would ensure the risk of flooding is not increased as a result of new development in the area and also ensure that the ecological status of the water environment is maintained or enhanced. **Overall a neutral effect on the water environment is predicted.** - The current approach to development in the countryside or on the coast seeks to minimise the loss of prime quality agricultural land, although this should also be extended to include such reference to rare or carbon rich soils. It is inevitable that if appropriate development is to be supported in the countryside or on the undeveloped coast that some prime quality agricultural land or carbon rich or rare soils may be lost. **Overall, a negative effect on soils is predicted.** - Development in the countryside or on the coast is likely to lead to people travelling by car, considering the less frequent public transport services in these locations, and also to travelling longer distances to access services, amenities and employment. The impact of this is likely to be increased vehicle emissions and particulate matter, and therefore a negative impact on air. **Overall, a negative effect on air is predicted.** - Development in the countryside or on the coast is likely to lead to travel by car, considering the less frequent public transport services available in these locations, and also to travelling longer distances to access services, amenities and employment. This would increase CO_2 emissions. **Overall, a negative effect on climatic factors is predicted.** - The proposed approach to development in the countryside or on the coast strongly supports the reuse of buildings worthy of retention, thereby prioritising the use of brownfield land before greenfield and making an efficient use of land. In many cases this results in the retention of buildings important to the character and identity of the area. The current approach is also clear that appropriate infrastructure provision must be available or secured. Other polices of the LDP will also ensure minerals safeguarding where appropriate and sustainable waste management. **Overall, a very positive effect on material assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields, many of which are in the countryside or on the coast. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.**

	- The proposed approach to development in the countryside or on the coast requires that in all cases the landscape impact of the proposed development to be minimised, that development reflects the character and quality of place and is compatible with its surroundings. These requirements ensure that significant built or natural heritage features or the setting of settlements are not harmed. Proposals are also to be integrated in to the landscape by utilising existing landscape features to secure this. **Overall, a positive effect on landscape is predicted.**
MITIGATION	Include reference to minimise the loss of rare or carbon rich soils in Policy DC1.
MONITORING	The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

5.3 CUMULATIVE ASSESSMENT OF PROPOSED & ALTERNATIVE SPATIAL STRATEGY APPROACHES

Proposed & Alternative Spatial Strategy Approaches

The Strategic Development Plan for Edinburgh and South East Scotland (SDP) requires that new development be accommodated within East Lothian. In terms of how this may be achieved there are broadly two options – the Proposed LDP 'compact' spatial strategy and an alternative more 'dispersed' spatial strategy. These options have been compared against one another in the SEA and the findings for each strategy approach are described below. This is followed by a summary which compares the two strategy options in SEA terms.

Proposed Spatial Strategy Approach

Table 10 below summarises the SEA of the Proposed LDPs '**compact**' strategy approach. Overall, the proposed strategy is predicted to have very positive effects on biodiversity, population, material assets and positive effects on human health. It is also predicted to have positive / negative effects on landscape, neutral effects on water quality and cultural heritage, and negative effects on soil, air and climatic factors.

TABLE 10: CUMULATIVE ASSESSMENT OF THE LDP SPATIAL STRATEGY APPROACHES

SEA TOPIC	BIODIVERSITY	POPULATION	HEALTH	WATER	SOIL	AIR	CLIMATE	ASSETS	HERITAGE	LANDSCAPE
Compact Growth	++	++	++	0	-	-	-	-	0	-
New Town Centre	0	++	?	0	-	-	-	++	0	+

Employment: Mix all sites	0	++	0	0	-	-	-	++	0	-
Housing: Longer term	++	++	+	0	- -	-	-	++	0	-
Green Belt: Modify	++	++	+	0	-	-	-	++	0	-
Introduce other countryside designations / CAT	++	0	+	0	0	0	0	0	+	++
CSGN with SPG	++	++	++	+	0	++	++	++	0	++
Countryside & Coast: More small scale housing	0	+ -	0	0	- -	-	-	+	0	-
OVERALL SEA SCORE	**++**	**++**	**+**	**0**	**- -**	**-**	**-**	**++**	**0**	**-**
COMMENT	- **In terms of development locations**, discussion with SNH and assessment through HRA/Appropriate Assessment suggests that the LDP strategy can be promoted without causing significant harm to Natura 2000 sites or Ramsar sites, including the Firth of Forth SPA. Where required, policy, proposals or site specific mitigation has been identified, and for some sites it may be that project level EIA and HRA would be required for some proposals. **In terms of managing the introduction of new development**, LDP Policy NH1: Protection of Internationally Designated Sites; Policy NH2: Protection of Sites of Special Scientific Interest and Geological Conservation Review Sites; Policy NH3 Protection of Local Sites and Areas; Policy NH4: European Protected Species; Policy NH5: Biodiversity and Geodiversity Interests, Including Nationally Protected Species; Policy NH6: Geodiversity Recording and Alternative Exposures; Policy NH7: Protecting Soils; Policy NH8: Trees and Development all seek to protect, conserve or where appropriate enhance biodiversity, flora and fauna. Similar secondary and synergistic benefits could be expected from the operation of LDP Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; Policy NH12: Air Quality. Additionally, Policy DP1: Landscape Character; Policy DP2: Design; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; all seek high quality development, including in relation to natural heritage. With site briefs and appropriate master planning and delivery, the LDP strategy approach offers scope for mitigation and the improvement and strategic enhancement of the Green Network, active travel, woodland planting, open space provision and habitat connectivity in the west of East Lothian. Within this there would be clear opportunities to prioritise the strategic extension of the CSGN and associate active travel routes in to East Lothian. **Overall, very positive effects are predicted for biodiversity, population and some aspects of human health.**									

	- **In terms of development locations**, the proposed strategy would contribute to the regeneration of communities in the west of East Lothian, which are currently the most deprived areas in the county. A new town centre could also be promoted at Blindwells, potentially to serve a wider area than just that settlement. This may assist in providing additional services and amenities locally. The LDP strategy aims to deliver affordable housing in an area of need, and where there is a significant volume of demand for new housing. It also promotes housing, including affordable housing, in other areas of East Lothian where there is also a more acute need for affordable housing, such as in the east of the area and in more rural areas. However, the west of East Lothian is the most accessible part of East Lothian. It also has good public transport connectivity to amenities in the wider city region, such as hospitals and further education, meaning that the distance travelled is reduced to access them when compared with other parts of the area. All of these factors would also help to minimise CO_2 emissions. **In terms of managing the introduction of new development**, general urban development policies (Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity) recognise the importance of vibrant town centres and maintaining access to local service provision and protecting amenity, particularly residential amenity. Policies on the approach to planning for employment (particularly Policy EMP1: Business and Employment Locations' Policy EMP2: Operational Harbours) and tourism (particularly Policy TOUR4: Hotels and Guest Houses) seek to ensure that jobs can be retained and created in appropriate locations or premises. Policies on the approach to planning for housing (Policy HOU1: Established Housing Land; Policy HOU2: Maintaining an Adequate 5-year Effective Housing Land Supply; Policy HOU3: Affordable Housing Quota; Policy HOU4: Affordable Housing Tenure Mix; and on specialist housing provision and other specific needs (Policy HOU5: Residential Care and Nursing Homes – Change of Use; Policy HOU6: Residential Care and Nursing Homes – Location; Policy HOU7: Housing in Multiple Occupation; Policy HOU8: Gypsy / Traveller's Sites) seek to ensure that housing opportunities, including affordable and housing for specialist and specific needs can be provided. Policies on the approach to education, community and health care facilities (Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals) seek to ensure that education and community facilities are safeguarded and will be expanded to accommodate the demand generated by new development if required. Policies on open space and play provision (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites) seek to ensure existing open space and play facilities will be protected or enhanced to accommodate new development if required and that new open space or play facilities of different types will be provided in association with new development if required. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy

	DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to population. **Overall, very positive effects are predicted for population.** - **In terms of development locations**, there are uncertain impacts in terms of air quality and noise. **In terms of managing the introduction of new development**, higher tier plans, polices or strategies (such as PAN 1/2011: Planning and Noise) and LDP policies would require these impacts to be mitigated, particularly LDP Policy NH12: Air Quality and Policy NH13: Noise. An air quality management strategy will be prepared to complement the LDP. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; all seek high quality development, including in relation to relevant aspects of human health. It may be that project level EIA would also be required for some proposals. A neutral impact on these aspects of human health is predicted. **Overall, a positive effect on human health is predicted.** - **In terms of development locations,** the LDP strategy avoids areas of flood risk in site selection and plan policies ensure that the risk of flooding is not increased as a result of new development in the area. **In terms of managing the introduction of new development**, LDP Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective too. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. LDP Policy NH9: Water Environment (including Advice Box 6), Policy NH10: Sustainable Drainage Systems (including Advice Box 7) and Policy NH11: Flood Risk (including Advice Box 8) will help secure this objective. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; all seek high quality development, including in relation to the water environment. It may be that project level EIA or specialist studies (water and drainage impact assessment / flood risk assessment etc.) would be required for some proposals, and the LDP identifies the need for these where known at this stage. **Overall, a neutral effect on the water environment is predicted.** - **In terms of development locations,** given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. The west of East Lothian contains a significant proportion of East Lothian's prime quality agricultural land with the area around Musselburgh being predominantly Grade 1. However, there is a balance to be struck between the loss of prime quality agricultural land and the accessibility, regeneration and other positive effects of the compact spatial strategy. Wherever possible, the re-use of previously developed land will be promoted, for example at Blindwells **(if Blindwells is capable of expansion, further previously developed as well as greenfield land would be used)**. **In terms of managing the introduction of new development**, the policies of the LDP will ensure that land is developed in the most efficient way, through for example promoting higher density development in appropriate locations, in accordance with LDP Policy DP3: Housing Density. The LDP strategy would also seek to minimise the loss of prime quality agricultural land and

	carbon rich or rare soils as would the policies of the LDP, in line with Policy NH7: Protecting Soils. **Overall, a very negative effect on soils is predicted.** - **In terms of development locations,** while overall CO_2 emissions and transport based particulate matter is likely to increase as a result of overall growth requirements in the area, the LDP strategy would focus development in the most accessible parts of East Lothian and where there is good public transport accessibility and good local access to facilities, services and employment. This will promote the use of public transport and thus help minimise the need to travel by car as well as air quality impacts and CO_2 emissions. However, there are currently air quality issues in Musselburgh and emerging concerns in Tranent. Any impact of additional development on air quality will require mitigation, and the impact of the LDP strategy may be more acute in certain locations, such as Musselburgh High Street. A strategy to manage air quality in Musselburgh has been developed to ensure that the mitigation takes into account the likely cumulative impact of the LDP. This issue has been considered in parallel with the transport mitigation measures, including those on the road network as well as for public transport including rail (to help promote modal shift and minimise other road based transport). **In terms of managing the introduction of new development**, LDP Policy NH12: Air Quality will help ensure air quality is maintained or enhanced as appropriate. LDP Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies as well as those on Transportation and Water Environment will help minimise the impact of new development on climate and vice versa. It may also be that project level EIA or specialist studies or plans (e.g. Travel Plans in line with Policy T1: Development Location and Accessibility) would also be required for some proposals. **Overall, a negative effect on Air and Climatic Factors is predicted.** - **In terms of development locations,** accommodating the SDP development requirements will require additional land to be developed. In view of the lack of brownfield land available in the area the release of greenfield land is needed. Prioritising the redevelopment of land and making an efficient use of it, for example at Blindwells and by developing at higher density, will help reduce impacts. Policies of the LDP also ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. The proposed longer term strategy would help ensure land is available and can be developed for the creation of infrastructure and facilities for the growing population. Importantly, a longer term approach will allow the infrastructure planning for the area to be aligned better with the development strategy. In particular it may help to clearly identify the need for, justify and provide solutions and delivery mechanisms that can achieve a step change in the nature of infrastructure provision in line with the growth in population. Although greenfield land would be developed, it would be developed in such a way that could help ensure an efficient use of land, and could be used to help better integrate land use and transport, particularly public transport. **In terms of managing the introduction of new development** and maintaining adequate infrastructure and services, a series of transport policies and proposals (Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part

	of the Green network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points; Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; Proposal T15: Old Craighall Junction Improvements; Proposal T16: A1 Junction Improvements at Queen Margaret Drive Interchange; Proposal T17: A1(T) Interchange Improvements; Proposal T18: Land Safeguard for Trunk Road Interchange at Adniston and Eastern Tranent By-pass; Policy T19: Transport Improvements to Musselburgh High Street; Proposal T20: Transport Related Air Quality measures: Relocation of Bus Stops; Proposal T21: Musselburgh Urban Traffic Control System; Proposal T22: Reopen Link to Vehicular Access at Queen Margaret drive / Whitehill Farm Road. Proposal T23: Transport Improvements A198 and Meadowmill Roundabout; Proposal T24: Land safeguard for A198 / B1361 Meadowmill Roundabout Improvements; Proposal T25: Land Safeguard for Dualling of A198 and Reconfiguration of Bankton Interchange; Policy T26: Transport Improvements to Tranent Town Centre; Proposal T27: Tranent Town Centre One-way System; Proposal T28: Junction Improvements at Elphinstone Road and Edinburgh Road all seek to provide for improvements to the trunk and local road networks and to the rail network to accommodate the demands of new development. Policies on the approach to education, community and health care facilities (Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals) all seek to ensure that education and community facilities are safeguarded and will be expanded to accommodate the demand generated by new development if required. Policies on open space and play provision (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites) seek to ensure existing open space and play facilities will be protected or enhanced to accommodate new development and that new open space or play facilities will be provided in association with new development. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to material assets. **Overall, a very positive effect on material assets is predicted.** - **In terms of development locations,** there are a range of cultural heritage assets in the area such as listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields that will be taken into account, including their settings. Legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the LDP would ensure those impacts are appropriately mitigated. **In terms of managing the introduction of new development** Policy CH1: Listed Buildings; Policy CH2:

	Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will help secure related objectives. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; Policy BW3: Blindwells Area Design Framework; will all seek high quality design, including in relation to cultural heritage. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish project level mitigation. **Overall, a neutral effect on heritage is predicted.** - **In terms of development locations,** accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The proposed strategy approach would continue to focus the majority of East Lothian's population in the west and consolidate the existing settlement pattern. However this could lead to the coalescence of settlements or impact upon their landscape settings. Yet there may be significant opportunities to strategically mitigate this impact and improve important areas of open space and the green network in this area by implementing national policy objectives such as the CSGN. Relevant LDP Policies include Policy DC7: Development in the Edinburgh Green Belt; Policy DC8: Countryside Around Towns; Policy DC9: Special Landscape Areas; Policy DC10: The Green Network and Policy DC6: Development in the Coastal Area. These policies acting together will seek to direct development to the most appropriate locations and resist it in inappropriate locations. Policies of the LDP will also ensure development of appropriate types and scales can take place within the countryside (this is dealt with separately under the other relevant part of this assessment). **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites;; Policy BW3: Blindwells Area Design Framework; will all seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Alternative MIR Spatial Strategy Approach

Table 11 below summarises the SEA of the alternative '**dispersed**' spatial strategy approach. Overall, the dispersed strategy is predicted to have neutral / positive effects on biodiversity, positive effects population and material assets and neutral effects on human health, water quality and heritage. It is also predicted to have negative effects on landscape, soil, air and climatic factors.

TABLE 11: CUMULATIVE ASSESSMENT OF THE ALTERNATIVE SPATIAL STRATEGY APPROACHES										
SEA TOPIC	BIODIVERSITY	POPULATION	HEALTH	WATER	SOIL	AIR	CLIMATE	ASSETS	HERITAGE	LANDSCAPE
Dispersed Growth	+	+	0	0	-	-	- -	-	0	-
Existing Town Centres	0	+	?	0	- -	-	- -	+	0	?
Employment: Mix only Local	0	+	0	0	-	-	-	+	0	-
Housing: Plan to 2024	+	+	+	0	-	-	-	+	0	-
Green Belt: Don't modify	+	+	+	0	-	- -	- -	+	0	-
No OCD / CAT	0	0	0	0	0	0	0	0	-	-
CSGN: No SG	+	+	+	0	0	+	+	+	0	+
Countryside & Coast: Maintain Current Approach	0	+	0	0	-	-	-	++	0	+
OVERALL SEA SCORE	0	+	+	0	0	-	-	-	+	0	-
COMMENT	- SNH has advised that the dispersed strategy may have the potential to harm the integrity of the Firth of Forth SPA as it may result in a greater scale of development in the main pink footed goose area than a compact strategy would. The alternative strategy is not assessed under HRA/AA; only the strategy that is to be taken forward is assessed. During the SEA site assessment process, the potential for impact on Natura sites was considered. Without detailed assessment, it cannot be certain that more negative effects will result from the development of certain sites in the east than the west of the area, however that is SNH's view. Notwithstanding this, with appropriate site design and delivery, this strategy approach offers scope for selective delivery of the Green Network, as well as active travel routes and open space provision to help improve habitat connectivity and active travel options in East Lothian. It could therefore have positive										

	impacts on biodiversity, flora and fauna and human health. Yet given the more dispersed nature of this alternative strategy, opportunities for creating networks and improving habitat connectivity and woodland networks may be reduced in comparison to the proposed approach. **Overall, at this stage, neutral or positive effects are predicted for biodiversity, positive effects for population and neutral effects on human health.** - The strategy may have the effect of diverting development away from areas in greatest need of regeneration in the west of East Lothian and would instead focus it in areas where limited regeneration potential exists if any. Although the strategy would provide affordable housing in a range of locations across East Lothian, it may reduce the volume of affordable housing that could be provided in areas with most population and housing need and demand. A new town centre could also be promoted at Blindwells, potentially to serve a wider area than that settlement. This may assist in providing additional services and amenities locally, including for regenerating communities. However, if Blindwells cannot expand the focus would be on growing existing centres, which may not be able to compete with other centres offering a wider range and choice of goods elsewhere in the city region. Overall, although this strategy would seek to direct development towards settlements with existing facilities and services, it may also have the effect of directing development to less accessible parts of East Lothian, particularly in terms of public transport accessibility and access to employment opportunities in the wider city region. This may not minimise related CO_2 emissions. **Overall, positive effects are predicted for population.** - There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. An air quality management strategy is being developed to complement LDP strategy. It may be that project level EIA would be required for some proposals. **Overall, a neutral effect on human health is predicted.** - The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. It may be that project level EIA or specialist studies (water and drainage impact assessment / flood risk assessment etc.) would be required for some proposals. **Overall, a neutral effect on the water environment is predicted.** - Given that any strategy for development in East Lothian would require the use of greenfield land, the loss of some prime agricultural land is inevitable if development requirements are to be met. Wherever possible, the re-use of previously developed land will be promoted through the strategy, for example at Blindwells. Additionally, the policies of the plan will ensure that land is developed in the most efficient way, for example through promoting higher density development in appropriate locations. The strategy and policies of the plan would also seek to minimise the loss of carbon rich or rare soils. **Overall, a negative effect on soils is predicted.** - While overall CO_2 emissions and transport based particulate matters are likely to increase as a result of overall growth requirements in the area, the alternative dispersed strategy would not focus development in the most accessible parts of East Lothian. This is particularly influenced because no modification of green belt boundaries is proposed. This would

	likely result in higher CO_2 emissions and particulate matter than would the compact strategy as the alternative strategy would direct development to less accessible locations beyond the green belt and likely increase the need to travel by car. The more dispersed strategy would also likely increase the distance travelled to access higher level facilities, services and employment opportunities in the wider city region. It would not minimise air quality impacts and CO_2 emissions. **Importantly, based on findings from the Scottish Governments SPACE Tool (see Appendix 3), the alternative dispersed strategy is predicted to result in increased emissions from transport energy use of 7,500 tCO_2eq (tonnes of CO_2 equivalent) per annum (base date 2014), when compared to the proposed strategy. <u>This represents an increase of over 52%.</u>** However, a more dispersed strategy may reduce the impact on certain locations, such as Musselburgh High Street, whereas the compact strategy may have more of an acute impact on these locations. There is currently an air quality issue in Musselburgh and emerging air quality issues in Tranent. Any impact of additional development on air quality will require mitigation. A strategy to manage air quality in Musselburgh is being developed alongside the LDP development strategy, to ensure that the mitigation takes into account the likely impact of the LDP strategy. It may be that project level EIA would be required for some proposals. **Overall, a negative effect on Air and Climatic Factors is predicted.** - In view of the lack of brownfield land available in the area the release of greenfield land is needed. Prioritising the redevelopment of land and making an efficient use of it, for example through developing at higher density, will help reduce impacts. Policies of the LDP will also ensure minerals safeguarding where appropriate, appropriate infrastructure provision and sustainable waste management. It may be that project level EIA would be required for some proposals. **Overall, a positive effect on Material Assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish mitigation. **Overall, a neutral effect on heritage is predicted.** - Accommodating the SDP's development requirements in the area will have a landscape impact irrespective of where new development is directed within the area. The alternative strategy may help avoid coalescence of settlements in the west, yet it could impact upon the landscape settings of other existing settlements in the east. However, there may be opportunities to mitigate this impact and improve the green network by implementing national policy objectives such as the Central Scotland Green Network, although the dispersed nature of the alternative strategy would make delivery of a well connected network more challenging. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals. **Overall, a negative effect on landscape is predicted.**

MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA and consequent adaptation of policies in mitigation during plan preparation and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 11. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 12. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 13. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 14. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 15. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 16. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 17. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 18. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 19. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	20. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as retail impact assessments, flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications. The Action Programme and its review as well Monitoring Statements will be used to monitor progress once the LDP is operative.

Summary

The main differences between the two spatial strategy approaches is that a compact spatial strategy gives opportunity to secure more significant positive environmental effects for certain SEA Objectives and reduced environmental effect on other SEA Objectives. The positive effects of the LDP's 'compact' approach are mainly attributed to the ability to take a strategic and longer term view for the development of a particular area. In particular, this allows consideration to be given to longer term infrastructure solutions as well as to seek opportunities for the provision of and strategic improvements to and connections in the green network, habitat network as well as the provision and extension of active travel routes / networks etc. The LDP strategy approach is therefore predicted to have more significant positive effects on the SEA Objectives of biodiversity, population and on material assets than the alternative 'dispersed' approach would.

Both strategy approaches show positive effects on the SEA Objectives for human health as well as a neutral effect on the SEA Objectives for water quality and cultural heritage, which are assumed to be safeguarded by the policies of the LDP. The compact spatial strategy is also predicted to have a less significant environmental effect on SEA Objectives for climatic factors and air, mainly because it would focus development in the most accessible part of East Lothian which is or is suitable to be well served by public transport options: the distance that need be travelled to access the existing range of jobs and amenities available in the wider city region would also be reduced. Both of these factors should help

minimise the need to travel as well as the distance that is travelled, together with minimising the emission of particulate matter and CO_2 emissions, particularly from private car use.

Importantly, based on findings from the Scottish Governments SPACE Tool (see Appendix 3), the alternative dispersed strategy was predicted to result in increased emissions from transport energy use of 7,500 tonnes of CO_2 equivalent per annum (base date 2014), when compared to the compact strategy. <u>This represents an increase of over 52%.</u>

The compact spatial strategy approach is also predicted to have a less significant environmental effect on SEA Objectives in relation to soils. This is because even though more greenfield land may be used, it could be used more efficiently. While both strategy approaches are predicted to have negative effects on landscape, the proposed compact strategy approach is also likely to have a minor positive effect. This is because the provision of green network measures and structural planting is likely to provide more significant strategic mitigation measures that create a network than the alternative 'dispersed' strategy. The full SEA of the spatial strategy options can be found in the main report.

5.4 THE LDP POLICY APPROACHES & MIR REASONABLE ALTERNATIVES

Developer Contributions

LDP POLICY APPROACH	Set a flat rate developer contribution for the catchment area of specific facilities where possible, for example in relation to primary school and secondary school facilities. This would be reviewed and contribution values would be index linked.

SEA TOPIC	**BIODIVERSITY**			**POPULATION**			**HEALTH**				**WATER**		**SOIL**		**AIR**			**CLIMATE**			**ASSETS**				**HERITAGE**	**LANDSCAPE**			
QUESTION	**B1**	**B2**	**B3**	**P1**	**P2**	**P3**	**H1**	**H2**	**H3**	**H4**	**W1**	**W2**	**S1**	**S2**	**A1**	**A2**	**A3**	**C1**	**C2**	**C3**	**M1**	**M2**	**M3**	**M4**	**H1**	**L1**	**L2**	**L3**	**L4**
SCORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMMARY	0			0			0				0		0		0			0			0				0	0			
COMMENT																													

	- No impact on biodiversity is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, neutral effects are predicted for biodiversity.** - No impact on population is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, neutral effects are predicted for population.** - No impact on human health is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on human health is predicted.** - No impact on the water environment is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on the water environment is predicted.** - No impact on soils is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on soils is predicted.** - No impact on air and climatic factors is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on air is predicted.** - No impact on climatic factors is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on climatic factors is predicted.** - No impact on material assets is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on material assets is predicted.** - No impact on heritage is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on heritage is predicted.** - No impact on landscape is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on landscape is predicted.**
MITIGATION	None
MONITORING	None

MIR PREFFERRED APPROACH	**Continue with the current approach for all applications. A cumulative assessment would continue to be undertaken on a case by case basis as and when applications are made.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SUMMARY	0	0	0	0	0	0	0	0	0	0
COMMENT	- No impact on biodiversity is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, neutral effects are predicted for biodiversity.** - No impact on population is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, neutral effects are predicted for population.** - No impact on human health is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on human health is predicted.** - No impact on the water environment is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on the water environment is predicted.** - No impact on soils is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on soils is predicted.** - No impact on air and climatic factors is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on air is predicted.** - No impact on climatic factors is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on climatic factors is predicted.** - No impact on material assets is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on material assets is predicted.** - No impact on heritage is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on heritage is predicted.** - No impact on landscape is anticipated as the developer contribution mechanism is a way of securing mitigation already identified as a requirement to make a proposal acceptable in planning terms. **Overall, a neutral effect on landscape is predicted.**									
MITIGATION	None									
MONITORING	None									

Summary

No significant environmental effect is predicted from this policy area as it relates to delivery mechanisms for mitigation once the need for it has been established. As such, the effects on all SEA Objectives from this policy area are predicted to be neutral under the LDP policy approach as well as the MIR reasonable alternative.

Affordable Housing

LDP POLICY APPROACH	**Existing affordable housing quotas are retained for all ELLP 2008 proposals and for all windfall proposals registered prior to the adoption of the LDP. The LDP sets the quota for serviced affordable housing land at 25% for all other housing proposals. Delivery mechanisms must be agreed with the Council. The trigger at which the transfer of serviced land for affordable housing will be sought shall be for proposals consisting of 5 or more dwellings. In terms of tenure mix, a wide range of affordable housing tenure models will be supported, including social rent, shared ownership / shared equity, homes for midmarket and intermediate rent, and low cost housing for market sale and self-build plots. The Council will specify in supplementary planning guidance to be prepared alongside the LDP the affordable housing tenures that will be supported. It will also specify targets for the range of affordable housing tenures. In all circumstances the mechanism for delivering affordable housing must be agreed with the Council, including the mix of affordable house types, sizes and tenures as well as the area of land needed to deliver them in an appropriate layout and form of development. These matters should be agreed during pre-application discussion so they are included in development appraisals before land is acquired, together with the need to fund any other planning obligations.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	+	0	0	0	0	0	0	0	0	o	0	0	0	0	0	0	0	o	o	o	o	o	0	0	0
SUMMARY	0			+			0				0		0		0			0			0				o	0			
COMMENT	- The implementation of this policy would be dependent on the sites to which it is applied so no direct impact on biodiversity is anticipated. **Overall, neutral effects are predicted for biodiversity.** - The implementation of this policy would be dependent on the sites to which it is applied. The LDP policy approach would not specifically contribute to the regeneration of an area, but it would help provide affordable housing in all locations in the county, including areas that would benefit from some regeneration. As the implementation of this policy is dependent on the sites to which it is applied it will not directly impact on transport connectivity or CO_2 emissions. **Overall, a positive effect is predicted for population.**																													

	- The implementation of this policy would be dependent on the sites to which it is applied. There are uncertain impacts in terms of air quality and noise, although the plan's policies (Policy NH13: Noise; Policy NH12: Air Quality) would require these impacts to be mitigated. A neutral impact on these aspects of human health is predicted. **Overall, a neutral effect on human health is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8);) - **Overall, a neutral effect on the water environment is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on soils is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on Air is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on Climatic Factors is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on Material Assets is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on heritage is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on landscape is predicted.**
MITIGATION	None
MONITORING	None

REASONABLE ALTERNATIVE	**A 30% affordable housing quota will be set by the LDP, and in terms of the quota in all other respects the same approach as the proposed approach would be followed. In terms of tenure mix, retain existing 80%/20% tenure mix: 80% to be social rent and 20% to be other forms of affordable tenure, delivered on the serviced land secured through the quota. The Council will specify in Supplementary Guidance to be prepared alongside the LDP which affordable housing tenures will be supported and how the affordable housing tenures will be delivered.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	++	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUMMARY	0			++			0				0		0		0			0			0				0	0			
COMMENT																													

	- The implementation of this policy would be dependent on the sites to which it is applied so no direct impact on biodiversity is anticipated. **Overall, neutral effects are predicted for biodiversity.** - The implementation of this policy would be dependent on the sites to which it is applied. The proposed policy approach would not specifically contribute to the regeneration of an area, but it would help provide affordable housing in all locations in the county to a greater extent than the proposed approach, including areas that would benefit from some regeneration. As the implementation of this policy is dependent on the sites to which it is applied it will not directly impact on transport connectivity or CO_2 emissions. **Overall, a very positive effect is predicted for population.** - The implementation of this policy would be dependent on the sites to which it is applied. There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall, a neutral effect on these aspects of human health is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. The strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall, a neutral effect on the water environment is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on soils is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on Air is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on Climatic Factors is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on Material Assets is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on heritage is predicted.** - The implementation of this policy would be dependent on the sites to which it is applied. **Overall, a neutral effect on landscape is predicted.**
MITIGATION	None
MONITORING	None

Summary

The LDP policy approach is predicted to have a positive effect on the SEA Objective population, whereas the MIR reasonable alternative policy approach is predicted to have a very positive effect on population since more affordable housing may be delivered. The effect predicted for all other SEA Objectives from this policy area is neutral.

Energy, Including Renewable Energy

PROPOSED POLICY APPROACH	**Safeguard the former Cockenzie Power Station site for future thermal power station, giving priority to uses which make the best use of the locations assets consistent with NPF3; Support onshore links to offshore renewable energy installation at Cockenzie and Torness; Promote Cockenzie, and longer term potentially Torness, as potential locations to support off shore renewable industry and / or for port related development; Illustrate new spatial framework for wind energy proposals and refine associated supplementary planning guidance; Support grid connection for off shore renewables, including (underground) transmission line to point of connection along the Forth coast, particularly at Cockenzie and / or Torness, and subject to minimising landscape impact including by combining infrastructure where possible; Promote district heating and combined heat and power facilities in large scale development sites. Also, in terms of individual buildings, the proposed approach is to require Scottish Building Standards mandatory CO_2 reduction targets to be achieved partly through LZCGT. The percentage requirements and timescales for increase would be initially be 10% of mandatory CO_2 reductions rising to 15% after 2019, to be achieved through LZCGT.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	?	?	++	0	+	0	0	0	0	0	0	0	0	0	0	0	0	+/-	0	++	0	+	0	0	0	-	0	-
SUMMARY	?			++			0				0		0		0			0			++				o	-			
COMMENT	- In terms of the former Cockenzie Power Station site, the overall approach set is required by higher tier plans (NPF3 and the SDP), namely to safeguard the site for thermal generation and prioritise uses which make the best of the locations assets. Strategic Environmental Assessments associated with those plans identify potential effects on biodiversity, which are to be addressed by further assessment and by project level EIA. These include impacts on European sites and on marine waters. Impacts could be minimised by making best use of existing infrastructure to minimise environmental impact. This proposal has been scoped into the HRA of the LDP. Mitigation would need to be identified by any project level EIA, including decommissioning and restoration. In term of wind energy, the spatial framework should help steer such developments to less sensitive areas and criteria based policies will be used to assess the impact on biodiversity and to ensure that this is minimised and appropriately mitigated. The promotion of district heating, combined heat and power and LZCGT is unlikely to have significant effects on biodiversity. **Overall, uncertain effects are predicted for biodiversity.** - In terms of Cockenzie Power Station, the repowering of the station and / or its use for other energy related / port development would help to provide employment nearby regenerating communities in the west of East Lothian, which are currently the most deprived areas in the county. The west of East Lothian is the most accessible and well served part by public transport, so access to any such employment opportunities would also be good. The promotion of wind energy, district heating, combined heat and power and LZCGT is unlikely to have significant effects on population. **Overall, very positive effects are predicted for population.** - In terms of specific proposals, these are likely to result in increase vehicle trips and air quality and noise impacts, potentially through construction as well as operational phases. However, at this stage these are uncertain impacts in terms of air quality and noise, although the plan's policies																													

	would require these impacts to be mitigated. (Policy NH13: Noise; Policy NH12: Air Quality;) **Overall, a neutral effect on human health is predicted.** - The plan policies would ensure that the risk of flooding is not increased as a result of new development in the area, including securing mitigation where required. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. (Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); **Overall, a neutral effect on the water environment is predicted.** - The proposed approach to Cockenzie would see previously developed land being reused. In terms of the approach to wind energy, the loss of some greenfield land is inevitable if wind energy proposals are to be delivered. However, the plan policies would seek to minimise the loss of prime agricultural land and carbon rich or rare soils. (Policy NH7: Protecting Soils;) **Overall, a neutral effect on soils is predicted.** - In relation to Cockenzie, impacts associated with thermal power may arise, and effects on climatic factors remain uncertain and depend on the extent to which emissions are reduced through any deployment of carbon capture and storage here as well as the reliability and cost effectiveness of this technology. However, in terms of wind energy, district heating, combined heat and power and LZCGT proposals, these technologies may assist in reducing carbon emissions. **Overall, a neutral effect on Climate is predicted.** - In relation to Cockenzie, impacts associated with thermal power could arise. In terms of wind energy, district heating, combined heat and power and LZCGT proposals, these technologies may assist in reducing air quality impacts, although the plans policies would require any associated impacts to be mitigated. Policy NH12: Air Quality; **Overall, a neutral effect on Air is predicted.** - In terms of the approach to Cockenzie, the redevelopment of brownfield land is proposed and best use is to be made of existing infrastructure. In terms of wind energy, district heating, combined heat and power and LZCGT proposals, these technologies would contribute to the area's material assets. **Overall, a very positive effect on Material Assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However, in terms of Cockenzie, best use is to be made of existing infrastructure so no significant impact is predicted. In addition, legislation and higher level policies prevent these assets being compromised. The spatial framework for wind energy proposals should help steer such developments to less sensitive areas. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - In terms of Cockenzie, best use is to be made of existing infrastructure, so a neutral impact in relation to that proposal is predicted. In terms of wind energy proposals, the spatial framework should help steer such developments to less environmentally sensitive areas. Yet there is potential to harm locations containing built or natural landscape features of significance, or views to and from them; cumulative impacts are also becoming a matter of concern in terms of landscape character more generally. In terms of district heating, combined heat and power and LZCGT proposals, these technologies may also have landscape impacts. Criteria based policies will be used to help avoid and / or mitigate landscape impacts, including cumulative impacts. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for

	further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**As the proposed approach but also consider policy and / or guidance for other forms of renewable such as solar and small scale hydro schemes were appropriate. In terms of individual buildings however, the alternative approach is to require LZCGT to be used to reduce CO_2 emissions beyond Scottish Building Standards mandatory requirements. The percentage requirements and timescales for increase would be set out in SPG but could be set initially at an additional 10% CO_2 emissions reduction through LZCGT beyond Scottish Building Standards mandatory requirements.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	?	?	++	0	+	0	0	0	0	0	0	0	0	0	0	0	0	+/-	0	++	0	+	0	0	0	-	0	-
SUMMARY	?			++			0				0		0		0			0			++				o	-			

COMMENT

- In terms of Cockenzie Power Station, deemed planning permission was approved for the conversion of the station to a gas fired facility and planning permission was approved for its associated gas pipeline. Strategic Environmental Assessments associated with those plans identifies potential effects on biodiversity, which are to be addressed by further assessment and by project level EIA. These include impacts on European sites and on marine waters. Impacts could be minimised by making best use of existing infrastructure to minimise environmental impact. This proposal will need to be scoped in to a HRA of the LDP. Mitigation would need to be identified by any project level EIA, including decommissioning and restoration. In term of wind energy, the spatial framework should help steer such developments to less sensitive areas and criteria based policies will be used to assess the impact on biodiversity and to ensure that this is minimised and appropriately mitigated. The promotion of district heating, combined heat and power and LZCGT is unlikely to have significant effects on biodiversity. **Overall, uncertain effects are predicted for biodiversity.**
- In terms of Cockenzie Power Station, the repowering of the station and / or its use for other energy related / port development would help to provide employment nearby regenerating communities in the west of East Lothian, which are currently the most deprived areas in the county. The west of East Lothian is the most accessible and well served part by public transport, so access to any such employment opportunities would also be good. The promotion of wind energy, district heating, combined heat and power and LZCGT is unlikely to have significant effects on population. **Overall, very positive effects are predicted for population.**
- In terms of specific proposals, these are likely to result in increase vehicle trips and air quality and noise impacts, potentially through construction as well as operational phases. However, at this stage these are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall, a neutral effect on human health is predicted.**
- The plan policies would ensure that the risk of flooding is not increased as a result of new development in the area, including securing mitigation where required. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. **Overall, a neutral effect on the water environment is predicted.**

	- The proposed approach to Cockenzie would see previously developed land being reused. In terms of the approach to wind energy, the loss of some greenfield land is inevitable if wind energy proposals are to be delivered. However, the plan policies would seek to minimise the loss of prime agricultural land and carbon rich or rare soils. **Overall, a neutral effect on soils is predicted.** - In relation to Cockenzie, impacts associated with thermal power are likely to continue, and effects on climatic factors remain uncertain and depend on the extent to which emissions are reduced through any deployment of carbon capture and storage here as well as the reliability and cost effectiveness of this technology. However, in terms of wind energy wind energy, district heating, combined heat and power and LZCGT proposals, these technologies may assist in reducing carbon emissions and air quality impacts. The addition of guidance on other forms of renewable energy may help shape appropriate proposals that may assist in reducing carbon emissions further. **Overall, a neutral effect on Climate is predicted.** - In relation to Cockenzie, impacts associated with thermal power are likely to continue. In terms of wind energy, district heating, combined heat and power and LZCGT proposals, these technologies may assist in reducing air quality impacts, although the plans policies would require any associated impacts to be mitigated. **Overall, a neutral effect on Air is predicted.** - In terms of the approach to Cockenzie, the redevelopment of brownfield land is proposed and best use is to be made of existing generation plant and pipeline infrastructure. In terms of wind energy, district heating, combined heat and power and LZCGT proposals, these technologies would contribute to the area's material assets. **Overall, a very positive effect on Material Assets is predicted.** - There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However, in terms of Cockenzie, best use is to be made of existing generation plant and pipeline infrastructure so no significant impact is predicted. In addition, legislation and higher level policies prevent these assets being compromised. The spatial framework for wind energy proposals should help steer such developments to less sensitive areas. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. **Overall, a neutral effect on heritage is predicted.** - In terms of Cockenzie, best use is to be made of existing generation plant and pipeline infrastructure, so a neutral impact in relation to that proposal is predicted. In terms of wind energy proposals, the spatial framework should help steer such developments to less environmentally sensitive areas. Yet there is potential to harm locations containing built or natural landscape features of significance, or views to and from them; cumulative impacts are also becoming a matter of concern in terms of landscape character more generally. In terms of district heating, combined heat and power and LZCGT proposals, these technologies may also have landscape impacts. The addition of guidance on other forms of renewable energy may help shape appropriate proposals that may assist in reducing landscape further. Criteria based policies will be used to help avoid and / or mitigate landscape impacts, including cumulative impacts. **Overall, a negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy:

	1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Summary

The LDP policy approach is predicted to have a positive effect on SEA Objective population and material assets, an uncertain effect on biodiversity, a neutral effect on health, water, soil, air, climate and heritage, and a negative effect on landscape. The reasonable alternative policy approach is predicted to have the same effects.

Minerals, Including Aggregates & Coal

LDP POLICY APPROACH	**Protect minerals which have a real prospect of being worked; safeguard certain sand and gravel and hard rock quarries; include policy to control and manage extraction of minerals including opencast coal and onshore oil and gas; strengthen policy on securing restoration after mineral extraction is included. Include policy supporting prior extraction of shallow coal before permanent development in some limited circumstances. Do not identify an area of search for open cast coal extraction; Approval of planning permission for an extension of Longyester sand and gravel quarry has increased associated reserves in East Lothian so no further action other than to identify consented area and delete existing area of search for sand and gravel extraction; Hardrock can be met from existing operational and non-operational quarries so no further action proposed other than to safeguard these existing extraction areas. Policy Approach: Develop policy to manage proposals for the extraction of shale gas or oil; Clarify the role of restoration bonds / guarantees in relation to proposals for mineral workings.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	?	?	0	0	+	0	0	0	0	0	0	-	?	0	0	0	+	0	0	0	+	0	0	0	-	-	0	0
SUMMARY	?			0			0				0		-		0			0			+				0	-			
COMMENT	- **In terms of the location of new development**, the implementation of this policy approach would be dependent on the sites to which it is applied, including in terms of any direct harm to biodiversity. **In terms of managing the introduction of new development,** whilst there is often scope to provide / improve biodiversity and habitat as part of restoration proposals, this is dependent on the site and the nature of restoration proposals proposed. An uncertain impact on biodiversity is therefore anticipated. However, polices of the plan will seek to prevent, avoid, reduce, or offset																												

	effects (Policy MIN6: Opencast Coal Extraction; Policy MIN7: Onshore Oil and Gas; Policy MIN8: Mineral Extraction Criteria; Policy MIN9: Supporting Information; Policy MIN10: Restoration and Aftercare). **Overall, an uncertain effect on Biodiversity is predicted.** - The LDP policy approach would help to provide some employment opportunities in terms of existing areas safeguarded for mineral extraction. **Overall, a neutral effect on Population is predicted.** - **In terms of the location of new development**, the LDP policy approach would be dependent on the sites to which it is applied, including in terms of any direct impact on open space / core path network or the opportunity to contribute to CSGN objectives. In terms of the latter, there may be opportunities in terms of restoration proposals, but this is site dependant. **In terms of managing the introduction of new development,** impacts have been predicted in terms of air quality and noise, however the LDP polices will seek to prevent, avoid, reduce, or offset effects (Policy MIN6: Opencast Coal Extraction; Policy MIN7: Onshore Oil and Gas; Policy MIN8: Mineral Extraction Criteria; Policy MIN9: Supporting Information; Policy MIN10: Restoration and Aftercare). A neutral impact on these aspects of human health is therefore predicted. **Overall, a neutral effect on human health is predicted.** - **In terms of the location of new development,** the strategy would need to avoid areas of flood risk in site selection and plan policies would ensure that the risk of flooding is not increased as a result of new development in the area. **In terms of managing the introduction of new development,** the plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced (Policy MIN6: Opencast Coal Extraction; Policy MIN7: Onshore Oil and Gas; Policy MIN8: Mineral Extraction Criteria; Policy MIN9: Supporting Information; Policy MIN10: Restoration and Aftercare). **Overall, a neutral effect on the water environment is predicted.** - **In terms of the location of new development,** given that minerals can only be worked where they are found, the loss of some greenfield / prime agricultural land is inevitable if minerals are to be worked. This may also result in the loss of carbon rich or rare soils. **In terms of managing the introduction of new development,** the policies of the plan would seek to minimise the loss of such soils, and seek to ensure restoration as appropriate (Policy NH7: Protecting Soils; Policy MIN6: Opencast Coal Extraction; Policy MIN7: Onshore Oil and Gas; Policy MIN8: Mineral Extraction Criteria; Policy MIN9: Supporting Information; Policy MIN10: Restoration and Aftercare). **Overall, a negative effect on soils is predicted.** - **In terms of managing the introduction of new development,** mineral working may result in reduced air quality owing to increased heavy vehicle movements, and dust and other particulate matter dispersing from areas being worked, although the plans policies would seek to mitigate associated impacts appropriately before any development could be approved (Policy NH12: Air Quality; Policy MIN6: Opencast Coal Extraction; Policy MIN7: Onshore Oil and Gas; Policy MIN8: Mineral Extraction Criteria; Policy MIN9: Supporting Information; Policy MIN10: Restoration and Aftercare). **Overall, a neutral effect on Air is predicted.** - **In terms of managing the introduction of new development, t**he safeguarding of areas for the extraction of sand and gravel, hard rock, and limestone may help ensure that these resources are able to be extracted close to where they need be used, minimising the need to travel and the distances that need be travelled. **Overall, a neutral effect on Climatic Factors is predicted.** - **In terms of the location of new development,** minerals can only be worked where they are found and the implementation of this policy approach would be dependent on the sites to which it is applied, so it is not possible to prioritise the use of certain types of land over others. The safeguarding of areas for the extraction of sand and gravel, hard rock, and limestone will help ensure these resources are not sterilised or are

	extracted prior to permanent development (Policy MIN1: Protection of Mineral Reserves; Proposal MIN2: Safeguarding Oxwellmains Quarry; Proposal MIN3: Safeguarding Longyester and Skateraw Sand and Gravel Quarries; Proposal MIN4: Safeguard Bangley and Markle Mains Hard Rock Quarries; Policy MIN5: Mineral Resources Policy; MIN11: Prior Extraction of Shallow Coal). **Overall, a positive effect on Material Assets is predicted.** - **In terms of development locations**, there are a range of cultural heritage assets in the area such as listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields that will be taken into account, including their settings. Legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the LDP would ensure those impacts are appropriately mitigated. **In terms of managing the introduction of new development** Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will help secure related objectives. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design will all seek high quality development, including in relation to cultural heritage. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish project level mitigation. **Overall, a neutral effect on heritage is predicted.** - **In terms of development locations**, the implementation of this policy approach would be dependent on the sites to which it is applied, including in terms of any direct harm to built or natural landscape features of significance. There is potential to harm such locations, or views to and from them and from and to settlements. **In terms of managing the introduction of new development,** Policy DP1: Landscape Character; Policy DP2: Design will seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals **Overall, a negative effect on Landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies** **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

REASONABLE ALTERNATIVE	**As the proposed approach but a potential Area of Search for Coal Extraction may be identified south of the A6093 due to proximity to the trunk road network. Features in this area, including individual houses, would be protected by criteria based policy. Based on the constraints mapping described above this is one of the areas not directly covered by the constraints listed. Notwithstanding this, it remains the Councils view that any operation in any of these areas is likely to have unacceptable environmental or traffic impacts.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	?	-/?	?	0	0	+	0	0	0	0	0	0	-	?	0	0	0	-	0	0	0	++	0	0	0	- -	-	0	0

SUMMARY	?	-	0	0	-	0	-	++	0	--

COMMENT

- Although designations such as Special Protection Areas, Special Areas of Conservation, RAMSAR sites, Special Scientific Interest and Local Biodiversity Sites have been sieved out of the study area, it may be that there is potential to harm biodiversity that exists within any potential area of search for open cast coal or to indirectly harm designated sites outwith it, including if there is the potential for connectivity with a designated natural heritage site, including an European site. Whilst there is often scope to provide / improve biodiversity and habitat as part of restoration proposals this is dependent on the site, and the nature of restoration proposals. A short term negative impact on biodiversity is anticipated with any potential for gains in the longer uncertain. It is very likely that project level EIA would be required. **Overall, an uncertain effect on Biodiversity is predicted.**
- The proposed policy approach would help to provide some employment opportunities. However, the impacts that may be experienced as a result of any surface workings, particularly if any residential properties are located nearby, are likely to have a negative impact on amenity. These impacts could include noise, dust, vibration, blasting, overpressure and potentially flyrock and fumes. Whilst Codes of Practice and Environmental Management Plans can help mitigate these impacts within acceptable limits, there is still likely to be a negative impact on amenity consequent on surface mine workings. It is very likely that project level EIA would be required. **Overall, since the policy approach is likely to affect the quality of life for some East Lothian residents, a negative effect on Population is predicted.**
- The proposed policy approach would be dependent on the sites to which it is applied, including in terms of any direct impact on open space / core path network or the opportunity to contribute to CSGN objectives. In terms of the latter, there may be opportunities in terms of restoration proposals, but this would be site dependant. Impacts have also been predicted in terms of air quality, noise and on amenity in general, including from heavy vehicle movements, although the plan's policies would require these to be mitigated if they can before any planning permission may be approved. Whilst a neutral impact on these aspects of human health is predicted, there may be amenity issues for any residents nearby any operations. It is very likely that project level EIA would be required. **Overall, a negative effect on human health is predicted.**
- Changes in the ground water regime, for example from removal of top soils and their replacement with backfill materials, and dewatering or the diversion of surface waters, can significantly impact on the ecological status of the water environment. Mineral working and the associated plant and machinery may result in contamination of water bodies. LDP policies would ensure that the risk of flooding is not increased as a result of new development in the area. The plan's policies would also ensure that the ecological status of the water environment is maintained or enhanced. Any such impacts would require mitigation before any planning permission may be approved. It is very likely that project level EIA would be required. **Overall, a neutral effect on the water environment is predicted.**
- Given that minerals can only be worked where they are found, the loss of some greenfield / prime agricultural land is inevitable if minerals are to be worked. This may also result in the loss of carbon rich or rare soils. Mineral working and the associated plant and machinery may also result in contamination and waste materials. However, the policies of the plan would seek to minimise the loss of such soils, and seek to ensure restoration as appropriate. It is very likely that project level EIA would be required. **Overall, a negative effect on soils is predicted.**

	- Mineral working may result in reduced air quality due to increased heavy vehicle movements, as well as dust and other particulate matter, for example from blasting, that may disperse from areas being worked, although LDP policies would seek to mitigate associated impacts appropriately before any development could be approved. It is very likely that project level EIA would be required. **Overall, a neutral effect on Air is predicted.** - Safeguarding areas for the extraction of opencast coal could help ensure that these resources are able to be extracted where they are found. However, with no operational coal fired power stations in East Lothian it is likely coal would need to be exported to other locations, such as Longannet Power Station, generating a need to travel. Additionally, the absence of rail or some other means of transporting materials, road based transport is likely to be used to transport materials, generating CO2 emissions, from the potential area of search. It is very likely that project level EIA would be required. **Overall, a negative effect on Climatic Factors is predicted.** - Minerals can only be worked where they are found. However, it is not clear if the potential area of search for open cast coal is underlain by deposits that are of sufficient scale or quality to be of commercial interest and if their extraction is technically feasible and may be carried out in a way that is environmentally and socially acceptable. The potential area of search would require the loss of greenfield land and prime quality agricultural land. However, if the deposits are of sufficient scale or quality to be of commercial interest, safeguarding a potential area for extraction would help ensure that these mineral resources are not sterilised if their extraction is technically feasible. A full assessment of the environmental effects and need for mitigation would however be required at the level of any project. It is very likely that project level EIA would be required. **Overall, a positive effect on Material Assets is predicted.** - Although designations such Gardens and Designed Landscapes, Scheduled Monuments and Listed Buildings have been sieved out of the study area, it may be that there is potential to harm such assets that exists around any area of search for open cast coal or to indirectly harm designated sites outwith it. There are a range of cultural heritage assets in the area including listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields. However, legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the plan would ensure those impacts are appropriately mitigated. It is very likely that project level EIA would be required. **Overall, a neutral effect on heritage is predicted.** - The implementation of this policy approach would be dependent on the sites to which it is applied, including in terms of any direct harm to built or natural landscape features of significance. However, there is significant potential to harm views to and from them as well as views to and from settlements and in the landscape more widely. It is very likely that project level EIA would be required. **Overall, a very negative effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Summary

The LDP approach is predicted to have a positive effect on SEA Objective material assets, an uncertain effect on biodiversity, a neutral effect on population, health, water, air, climate and heritage, and a negative effect on soil and landscape. The reasonable alternative policy approach suggests the inclusion of a potential area of search for open cast coal working. It is predicted to have similar effects to the proposed approach,

but there is predicted to be a very positive effect instead of positive effect on material assets, a negative instead of neutral effect on population and climate, and a very negative effect instead of negative effect on landscape.

Waste

LDP POLICY APPROACH	**The LDP approach is to reflect the new national policy context as set out in the Zero Waste Plan. The LDP prioritises employment locations as suitable in principle for many waste management developments, subject to criteria being met including amenity impacts on surrounding uses. Sites allocated for class 4 business uses only may not be suited to certain technologies, depending on their impacts. Policy requirements for recycling facilities to be included in site design and layout for are included. Design guidance on waste storage, recycling and collection space will be provided as supplementary planning guidance. Policy promotes the use of site waste management plans for appropriate scales of development, to reduce construction and demolition waste. Existing and committed waste management facilities have been identified in the Plan's Proposals Map(s) and safeguarded, with development proposals that could compromise their operation to be resisted. The LDP policies will be amended to clarify that inappropriate co-location should be avoided.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	0	0	0	0	0	0	0	0	+	+	0	0	0	0	0	0	+	0	0	++	0	0	0	0	0
SUMMARY	0			0			0				0		+		0			0			++				0	0			

COMMENT	- **In terms of the location of new development**, the implementation of the LDP policy would be dependent on any new sites to which it is applied so no direct impact on biodiversity is anticipated. However, policies of the plan will seek to prevent, avoid, reduce, or offset effects (Policy W1: Waste Management Safeguards; Policy W2: Waste Management Developments) are mechanisms for securing the appropriate location for waste management facilities. **Overall, a neutral effect is predicted for biodiversity.** - The LDP policy approach would not directly contribute to the regeneration of communities or deliver affordable housing. In terms of access, the policy safeguards existing operational waste management facilities / areas. It also promotes the use of employment locations for the establishment of new facilities. Matters of accessibility and access for new sites would be assessed against other relevant polices as relevant to the proposal being assessed. **Overall, a neutral effect is predicted for population.**

	- In terms of remediating contaminated land and contributing towards CSGN objectives, the implementation of the LDP policy would be dependent on any new sites to which it is applied. There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. (Policy NH13: Noise; Policy NH12: Air Quality;) **Overall, a neutral effect on human health is predicted.** - **In terms of the location of new development** the implementation of the LDP policy would be dependent on the sites to which it is applied so no direct impact on the water environment is anticipated, although the plan's policies (Policy NH9: Water Environment – Including Advice Box 6) would require any such impacts to be mitigated. **Overall, a neutral effect on the water environment is predicted.** - **In terms of the location of new development**, the implementation of the LDP policy would be dependent on any new sites to which it is applied and the plan's policy on soil (Policy NH7: Protecting Soils) would require any impacts on soil to be mitigated so no direct impact on soils is anticipated. However, signposting that land already allocated for employment use may also be suitable for waste management facilities may help minimise the loss of greenfield land or prime agricultural land and or rare soil types. **Overall, a positive effect on soils is predicted.** - **In terms of the location of new development** the implementation of the LDP policy would be dependent on any new sites to which it is applied, and the plan's polices (Policy NH12: Air Quality) would require any impacts on air quality to be mitigated. **Overall, a neutral effect on Air is predicted.** - **In terms of managing the introduction of new development** the implementation of the LDP policy would be dependent on any new sites to which it is applied. **Overall, a neutral effect on Climatic Factors is predicted.** - **In terms of managing the introduction of new development** the implementation of the LDP policy would be dependent on any new sites to which it is applied. However, signposting that land already allocated for employment use may also be suitable for waste management facilities may help minimise the use of greenfield land (Policy W2: Waste Management Developments, Policy W3: Waste Separation and Collection and W4: Construction Waste). Importantly, the policies would ensure that facilities can be provided to help deliver a reduction in as well as the reuse and recycling of waste. **Overall, a very positive effect on Material Assets is predicted.** - **In terms of managing the introduction of new development** there are a range of cultural heritage assets in the area such as listed buildings, conservation areas, historic gardens and designed landscapes, scheduled monuments and battlefields that will be taken into account, including their settings. Legislation and higher level policies prevent these assets being compromised. Where development may impact upon them the policies of the LDP would ensure those impacts are appropriately mitigated. The implementation of the proposed policy would be dependent on any new sites to which it is applied, and the plan's polices would require any impacts on heritage to be mitigated. Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies and Supplementary Planning Guidance will help secure related objectives. In relation to design issues, LDP Policy DP1: Landscape Character; Policy DP2: Design will all seek high quality development, including in relation to cultural heritage. It may be that project level EIA would be required for some proposals, or specialist studies (e.g. archaeological assessments) to establish project level mitigation. **Overall, a neutral effect on heritage is predicted.** - **In terms of managing the introduction of new development** the implementation of the proposed policy would be dependent on any new sites to which it is applied, and the plan's polices would require any impacts on landscape to be mitigated. Policy DP1: Landscape Character; Policy

	DP2: Design will seek high quality development, including in relation to landscape considerations. It may be that project level EIA or specialist studies (e.g. landscape and visual impact assessments / arboricultural reports) would also be required for some proposals **Overall, a neutral effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA with mitigation identified where appropriate, and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees

MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

MIR REASONABLE ALTERNATIVE	**The alternative approach is to comprehensively review the text of the Local Plan in respect of waste developments to reflect the new national policy context as set out in the ZWP. The LDP would introduce a criteria based policy against which proposals for waste management faculties would be assessed, including amenity impacts on surrounding uses. Existing and committed waste management facilities (including but not limited to Oxwellmains) will be identified in the Plan's Proposals Map(s) and will be safeguarded.**

SEA TOPIC	BIODIVERSITY			POPULATION			HEALTH				WATER		SOIL		AIR			CLIMATE			ASSETS				HERITAGE	LANDSCAPE			
QUESTION	B1	B2	B3	P1	P2	P3	H1	H2	H3	H4	W1	W2	S1	S2	A1	A2	A3	C1	C2	C3	M1	M2	M3	M4	H1	L1	L2	L3	L4
SCORE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	++	0	0	0	0	0
SUMMARY	0			0			0				0		0		0			0			++				0	0			

COMMENT	- The implementation of the proposed policy would be dependent on any new sites to which it is applied so no direct impact on biodiversity is anticipated. The policy on waste a mechanism for securing waste management facilities. **Overall, a neutral effect is predicted for biodiversity.** - The proposed policy approach would not directly contribute to the regeneration of communities or deliver affordable housing. In terms of access, the policy safeguards existing operational waste management facilities / areas. It may also promote the use of employment locations for the establishment of new facilities. Matters of accessibility and access for new sites would be assessed against other relevant polices as relevant to the proposal being assessed. **Overall, a neutral effect is predicted for population.** - In terms of remediating contaminated land and contributing towards CSGN objectives, the implementation of the proposed policy would be dependent on any new sites to which it is applied. There are uncertain impacts in terms of air quality and noise, although the plan's policies would require these impacts to be mitigated. **Overall, a neutral effect on human health is predicted.** - The implementation of the proposed policy would be dependent on the sites to which it is applied so no direct impact on the water environment is anticipated, although the plan's policies would require any such impacts to be mitigated. **Overall, a neutral effect on the water environment is predicted.**

	- The implementation of the proposed policy would be dependent on any new sites to which it is applied so no direct impact on soils is anticipated. **Overall, a neutral effect on soils is predicted.** - The implementation of the proposed policy would be dependent on any new sites to which it is applied, and the plan's polices would require any impacts on air quality to be mitigated. **Overall, a neutral effect on Air is predicted.** - The implementation of the proposed policy would be dependent on any new sites to which it is applied. **Overall, a neutral effect on Climatic Factors is predicted.** - The implementation of the proposed policy would be dependent on any new sites to which it is applied. Importantly, the policy would ensure that facilities can be provided to help deliver a reduction in as well as the reuse and recycling of waste. **Overall, a very positive effect on Material Assets is predicted.** - The implementation of the proposed policy would be dependent on any new sites to which it is applied, and the plan's polices would require any impacts on heritage to be mitigated. **Overall, a neutral effect on heritage is predicted.** - The implementation of the proposed policy would be dependent on any new sites to which it is applied, and the plan's polices would require any impacts on landscape to be mitigated. **Overall, a neutral effect on landscape is predicted.**
MITIGATION	In terms of mitigation, the process of preparing the plan has helped avoid significant environmental effects where possible. This includes assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. Additionally, it is important the SEA and LDP signpost the potential need for further study to clearly establish mitigation, including for individual sites once these are finalised. At this stage the following is the type of mitigation that is anticipated, taking in to account the mitigation hierarchy: 1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate 3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies / site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA **or specialist studies / site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA **/ site briefs / masterplans /** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

	7. **Climate** - LDP strategy and policies / potentially project level EIA **or specialist studies** / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees 10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees
MONITORING	Completion of HRA/AA; inclusion of relevant and appropriate LDP policies and proposals informed by other relevant strategies, including clarification of any requirement for masterplans and the need for EIA or other project level assessments, such as flood risk assessments, archaeological assessments, landscape and visual impact assessments etc.; monitor if these assessments / studies are completed and / or submitted with applications and masterplans as relevant. The Action Programme and its review as well Monitoring Statements will also be used to monitor progress once the LDP is operative.

Summary

The LDP policy approach is predicted to have a very positive effect on the SEA Objective material assets, a positive effect on soil (mainly because waste installations would be supported at suitable employment sites, thus potentially minimising greenfield land take etc.) and a neutral effect on all other SEA Objectives. The reasonable alternative policy approach is predicted to have similar effects to the proposed approach, but the effect on soil is predicted to be neutral, since there would be no clear support for waste facilities to be delivered on appropriate employment sites. Importantly, it is not clear at this stage if any additional waste installations would be required or where they may be developed. The effect predicted for all other SEA Objectives from this alternative policy approach is neutral.

6 MITIGATION MEASURES

6.1.1 Mitigation Measures

The Environmental Assessment (Scotland) Act 2005 requires that the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of the plan are set out in the Environmental Report – i.e. to set out the anticipated mitigation measures. Importantly, the outcome of the SEA should not stop a course of action being followed by the plan because one approach may have a greater environmental effect than another[45].

A key role of SEA therefore is to identify mitigation measures to help avoid or reduce environmental effects as far as possible – i.e. it may be that an environmental effect needs to be accepted with consideration given to mitigation where possible. The sequence of identifying suitable mitigation is usually done in a hierarchy – 1) avoid / prevent; 2) reduce / minimise; and 3) offset / compensate. These may include such measures as making changes to the plan, amending a policy or proposal in the plan, adding further policies to the plan, identifying specific effects to be addressed at project level, or a combination of the above. This has been done iteratively and in full consultation with the Consultation Authorities in the preparation of the LDP. However, further specific project level mitigation may be identified through the Development Management process.

A further consideration is the extent to which other environmental assessments should be integrated with the SEA, or how the SEA can be used to streamline such other assessments processes. An important consideration in this is the need for any Habitats Regulation Appraisal (HRA) and any related Appropriate Assessment (AA) of the LDP and signposting the need for any project level assessments. In terms of HRA, current guidance does not recommend full integration of SEA and HRA; instead, consideration is to be given through the SEA to screen for any likely significant effects on European sites. In agreement and collaboration with the SNH, initial HRA screening formed part of this SEA in relation to the site assessment work. Where any site(s) may have connectivity with a European site and SNH considered they may require assessment through the HRA process, either individually or cumulatively, this is indicated with a * in the respective site assessment.
The LDP has been the subject of more detailed assessment and the assessment of proposed sites under HRA/AA. The LDP signposts where project level assessment is likely to be required, taking in to account advice from the Consultation Authorities and the outputs of HRA/AA. Where

[45] Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.25 – 3.28

required policies, proposals or site specific mitigation has been identified, and for some sites it may be that project level EIA **and HRA** will be required.

Mitigation measures should be capable of being implemented. This means that the mitigation identified should be as specific as possible. Clarity on who will be responsible for providing the mitigation and when, and monitoring if the mitigation has been implemented as well as monitoring the overall effects of the plan on the environment, will be important.

In terms of mitigation, the process of preparing the plan has avoided significant environmental effects where possible. This included assessment of the LDP under HRA/AA and the production of other complementary assessments and strategies, such as Transport Appraisal and an air quality management strategy. These were the responsibility of the Council to prepare. These assessments / strategies have been used in the preparation of the LDP and have helped guide the site selection process identification of any necessary mitigation on a cumulative and site by site basis.

The SEA and LDP signpost the need for further study to clearly establish mitigation, including for individual sites where significant environmental effects are anticipated. Much of the mitigation required once the plan is operative is the responsibility of developers to provide and deliver. In order to secure planning permission, this will include the preparation of supporting studies and assessments as well as masterplans as required. Where necessary planning conditions and / or obligations will be used to ensure mitigation is provided. The following is the type of mitigation that is has been included or is anticipated or required taking in to account the mitigation hierarchy:

1. **Biodiversity** – HRA / LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
2. **Population** – Retail Impact Assessment to ensure the vitality, viability and vibrancy of existing town centres is retained and that the scale of provision in any new centre is appropriate
3. **Human Health** – Noise, Dust, vibration etc. - LDP strategy and policies / potentially project level EIA **or specialist studies** **/ site briefs** / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
4. **Water** – LDP strategy and policies / potentially project level EIA **or HRA** or specialist studies (water and drainage impact assessment / flood risk assessment etc.) **/ site briefs** / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees

5. **Soils** – LDP strategy and policies, including on prime quality agricultural land, carbon rich and rare soils and development density / potentially project level EIA or specialist studies / site briefs / masterplans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
6. **Air** – Air quality management strategy to complement LDP strategy / LDP policies / potentially project level EIA / site briefs / masterplans / / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
7. **Climate** - LDP strategy and policies / potentially project level EIA or specialist studies / Travel Plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
8. **Material Assets** - LDP strategy and policies / potentially project level EIA / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
9. **Heritage** – LDP strategy and policies / potentially project level EIA or specialist studies (e.g. archaeological assessments) / site briefs / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds / Guarantees
10. **Landscape** – LDP strategy and policies (e.g. Green Belt / CSGN / CAT) / potentially project level EIA or specialist studies (landscape and visual impact assessments / arboricultural reports etc.) / site briefs / master plans / Code of Practice / Environmental Management Plans / Restoration Plans / Bonds & Guarantees

7 MONITORING

7.1.1 Monitoring Framework

Any significant environmental effects of the plan should be monitored, consistent with the Environmental Assessment (Scotland) Act 2005. SEA monitoring arrangements should help identify possible significant environmental effects and help identify any unforeseen issues arising from the implementation of the LDP. This is to allow any remedial action to be taken, if required.

However, it is a challenge to identify appropriate and proportionate Monitoring Statement and SEA indicators that can actually achieve this, and that can be monitored within available resources. This is because it is not always possible to directly link changes in the environment to the specific effects of implementing an LDP. This is discussed further below in Section 8 in respect of the limitations and difficulties in the assessment. The Environmental Assessment (Scotland) Act 2005 does not require bespoke monitoring arrangements or timelines, although this should be tied to the implementation of the LDP. As such, the Council proposes to monitor the effects of the plan in terms of the requirement of the Environmental Assessment (Scotland) Act 2005 through the parallel monitoring arrangements required by The Town and Country Planning (Scotland) Act 1997 (as amended) – i.e. with the production of a Monitoring Statement and Action Programme:

- A Monitoring Statement provides the environmental baseline for the emerging LDP. A Monitoring Statement was prepared to support the MIR, and was published then and again with the proposed LDP. It discusses the changes in the principal physical, economic, social and environmental characteristics of the area and the impact on these of the policies and proposals of the existing plan. Monitoring Statements are prepared for the review of each LDP.

- Action Programmes sets out how the authority proposes to implement the plan. An Action Programme will be published alongside the LDP. It will be reviewed at least every two years thereafter. Action Programmes may include the delivery of key infrastructure and the preparation of Supplementary Guidance &c. However, actions need not be limited to those by the planning authority, and can include, for example, the preparation of Environmental Impact Assessments or specialist studies for certain proposals. Action Programmes are to be reviewed at least biannually.

8 LIMITATIONS OF AND DIFFICULTIES IN THE ASSESSMENT

8.1.1 Limitations & Difficulties in the Assessment

The LDP needs to acknowledge the requirements of higher tier PPSs, align with those that operate at the same level as it as well as set an appropriate context for any that will operate under it. However, the SEA needs to recognise that the LDP will be one of many PPSs that act together to achieve positive outcomes whist encouraging sustainable economic growth. Importantly, the limited remit of the LDP will place limitations on its ability to influence the wider forces acting on the environment.

When preparing the LDP, the planning authority should have regard to such other information and considerations as appear to it to be relevant, including higher tier PPSs. SPP expects this to include statements of Scottish Government policy in SPP, Designing Places, Designing Streets and Planning Circulars and Planning Advice Notes etc. The primary limitation on the assessment however is that the principal elements of the LDP that are likely to have significant environmental effects, being the amount and broad location of housing and economic development and other items to be planned for, must be in accordance with the SDP. From these requirements flow many others that the LDP will need to provide for through its policy approach and land use proposals, including new community and education facilities and transport and other infrastructure. Whilst the process of SEA predicts and evaluates the likely significant environmental effects of the LDP, it is not an option for the LDP to exclude requirements if effects are found to be negative as the LDP must be consistent with the SDP. As explained above it is also not the case that the option with the least negative environmental effects must be followed.

Due to the stage of the planning process at which Development Plans are prepared it is also not possible to establish the detailed environmental effects of development at the LDP stage: this is why the SEA is to focus on likely ***significant*** environmental effects. Such detailed assessment is to be undertaken at later stages of the planning process - for example, through the preparation of Transport Assessments, Flood Risk Assessments and other technical assessments. These more detailed assessments would be submitted with planning applications, once the nature of proposals are fully understood and can be assessed in detail. Yet it is possible through SEA to identify what issues will need to be addressed in the development of a site and what kind of mitigation should be put in place by the LDP. As mentioned, this includes the need for further study through which any requirement for detailed mitigation whether prior to, during and / or post development will be specified. The SEA has an important role in identifying any need for this and to help scope / identify any further study that may be necessary at later stages of the planning process. The consultation responses from the Consultation Authorities were key to establishing the nature of mitigation that the LDP has put in place and / or sought. However, further specific project level mitigation may be identified through the Development Management process.

It is not possible to predict and evaluate **all** the environmental effects of the LDP. The actual effects depend on many subsequent decisions on planning applications for development. This will include decisions to grant planning permission for development on allocated sites and for other windfall proposals consistent with the plans policies if the principle of development and detailed design proposed are acceptable. The effects of the LDP also depend on the way that the plan policies and proposals work together and the consistency with which all of the plan's policies and proposals are interpreted and applied. However, it has to be assumed that as part of the SEA that all decisions will be made in accordance with the LDP; whilst material considerations may lead to a decision that is not in accordance with it, this cannot be anticipated. Some long-term, cumulative and synergistic effects of the LDP may not therefore be predictable.

The Scottish Government directs that planning powers should not be used to regulate matters more properly dealt with under other regimes and that the approval of planning permission does not override the need to obtain any other permission that need be sought under separate procedures[46]. In some cases, the role of these other agencies / regimes may be sufficient 'assumed mitigation' to ensure certain predicted effects will not be significant – e.g. the need to obtain Controlled Activity Regulations licences may mitigate certain potential impacts on the water environment[47].

Another key limitation is the availability of information which can be used in the assessment and to monitor the effects of the LDP. The remit of the LDP – i.e. a land-use plan which seeks to promote and control development and the use of land as appropriate – is one of many factors that influence the environment, many of which fall outwith the scope of the planning system. Due the complex relationships that exist between how the environment is affected by human activity and other natural processes etc. it is not always possible to predict and evaluate and / or attribute environmental effects monitored solely to the implementation of the Development Plan.

The assessment itself and the information sources used for monitoring the effects of the LDP must also be proportionate and related to available resources[48]. Professional judgement and expert opinion has played a significant role in predicting and evaluating effects, and if future monitoring reveals there is a need for action it does not directly follow that this will have arisen as a direct result of the LDPs implementation.

[46] Scottish Government Circular 4/1998: Annex A paragraph 20.
[43] Scottish Government PAN 1 / 2010 paragraph 5.2 (point 4)
[48] Scottish Government PAN 1 / 2010 paragraph 5.2 & Scottish Government: Strategic Environmental Assessment Guidance August 2013 paragraph 3.35

9 NEXT STEPS

9.1.1 POST-ADOPTION STATEMENT

When the Council published the proposed LDP for representation, the draft ER was also published for consultation. The Council will set out how it responded to comments received on the draft ER, including those from the Consultation Authorities, in its Post Adoption Statement. This statement will also include how environmental considerations have been taken into account in preparation of the plan. This will be published within six weeks of the adoption of the LDP.

APPENDIX 1 Other Relevant Plans Policies & Strategies

The following Plans, Policies and Strategies are relevant. They are grouped under the main SEA topic though some cover more than one topic, for example PAN 71 is relevant to both Cultural Heritage and Landscape and Townscape.

Name Of Plan	Environmental Requirements Of Plan	Implications For The SEA	LDP Response
AIR			
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. (2011)	Sets out the air quality strategy for the UK with objectives and targets, referring to the Environment Act 1995 legislation. It seeks a reduction in the levels of 8 harmful pollutants present in the air, which in turn promote: • the protection of human health; and • the protection of vegetation and ecosystems	Air Quality: LDP should contribute to reduction in air pollution. Human Health and Safety: LDP should contribute to reduction in air pollution for the benefit of human health. Biodiversity: LDP should contribute to reduction in air pollution for the benefit of human health for the benefit of biodiversity.	Meeting development requirements set out in the SDP is likely to lead to increased journeys by private car wherever it is located. The LDP focusses development in the west of the area to minimise impacts to air, as well as requiring improvements to rail stations and active travel provision as mitigation. Policy NH12 Air Quality provide that impacts on air quality will be taken into account. Policy DC10: The Green Network supports creation of green infrastructure. Improvements to Musselburgh and Tranent High Street to address air quality issues are included in the plan (Musselburgh: Policy T19 and PROP T20 – T22 and Tranent Policy T26 and PROP T27 and T28). Other Transport policies seek to encourage active travel to reduce emissions to air (see Appendix 4: SEA Topic Air)
Local Air Quality Management Act (Part of the Environmental Act 1995)	Sets out duties requiring local authorities to review and assess air quality in their area from time to time, the reviews forming the cornerstone of the system of local air quality management.	Air Quality: sets out requirements to reduce air pollution which LDP should contribute to. Human Health and Safety: looks to maintain and improve air quality for the benefit of human health to which LDP should make a contribution.	
POPULATION			

Scotland's National Transport Strategy (2006)	• Promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of the transport network: • Protect our environment and improve health by building and investing in public transport and other types of efficient and sustainable transport which minimize emissions and consumption of resources and energy • Improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, cyclists, drivers, passengers and staff.	Material Assets: LDP should seek to integrate with the aims of the National Transport Strategy.	The LDP locates the majority of new development in areas which are or can be made accessible by public transport and which will minimise distance travelled and therefore vehicle-based emissions. The LDP supports active travel through setting criteria for new development in Policy DP2 Design; criteria for location of development in Policy T1: Development Location and Accessibility; protects convenience, safety and attractiveness of active travel in Policy T2: General Transport Impact. Policy T6 contains policy on reallocating road space to pedestrians and cyclists. Developer contributions will be sought for platform lengthening at rail stations to improve capacity and a Segregated Active Travel Corridor (PROP T3). The Cycle Route Network will be supported (PROP T5). Policy T7 supports improved use of IT in public transport; Policy T8 bus network improvements. Improvements to the road network are promoted and supported in PROP T15 – T28 and Policies T19 – T32. The LDP sets out requirements for individual sites in
Strategic Transport Projects Review (STPR) (2008)	STPR complements the National Transport Review and seeks to: • improve journey times and connections – to tackle congestion and the lack of integration and connections in transport which impact on our high level objectives for economic growth, social inclusion, integration and safety • reducing emissions – to tackle the issues of climate change, air quality and health improvement which impact on our high level objective for protecting the environment and improving health, and • improving quality, accessibility and affordability – to give people a choice of public transport, where availability means better quality transport services and value for money or an alternative to the car	Material Assets: LDP should seek to integrate with the aims of the STPR. Population & Human Heath: LDP should support the STPR interventions aimed at reducing congestion, emissions etc. and improving human health. Climatic Factors and Air Quality: LDP should support the STPR interventions aimed at reducing congestion, emissions etc. such as tackling issues of climate change and the availability of better forms of public transport to reduce dependency on cars.	
SESTRAN Regional Transport Strategy (2008-2023)	• to ensure that development is achieved in an environmentally sustainable manner: reducing greenhouse gas emissions and	Material Assets: LDP should seek to integrate with the aims of the transport strategy	

	other pollutants and enabling sustainable travel/ reduce car dependency • to promote a healthier and more active SEStran area population	Climatic Factors and Air Quality: LDP should contribute to ensuring that development is achieved in an environmentally sustainable manner, reducing air pollutants and thus improving air Quality Human Health: LDP should promote a healthier and more active population	Development Briefs which include provision for active travel connections (see also Appendix 4: SEA Topic Population)
SPP: Promoting Sustainable Transport and Active Travel (para 269-291)	The national focus is on improving connectivity and promoting more sustainable patterns of transport and travel.	Material Assets: the LDP should plan land use in a manner which assists in reducing the need to travel and contributes to sustainable transport nodes.	
PAN 75 Planning for Transport	PAN 75 accompanies SPP and aims to create greater awareness of how linkages between planning and transport can be managed. It highlights the roles of different bodies and professions in the process and points to other sources of information.	Material Assets: the LDP should plan land use in a manner which assists in reducing the need to travel and contributes to sustainable transport nodes.	
A cycling Action Plan for Scotland (2013)	**Sets policy and strategy for increasing cycling, including a vision for 10% target of journeys by bike by 2020**	**LDP should seek to support objectives**	
A Long term Vision for Active Travel in Scotland	**Sets out a vision for walking and cycling as most popular choice for shorter, everyday journeys. This includes a vision for development planning as focused on creating placed based around active travel and which support local economies, incorporate green networks and encourage social interaction and activity.**	**LDP should seek to support objectives**	
BIODIVERSITY, FLORA AND FAUNA			
Nature Conservation (Scotland) Act (2004)	Introduced a 'duty to further the conservation of biodiversity' for all pubic bodies, and sets out more specific provisions within this (e.g. for SSSIs). Also states a requirement for the preparation of a Scottish Biodiversity Strategy, to which all public bodies should pay regard.	Biodiversity: LDP should aim to conserve Scotland's biodiversity for future generations by conserving habitats and species and raising public awareness on the importance of biodiversity.	The LDP aims to minimise impacts on biodiversity in allocating sites for development. HRA/AA has been carried out on the LDP to ensure impacts on Natura 2000 sites are avoided, including providing for mitigation of potential effects through PROP
Scotland's Biodiversity – It's In Your Hands.	Sets out Scottish aims relating to biodiversity over 25 year period. Seeks to go beyond a previous emphasis	Biodiversity: LDP should aim to conserve Scotland's biodiversity for future	

A strategy for the conservation and enhancement of biodiversity in Scotland (2004)	on protecting individual sites to achieve conservation at a broader scale. Aims to halt loss and reverse decline of key species, to raise awareness of biodiversity value at a landscape or ecosystem scale, and to promote knowledge, understanding and involvement amongst people.	generations by conserving habitats and species and raising public awareness on the importance of biodiversity.	MH16: Levenhall Links to Prestonpans: Area for Habitat, which proposes that the Council manages an area of land as habitat for qualifying species of the Firth of Forth SPA. The LDP conserves biodiversity in general and particular habitats and species through Policies NH1 – NH5 which protect biodiversity in internationally, nationally, and locally designated sites, as well as biodiversity that could be affected by development. Policy NH8 protects trees which may be affected by development, and NH9 the water environment. Policy DC10 provides for development to contribute to the Green Network, and for its function to be maintained. Policies W1 – W4 support the Zero Waste Plan, reducing resource use. The LDP aims to minimise greenhouse gas emissions (see Climate Change, below). THE LDP notes (paragraph 6.14) that the East Lothian Biodiversity Action Plan will be referred to in considering planning applications. (see also Appendix 4: SEA Topic Biodiversity, Flora and Fauna)
Choosing Our Future – Scotland's Sustainable Development Strategy (2005)	Details the Scottish Executive's (now Government) strategy for tackling issues such as climate change, biodiversity, resource use and pollution.	Biodiversity: LDP should aim to conserve Scotland's biodiversity for future generations by conserving habitats and species. Climatic Change and Air Quality: aims to reduce impact on and adapt to climate change, LDP should aspire to this. Material Assets: LDP should aim to minimise resource depletion, encourage the responsible use of natural resources and maximise where possible on recovery, re-use and recycling of materials.	
SPP: Valuing the Natural Environment (para 193-218) PAN 60 Planning for Natural Heritage (2000)	The conservation of Scotland's plants, animals, landscapes, geology, natural beauty and amenity is important and should be considered in all development plans.	Biodiversity and Landscape: these priorities should be taken into account and progressed as far as possible within the LDP. The LDP should not adversely affect designated natural heritage sites, and should aim to support conservation and appreciation of natural heritage at a landscape scale.	
The Scottish Forestry Strategy (2006) (and associated SEA)	Key themes include to: • reduce the impact of climate change; • get the most from Scotland's increasing and sustainable timber resource; • make access to and enjoyment of woodlands easier • for all to improve health; • protect the environmental quality of our natural	Biodiversity: aims to conserve and enhance biodiversity which needs to be taken on board by LDP. Population & Human Heath: aims to improve health and well being by providing biodiversity and green infrastructure benefits, the LDP should enhance this.	

	• resources; and • help to maintain, restore and enhance Scotland's biodiversity	Climatic Change: aims to reduce impact on and adapt to climate change.	
Local Biodiversity Action Plan: East Lothian (2008 – 2013)	The LBAPs translate national targets for species and habitats into effective local action, stimulates local working partnerships into tackling biodiversity conservation, raises awareness, identify local resources, identify local targets for species and habitats, ensure delivery and monitor progress.	Biodiversity: LDP should support the aims of the LBAPs and avoid adversely affecting key habitats and species as identified therein.	
East Lothian Environment Strategy (2010 – 2015)	Long term vision: 'East Lothian is a place of opportunity for all, with a thriving low carbon economy, a high quality environment and healthy communities that are prepared for the challenges of climate change' Key principles: • Moving to a low carbon and more localised economy • Reducing dependence on finite resources • Recognising the importance of a well looked after natural environment to the health and well-being of East Lothian's communities • Encouraging more sustainable land use patterns • Connecting communities and increasing use of sustainable forms of transport • Developing and nurturing environmental education, responsibility and action • Preparing for and managing climate impacts	Biodiversity: LDP should support the key themes of the Environment Strategy and safeguard and promote the biodiversity of East Lothian. Population & Human Heath: through the safeguard and promotion of biodiversity and green networks the LDP will create benefits for the wellbeing of all the people in East Lothian. Climate Change and Air Quality: LDP should aim to make an appropriate contribution to this strategy to increase sustainable transport, reduce emissions, and prepare for and manage climate impacts.	
Edinburgh and Lothians Forestry & Woodland Strategy (ELFWS) 2012-2017	The purpose of the Edinburgh and Lothians Forestry & Woodland Strategy 2012-17 is to guide woodland expansion and management across the Lothians in a manner that optimises their contribution to the region's people, economy and environment.	Biodiversity: aims to conserve and enhance biodiversity which needs to be taken on board by LDP. Population & Human Heath: aims to improve health and well being by	

		providing biodiversity and green infrastructure benefits, the LDP should enhance this.	
CLIMATIC FACTORS			
SPP : Delivering Heat and Electricity (para 152-174) Pan 45 Renewable Energy Technologies (2005)	The Scottish Ministers have set a target of generating 80% of Scotland's electricity from renewable sources by 2020[49]. The importance of using clean and sustainable energy from renewable sources will continue to increase as a result of global imperatives to tackle climate change and the need to ensure secure and diverse energy supplies. PAN 45 complements SPP and highlights examples of good practice across Scotland. A key role of the planning system is to support a move towards low and zero carbon development through the use of energy efficient, micro-generating and decentralised renewable energy systems.	Climatic Change and Air Quality: LDP should safeguard sites suitable for renewable energy developments and support Scotland's commitment to renewable energy developments and movement towards low and zero carbon developments.	The LDP spatial strategy focusses development in the west of the area, close to Edinburgh a main employment and service centre. It sets out policy to minimise the need to travel and allow travel by public transport. The LDP supports the Zero Waste Stratetgy (see policy and proposals listed under 'Air' above). The LDP sets out policy to encourage wind development where environmental impacts are acceptable in Policies WD1 – WD6. Policy SEH1 notes Council support for the prinicples of the energy hierarchy and promotes energy efficient design and community heating schemes. It also provides for development to connect to district heat networks where appropriate. Policy SEH2 provides for use of renewable energy technologies in larger developments. Biomass is mentioned as a potentially suitable technology in Advice Box 4. Flood risk is addressed in the Strategic Flood Risk Assessment.
Changing Our Ways – Scotland's Climate Change Programme (2006)	Details the Scottish Executive's (now Government's) programme for reducing and adapting to climate change.	Climatic Change and Air Quality: LDP should aim to make an appropriate contribution to this programme.	
Climate Change (Scotland) Act 2009	Act to: • set a target for the year 2050, an interim target for the year 2030, and to provide for annual targets, for the reduction of greenhouse gas emissions; • to provide about the giving of advice to the Scottish Ministers relating to climate change; • to confer power on Ministers to impose climate change duties on public bodies; • to make further provision about mitigation of and adaptation to climate change; • to make provision about energy efficiency; • to make provision about the reduction and recycling of waste	Climatic Change and Air Quality: reduction in greenhouse gas emissions through target setting and implementation of measures to improve energy efficiency and make provision for reduction and recycling of waste. LDP should promote and contribute towards the targets set by the bill. The LDP should also adhere to the public body duties in Section 4 of the Act, this means exercising functions: in the best way calculated to contribute to delivery of the Act's emission reduction targets, deliver any statutory adaptation	

[49]Scottish Government 2010: http://www.scotland.gov.uk/News/Releases/2010/09/23134359

		programme; and in the most sustainable way.	Policy NH11 Flood Risk provides that development at risk of flooding or that would increase flood risk elsewhere will not be supported. Policy DC10 Green Network supports the development of a green network which could mitigate climate change and provide some adaption also. (see also Appendix 4: SEA Climatic Factors)
Energy Efficiency and Micro generation: achieving a Low Carbon Future: A Strategy for Scotland (2008)	Strategy sets out the action to take to help Scotland meet carbon savings targets etc. outlined in Changing Our Ways – Scotland's Climate Change Programme (2006) through improving energy efficiency and encouraging a greater uptake of micro generation.	Climatic Change and Air Quality: LDP should aim to make an appropriate contribution to this programme to help meet carbon saving targets for Scotland.	
Biomass Action Plan for Scotland (2007)	The Biomass Action Plan sets out a coordinated programme for the development of the biomass sector in Scotland and aims to: • provide a summary of the wide range of existing activities, actions and initiatives; • provide a focus for a strategic coordinated approach to developing biomass for energy production across the heat, electricity and transport sectors; • identify roles and responsibilities for government, industry and public stakeholders to develop a vibrant bioenergy industry in Scotland; and • identify future actions and gaps	Climatic Change and Air Quality: LDP should aim to make an appropriate contribution to this programme to help meet biomass plan aims for Scotland.	
Scottish Government online renewable advice	These supplementary guides for renewables support SPP: Renewable Energy and set out advice to assist in planning for a range of renewable technologies.	Climatic Change and Air Quality: LDP should support and plan for renewable energy including wind energy developments in East Lothian.	
Scotland's Climate Change Adaptation Framework	The aim of the Adaptation Framework is to lead planned adaptation across all sectors to increase the resilience of Scotland's communities to the impacts of climate change, and the natural and economic systems on which they depend. The document has three pillars for action: • Improving the understanding of the consequences of a changing climate and both the challenges and opportunities it presents • Equipping stakeholders with the skills and tools needed to adapt to the changing climate	Climatic Change and Air Quality: LDP should recognise the need to understand the consequences of a changing climate and integrate adaptation measures into policy where possible	

	• Integrating adaptation into wider regulation and public policy so that it is a help, not a hindrance, to addressing climate change issues		
CULTURAL HERITAGE (INCLUDING ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE)			
Historic Environment Scotland Policy Statement (2016)	The HES Policy Statement is the overarching policy statement for the historic environment. It provides a framework for more detailed strategic policies and operational policies that inform the day-to-day work of a range of organisations that have a role and interest in managing, protecting, conserving and where appropriate enhancing, the historic environment.	Cultural Heritage: LDP should impact as little as possible on the historic environment. The LDP should seek to promote the HES Policy Statement vision.	LDP allocations for development aim to minimise impacts on the cultural heritage. LDP Policies CH1 – CH9 protects elements of the cultural heritage including Listed Buildings, Conservation Areas, Battlefields, Scheduled Monuments, archaeological sites, Garden and Designed Landscapes and specific cultural heritage assets within East Lothian. Policy DC5 supports restoration of listed buildings. PROP MH2 includes reference to the need to safeguard the setting of Monkton House and Gardens. Impacts on listed buildings are noted in relation to PROP MH5, PROP PS1, in relation to Longniddry Farm and Longniddry Primary School (as is PROP ED2) PROP DR9 in relation to Auction Mart, East Linton PROP NK8, in relation to Greywalls, The LDP proposes Supplementary Planning Guidance containing Conservation Area Character Statements, and signposts their replacemet by more detailed Conservation Area Character Appraisals and Management Plans in due course.
SPP: Valuing the Historic Environment (para 135-151)	The historic environment is a vital contribution to Scotland's cultural heritage and contributes to our understanding of the past and present. The conservation of the historic environment should be carefully integrated with other policies to ensure its survival.	Cultural Heritage: LDP should impact as little as possible on the historic environment. The LDP should outline the strategic importance of the historic environment as a resource in its own right and as a driver for sustainable economic development and regeneration. The spatial strategy of the plan should be informed by considerations including the capacity of settlements and areas of countryside to accommodate development without damage to their historic value.	
Our Place in Time: The Historic Environment Strategy for Scotland	Sets out a vision for the historic environment, including understanding it by investigating and recording; protecting it by caring and protecting; valuing by sharing and celebrating. It expects these aims to be delivered by collaborative working through a range of bodies and individuals and other plan policies and strategies.	LDP should seek to support these aims	
PAN 2/2011: Planning and Archaeology	This PAN is intended to inform the day-to-day work of a range of local authority advisory services and other organisations that have a role in the handling	LDP should seek to support these aims	

	of archaeological matters within the planning process.		The LDP has designated Special Landscape Areas which include area of historic landscape, taken into account in the process of identifying areas and boundaries. Avoidance of impacts on Cultural Heritage is also a criteria for specific development types including minerals and wind. (see also Appendix 4: SEA Topic Cultural Heritage)
Managing Change in the Historic Environment: Guidance Notes	Az range of guidance notes that set out the principles that apply to developments of different types that affect the historic environment. They should inform planning policies and the determination of applications	LDP should seek to reflect these guidance notes	
LANDSCAPE AND TOWNSCAPE			
Creating Places (2013)	Policy statement sets out the overarching policy on design including architecture and place.	LDP should reflect national policy	Landscape issues were considered in allocating sites for development, including mitigation identified through Development Briefs. LDP Policy DP1 Landscape Character and DP2 Design sets out design criteria for new development. Masterplans are required for larger sites to promote good design. Supplementary Planning Guidance signposted in the LDP will set out appropriate development in Conservation Areas which cover many town centres and villages. The LDP designates Special Lansdcape Areas, while related SPG will outline appropriate design for these areas. Placemaking criteria such as accessibility by foot are covered by policies on transport.
Pan 44 Fitting New Housing Development into the Landscape	Strategically, establishing landscape capacity and the relationship of new to existing urban forms as primary factors in determining the desirability of settlement expansion Promoting higher design standards relative to form layout and relation with existing urban areas	Landscape and Townscape: LDP should promote development which fits into the existing landscape and townscape.	
SPP: Placemaking (para 36-57)	The SPP sets out the national planning policy framework for creating better places, using a design-led approach.	Landscape and Townscape: LDP should reflect national policy on placemaking.	
Pan 52 Planning and Small Towns	Identifying factors which threaten the important legacy of small towns: • Providing for regeneration and expansion • Enabling lively, active and vibrant town centres within small towns • Enabling efficient and effective transport to support economic growth and accessibility • Promoting quality design that promotes townscape quality	Landscape and Townscape: LDP should promote quality development.	
PAN 65 Planning and Open Space (2003)	Provides advice on the role of the planning system in protecting and enhancing existing open spaces and providing high quality new spaces.	Landscape and Townscape: LDP should enhance existing open space and provide high quality new spaces.	

PAN 71 Conservation Area Management	This provides further advice on the management of conservation areas. It identifies good practice for managing change, sets out a checklist for appraising conservation areas and provides advice on funding and implementation.	Landscape and Townscape: LDP should not have a negative impact on any conservation areas in East Lothian.	The LDP protects existing open space and provides for new open space through housing development (Policy OS1 – OS4). The vibrancy of Town Centres is encouraged through applying a sequential approach to retail, commercial, leisure, office and other development with significant footfall (Policy TC1), and resisting changes of use from such uses in town and local centres (Policy TC2). Policy DC2 – DC5 allows for rural housing in limited circumstances, reflecting the pressure the rural area is under due to its attractive nature and proximity to Edinburgh. Policy aims to support conversion of appropriate buildings to housing, with limited new build. Policy DC7 limits development within the Edinburgh Green Belt to that of an appropriate use, size, scale and nature. Policy DP1 and DP2 support the 'all landscapes' approach promoted in the European Landscape Convention by supporting good design and landscape/townscape fit in all cases. Policy DC10 Green Networks supports the creation of a green network which will provide
PAN 72: Housing in the Countryside	Advice on design of houses in the countryside with a purpose to create more opportunities for good quality rural housing which respects Scottish landscapes and building tradition.	Landscape and Townscape: LDP should seek to create opportunities for good quality rural housing in East Lothian.	
SPP: Promoting Rural Development (para 74-91)	Planning policy which encourages a supportive attitude towards 'appropriate' development whilst acknowledging and valuing the diversity of rural Scotland.	Landscape and Townscape: LDP should seek to create opportunities for good quality rural housing in East Lothian where appropriate.	
SPP: Green Belts (para 49-52)	Key objectives of green belt policy are: • To direct planned growth to the most appropriate locations and support regeneration; • To protect and enhance the character, landscape setting and identity of towns and cities; and • To protect and give access to open space within and around towns and cities, as part of the wider structure of green space	Landscape and Townscape: LDP should safeguard designated green belts within East Lothian.	
European Landscape Convention	The aim of the convention is to promote landscape protection, management and planning, and to organise European cooperation on landscape issues. To be achieved by: • recognising landscapes in law as an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity • establishing and implementing landscape policies aimed at landscape protection, management and planning through the adoption of the specific measures set out in Article 6	Landscape and Townscape: LDP should support the articles of the European Convention on Landscape	

	• establishing procedures for the participation of the general public, local and regional authorities, and other parties with an interest in the definition and implementation of landscape policies • integrating landscape into regional and town planning policies and in cultural, environmental, agricultural, social and economic policies, as well as in any other policies with possible direct or indirect impact on landscape • In addition member parties should adhere to Article 6- Specific Measures which includes: awareness raising, training and education, identification and assessment.		landscape benefits. (see also Appendix 4: SEA Topic Landscape)
Landscape Character Assessments: **The Lothians Landscape Character Assessment (1998)** **Edinburgh Greenbelt Landscape Character Assessment (2008)**	The aim of Landscape Character Assessments is to classify landscape within certain areas, to identify the forces for change which may affect their distinctive character, give guidelines for conservation/enhancement of the different types of landscape and to find opportunities for landscape conservation, restoration or enhancement	Landscape and Townscape: LDP should seek to support conservation and enhancement of different types of landscape in East Lothian.	
Fitting Landscapes	**Scottish Government Policy on Landscape Design**	**LDP should seek to support objectives**	
Green Infrastructure: design and placemeaking	**Provides an overview of the policy context for green infrastructure and sets out design issues and techniques for integration into placemaking**	**LDP should seek to support objectives**	
MATERIAL ASSETS			
A Forward Strategy for Scottish Agriculture: Next Steps (and associated retrospective SEA) (2006)	Aims to create a prospering and sustainable farming industry which is: • a major driver in sustaining rural development, helping rural communities prosper; • a leading player in the protection and enhancement of the environment; and	Material Assets: LDP should support aims to create a prosperous and sustainable farming industry. Biodiversity: the forward strategy looks to protect and enhance the environment, the LDP should support this.	Many LDP site allocations are on prime agricultural land. Much of East Lothian's most accessible land is such, this objective had to be balanced against climate change targets and the good planning of the area. Policy DP3

	• a major contributor to key objectives on animal health and welfare and human health and well-being.	Population & Human Heath: the forward strategy aims to contribute to human health and well-being, the LDP should support this.	Housing Density aims to increase density and therefore promote efficient use of land, minimizing the impact. Policy MIN1 protects mineral reserves through requiring that where mineral deposits with a real prospect of supportable extraction are extracted prior to development. PROP MIN 2 – MIN4 safeguard mineral sites. PROP MIN5 allows for the winning of minerals where related to existing workings. Policies and proposals of the LDP support the zero waste plan (see Air, above).
Rural Development Programme for Scotland, The Strategic Plan, 2007-2013 (2006)	• Promote an environmentally sustainable industry by targeting capital investment to mitigate farm pollution and secure environmental improvement; • developing products that reflect the high quality of the natural and cultural heritage; and • supporting the production of feedstock for renewable energy production	Material Assets: LDP should support the rural development programme's strategic plan Climatic Factors: the LDP should support the production of feedstock for renewable energy production.	
SPP: Promoting Responsible Extraction of Resources (para 234-248)	This Scottish Planning Policy (SPP) sets out the national planning policy framework for minerals, including the working of opencast coal.	Material Assets: LDP should support the planning policy framework.	
Zero Waste Plan (2010) and SPP: Planning for Zero Waste (para 175-192)	The aims of the **Zero Waste Plan** are to create a stable framework that will provide confidence for the investment necessary to deliver a zero waste Scotland over the next 10 years by minimizing Scotland's demand on primary resources, and maximizing the reuse, recycling and recovery of resources instead of treating them as waste.	Material Assets: LDP should support measures to improve resource efficiency and implement zero waste objectives in East Lothian.	
POPULATION & HUMAN HEATH			
Our National Health: A Plan for Action, A Plan for Change (2000)	Poverty, poor housing, homelessness and the lack of educational and economic opportunity are the root causes of major inequalities in health in Scotland. The core aims are to build a national effort to improve health and to reduce inequalities in health.	Population & Human Heath: LDP should contribute to improving the health of East Lothian.	The LDP allocates sites which are or can be made accessible by public transport and/or active travel (see Air, above). This allows for active travel which supports health, as well as minimizing health effects related to poor air quality. The LDP provides for sports pitches and play where they will be required as a result of development (Policy OS3) in
SPP: Maximising the Benefits of Green Infrastructure (para 219-233)	• To protect and enhance open space and multi-functional green networks; • To ensure a strategic approach to open space and other opportunities for sport and recreation by requiring local authorities to undertake an open space audit and prepare an open space strategy for their area;	Population & Human Heath: sport and recreation are an important part of a healthy life and therefore areas for these activities should be protected and enhanced within the LDP.	

	• To protect and support opportunities for sport and recreation; • To provide guidance on the quality and accessibility of open space in new developments and on providing for its long-term maintenance and management; • To provide guidance on planning for development of new indoor and outdoor facilities for sport and recreation.		accordance with The Council's Open Space and Sports Pitch Strategy 2012. Outdoor recreation is also provided for by protection of Active Travel Routes and Core Paths as part of the Green Network Strategy (Policy T4). The LDP allocates sites for development in areas which could support regeneration of disadvantaged areas in the west of the area. The LDP seeks to protect and enhance green spaces (Policy OS1). Policy DC1 and DC7 aim to protect the countryside from inappropriate development, to which access is provided by Core Paths. The LDP has designated Local Biodiversity Sites, some of which were selected to provide access to nature for people in the main urban areas. Aberlady Nature Reserve and John Muir Country Park are protected by Policy NH3. Policy DC10 requires development to contribute to the Green Network, in accordance with the relevant development brief and Green Network Strategy supplementary planning guidance. The LDP meets the SDP housing requirement in full, including the
A Partnership for a Better Scotland (2003)	The key aim is to ensure that no one in Scotland suffers from poverty and to regenerate the most disadvantaged neighborhoods so that people can take advantage of job opportunities and improve their quality of life.	Population & Human Heath: LDP should contribute towards ensuring that disadvantaged neighbourhoods are targeted for regeneration to allow for improvements in quality of life of the Population.	
Making the Links: Greenspace and the Partnership Agreement, Greenspace Scotland	Greenspaces contribute to quality of life, access, health, education, community cohesion, biodiversity and enterprise. They have a significant role to play in relation to housing and the environmental and community services that they offer.	Population & Human Heath: LDP should seek to protect, enhance and promote green spaces.	
East Lothian Core Paths Plan (2008)	Core Paths Plans look to promote themes of: • green spaces • human health and well being • accessibility • inclusion • biodiversity	Population & Human Heath: LDP should contribute towards improving the health and well being of East Lothian by promoting core paths and accessibility to the countryside and green spaces.	
Central Scotland Green Network	The Central Scotland Green Network looks to promote: • access to attractive, safe and well maintained greenspace or accessible countryside • to improve the green infrastructure of all our major towns and cities by investing in green and	Population & Human Health: LDP should contribute towards delivering the aims of the Central Scotland Green Network and extending the areas of accessible, attractive, safe and well maintained greenspace	

	blue space, tree planting and sustainable urban drainage • to deliver a threefold increase in the area of land used for community growing – allotments, orchards and gardens • to deliver a strategic network of high-quality routes for active travel and recreation throughout Central Scotland • to ensure that the green network is used by everyone to improve health and well-being through physical activity and contact with nature, volunteering and learning outdoors • to foster community pride and ownership in the CSGN and to use the green network as a community resource, providing opportunities for education, volunteering, training, skills development and employment in land-based and low-carbon industries		requirement for 25% affordable housing quota. Policy NH13 Noise requires noise to be taken into account when assessing development proposals, and potential exposure to noise was also taken into consideration in allocation of development sites.
Strategic Housing Investment Plan (SHIP) East Lothian SHIP	SHIPs set out how investment in affordable housing will be directed over the next 5 years to achieve the outcomes set out in their associated Local Housing Strategy.	Population & Human Heath: LDP should integrate with the SHIPs and plan to achieve the outcomes set out in the Local Housing Strategy.	
Draft Strategic Noise Action Plan for the Edinburgh Agglomeration (2013)	This plan is one in a suite of six draft noise action plans produced under the terms of the Environmental Noise Directive (END). The three main objectives of the Directive are as follows: • To determine the noise exposure of the population through noise mapping • To make information available on environmental noise to the public • To establish Action Plans based on the mapping results, to reduce noise levels where necessary, and to preserve environmental noise quality where it is good	Population & Human Heath: LDP should not add to noise levels and seek to preserve noise quality where it is good.	

Pan 74 Affordable Housing	Advice setting out how the planning system can support the Scottish Government's commitment to increase the supply of affordable housing.	Population and Human Health: LDP should seek to provide affordable housing in line with the Scottish Government's recommendations.	
SOIL			
PAN 33 Development of Contaminated Land (Revised Oct 2000)	Document provides advice with regards to the development of contaminated land, which any developments will need to adhere to.	Soil: LDP should follow this guidance on development in areas of contaminated land.	Contamination of land was considered in SEA site assessments and site selection. Effects on the water environment were taken into account in the allocation of sites for development. Policy NH9 provides that proposals that have a detrimental impact on the water environment will not be supported. Policy NH7 provides for the protection of soils; development on prime quality agricultural land or rare or carbon rich soils will not be permitted unless they meet certain criteria. The LDP designates and protects Local Geodiversity Sites (Policy NH3) and Local Biodiversity sites, which will help protect biodiversity and geodiversity within the soil in those areas. Policy on wind power and mineral extraction also provide for the protection of some soils.
The Contaminated Land (Scotland) Regulations (2005)	Details activities that are prohibited to prevent the contamination of land and watercourses.	Soil: LDP should not conflict with these regulations.	
Scottish Soil Framework (2009) –	The main aim of the Framework is to promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland. Activities identified for focus include: • soil organic matter stock protected • soil erosion reduced • greenhouse gas emission from soils reduced • soil's capacity to adapt to changing climate enhanced • soil biodiversity as well as above ground biodiversity • protected soils making a positive contribution to sustainable flood management	Soil: LDP should promote the sustainable management of soils.	
WATER			
The Water Environment and Water Services (Scotland) Act 2003	Ensures that all human activity that can have a harmful impact on water is controlled.	Water Status: LDP should follow all appropriate guidance and legislation.	Effects on the water environment and drainage and water supply capacity were taken into account

(Designation of Scotland River Basin District) Order 2003			in the allocation of sites for development. Policy NH9 provides that proposals that have a detrimental impact on the water environment will not be supported. Policy NH10 requires appropriate Sustainable Drainage Systems in new development. Policy NH11 requires that development at unacceptable risk of flooding, or that increases risk of flooding elsewhere, be avoided. Policy on flooding requires culverting to be taken into account when assessing flood risk. Policy DC6 defines the developed, constrained and largely unspoiled coast, and restricts development in the two last to that requiring a coastal location, or in the unspoiled coast, to that requiring that particular location. Paragraph 1.35 of the LDP advises that there is a preference to use available water and drainage capacity to deliver the spatial strategy before distributing development to locations where additional capacity is needed. The LDP (paragraph 1.56) notes that the terrestrial and marine planning zones overlap int eh intertidal szone, and notes that any public body taking authorization decisions that may affect the marine area must do so
SEPA (2008) Finalised River Basin Management Plans: Scotland River Basin District and Solway Tweed River Basin District	• Identifying areas of the water environment for protection and improvement • Identifying where current or historic activities are • constraining the quality of the water environment and the biodiversity it supports • Details the actions required to ensure waters of special value (e.g. drinking, biodiversity, shellfish, bathing) are up to standard and maintain the quality where they already meet those standards • Set out actions needed to deliver environmental improvements over the next 6 years and longer to 2027	Water Status: LDP proposals should prevent deterioration and enhance the status of the water environment; promote sustainable water use; reduce pollution; and contribute to the mitigation of floods and droughts	
Flood Risk Management (Scotland) Act 2009	The Scottish Ministers, SEPA and responsible authorities must exercise their flood risk related functions with a view to reducing overall flood risk through: • promotion of sustainable flood risk management, acting with a view to raising public awareness of flood risk, and acting in the way best calculated to contribute to the achievement of sustainable development.	Water Status: flood risk management across Scotland is important; the LDP should not create flood risks and should actively promote sustainable flood risk management.	
SPP: managing Flood Risk and Drainage (para 254-268)	SPP provides guidance to developers and planning authorities on planning and flooding. New development should not take place if it would be at significant risk of flooding from any source or would materially increase the probability of flooding elsewhere. The storage capacity of functional floodplains should be safeguarded, and works to elevate the level of a site by land raising should not lead to a loss of flood water storage capacity.	Water Status: LDP should not contribute towards or create flood risks within East Lothian.	

	Drainage would be a material consideration and the means of draining a development should be assessed. Sustainable drainage would be required whenever practicable and watercourses should be culverted. Flood prevention and alleviation measures should respect the wider environmental concerns and appropriate engineering solutions recognise the context provided by the development plan. Whilst it is preferable for open spaces to flood rather than buildings it may not always be acceptable.		in accordance with relevant Marine Plan unless relevant considerations dictate otherwise. It notes that early dialogue between applicants and authorities is essential. The preamble to PROP EGT3 on the Forth Coast Area of Coordinated Action from NPF3 notes the need to coordinate between land based and marine planning systems. Policy NH9 protects the water environment, and paragraph 6.25 specifically mentions the need to protect designated bathing waters.
Scottish Government online advice on Flood Risk	The online advice supports SPP.	Water Status: LDP should not contribute towards or create flood risks within East Lothian.	
Haddington Flood Study (2009) **Musselburgh Flood Study (2012)**	Under the Flood Prevention and Land Drainage (Scotland) Act 1997 Local Authorities are required to publish a report at 2 yearly intervals specifying: the measures which they consider that they require to take to prevent or mitigate the flooding of land in their area; the measures which they have taken since the date of publication of their previous report to prevent or mitigate the flooding of such land and all occurrences of flooding of such land since that date.	Water Status: LDP should not contribute towards or create flood risks within East Lothian and should actively promote sustainable flood risk management.	
SPP: Coastal Planning (para 87)	SPP notes that the developed coast should be the focus for developments requiring a coastal location, or which contribute to economic regeneration of settlements whose livelihoods is dependent on coastal or marine activities and features.	Water Status: LDP should only designate coastal areas for developments requiring a coastal location.	
SEPA Statement on the Culverting of Watercourses (1998)	SEPA's policy sets out the environmental issues associated with culverting and presents a consistent and pragmatic approach to this aspect of river engineering.	Water Status: LDP should take account of the environmental issues associated with culverting.	
Scottish Water Strategic Asset Capacity and Development Plan	Outlines the current capacity at water and wastewater treatment works across Scotland to let local authorities and developers see "at a glance" what capacity currently exists at a particular location in Scotland. It is intended to use this information to	Water Status: LDP should check current capacity before planning any major developments in East Lothian.	

	decide whether work will have to be carried out by Scottish Water to increase capacity at treatment works to enable a particular development to go ahead.		
Scottish Water, Water Resource Plan (2008)	In this draft Water Resources Plan we set out our strategy to ensure that all our customers, the length and breadth of Scotland, have a secure supply of clear, fresh, safe drinking water to 2031/32 and beyond. The key environment challenges for Scottish water is to: • to adapt to pressures on water resources due to climate change and environmental constraints.	Water Status: LDP should not add any additional pressure to Scottish Water resources.	
The Marine (Scotland) Act (2010)	The Marine (Scotland) Act provides a framework which will help balance competing demands on Scotland's seas. It introduces a duty to protect and enhance the marine environment and includes measures to help boost economic investment and growth in areas such as marine renewables	Water Status: The LDP should take account of the Marine Bill when planning anything that could impact on coastal waters and/or the sea	
Sustainable Seas for All: A Consultation on Scotland's first Marine Bill (2008)	Marine Bill proposes a new legislative and management framework for the delivery of sustainable economic growth in the marine environment, with proposals relating to creating a stable investment environment, reducing the regulatory burden, nature conservation, improving our understanding of the seas with delivery through a Scottish marine management organization.	Water Status: LDP should take account of the Marine Bill when planning anything that could impact on coastal waters and/ or the sea.	
Bathing Water Strategy (2006)	The purpose of the document is to ensure Scotland's bathing waters meet the targets of the revised European Bathing Waters Directive. This means meeting stricter bacteriological standards, providing more comprehensive information to the public on bathing water standards and engaging public participation on bathing water matters	Water Status: LDP should take account of the Bathing Water Strategy when planning anything that could impact on bathing waters in East Lothian.	

NPF3 and SPP, Scottish Planning Policy (2014)	Set out the national planning framework and the main purpose and tasks for land use planning, development planning and control for Scotland.	All: underpins the development and implementation of the LDP.	

APPENDIX 2 SEA Assessment Framework Methodology

SEA Assessment Framework Methodology / Questions

	ASPECT OF LDP BEING ASSESSED				
		SEA OBJECTIVE	**STRATEGIC OPTIONS**	**DEVELOPMENT SITES**	**POLICY APPROACHES**
SEA ASSESSMENT	**SEA TOPIC**				
	Biodiversity, Flora and Fauna	Would the LDP objective help conserve or enhance biodiversity?	1. Would the strategic option help conserve or enhance sites designated for their international, national or local nature conservation interest? 2. Would the strategic option help conserve or enhance wider habitat connectivity? 3. Would the strategic option help conserve or enhance	1. Is the site outwith an area designated for its: - International - National, or - Local nature conservation interest? 2. Is the site's development for the use proposed likely to have a direct or indirect adverse	1. Would the policy approach help conserve or enhance sites designated for their international, national or local nature conservation interest? 2. Would the policy approach help conserve or enhance wider habitat connectivity? 3. Would the policy approach help conserve or enhance

		protected trees or woodland important for its type, extent or landscape significance?	effect on the qualifying interest of such a site? 3. Would the proposed development provide any significant opportunity to maintain or enhance wider habitat connectivity? Would the proposed development avoid the loss of protected trees or woodland important for its type, extent or landscape significance,	protected trees or woodland important for its type, extent or landscape significance?
Population	Would the LDP objective help to maintain or enhance the quality of life for East Lothian's residents?	1. Would the strategic option contribute to the regeneration of a disadvantaged area? 2. In the case of housing, would the strategic option promote the provision of affordable housing within areas of particular affordable housing need? 3. Would the strategic option help ensure local access to active travel or public transport options to facilities, or services, or employment opportunities?	1. Would the site's development for the proposed use contribute to the regeneration of a disadvantaged area? 2. In the case of housing, would the site's development promote the provision of affordable housing within an area of particular affordable housing need? 3. Does the site have reasonable access by active travel or public transport modes to a town centre, education and community facilities, and employment?	1. Would the policy approach contribute to the regeneration of a disadvantaged area? 2. In the case of housing, would the policy approach promote the provision of affordable housing within an area of particular affordable housing need? 3. Would the policy approach help ensure local access to active travel or public transport options to facilities, or services, or employment opportunities?
Human Health	Would the LDP objective help maintain, or provide opportunities to improve, human health?	1. Would the strategic option help ensure reasonable accessibility to existing open spaces, or	1. Is the site known to be contaminated and, if so, does	1. Would the policy approach help ensure reasonable accessibility to existing open

		sports facilities, or the core path network? 2. Would the strategic option help preserve or enhance the Central Scotland Green Network? 3. Would the strategic option help ensure acceptable levels of noise? 4. Would the strategic option help reduce or maintain levels of emissions and help ensure that the threshold for an AQMA designation is not triggered?	the proposal provide the opportunity to mitigate this? 2. In the case of a housing proposal, is the site reasonably accessible to existing open space, sports facilities or the core path network? 3. Would the development of the site provide opportunities to contribute to the Central Scotland Green Network? 4. Would development of the site maintain or reduce levels of noise? 5. Is it likely that the development of the site will maintain or reduce levels of emissions to help ensure that the threshold for an AQMA designation is not triggered?	space, sports facilities or the core path network? 2. Would the policy approach help preserve or enhance the Central Scotland Green Network? 3. Would the policy approach help to ensure noise remained within acceptable levels? 4. Would the policy approach help to control levels of emissions to help ensure that the threshold for an AQMA designation is not triggered?
Water	Would the LDP objective help to maintain or enhance the water environment and reduce flood risk?	1. Would the strategic option avoid inappropriate development in areas at risk from flooding and ensure that the overall flood risk in the area is not increased as a result of development? 2. Would the strategic option help to maintain or enhance the	1. Is the site outwith a functional flood plain and other areas of flood risk. 2. Can the site be developed without increasing the risk of flooding elsewhere? 3. Would the site's development be likely to maintain or	1. Would the policy approach avoid unacceptable development in areas at risk of flooding and ensure that the overall flood risk in the area is not increased as a result of development? 2. Would the policy approach help to maintain or enhance the

		ecological status of the water environment?	enhance the ecological status of the water environment?	ecological status of the water environment?
Soil	Would the LDP objective help to conserve or enhance soil quality, quantity and function?	1. Would the strategic option avoid the loss of prime quality agricultural land? 2. Would the strategic option avoid the loss of rare or carbon-rich soils?	1. Would the site's development ensure that prime quality agricultural land is not lost? 2. Would the site's development ensure that rare or carbon-rich soils are not lost?	1. Would the policy approach prevent loss of prime quality agricultural land? 2. Would the policy approach prevent loss of rare or carbon-rich soils?
Air	Would the LDP objective help to maintain or enhance air quality?	1. Would the strategic option maintain or enhance current levels of air quality? 2. Would the strategic option promote good public transport accessibility so that the need to travel by car is minimised? 3. Would the strategic option promote good local access to existing facilities, services and employment?	1. Would development of the site be unconstrained by existing sources of air pollution or odour and would its development ensure such effects on existing sensitive receptors was within acceptable levels? 2. Does the site have, or can it be provided with good active travel and public transport accessibility such that the need to travel by car is minimised? 3. Does the site have good access to existing facilities, services and employment locally?	1. Will the policy approach maintain or enhance current levels of air quality? 2. Does the policy approach promote good public transport accessibility so that the need to travel by car is minimised? 3. Does the policy approach promote local access to existing facilities, services and employment?
Climatic Factors	Would the LDP objective help to contribute to reducing GHG emissions and energy consumption or adapting to the effects of climate change?	1. Would the strategic option help reduce the need to travel as well as the distance travelled? 2. Would the strategic option promote development that is energy and resource efficient?	1. Would the site's development help reduce the need to travel as well as the distance travelled?	1. Would the policy approach help reduce the need to travel as well as the distance travelled?

		3. Would the strategic option promote resilience to the effects of climate change through, for example, flood, storm, landslip or subsidence?	2. Does the site lend itself to development that would be energy and resource efficient? 3. Would development of the site be resilient to the effects of climate change through, for example, flood, storm, landslip or subsidence?	2. Does the policy approach promote development that is energy and resource efficient? 3. Is the policy approach likely to increase resilience to the effects of climate change through, for example, flood, storm, landslip or subsidence?
Material Assets	Would the LDP objective help to manage, maintain or promote the efficient, effective or appropriate use of material assets?	1. Would the strategic option promote the re-use of existing buildings worthy of retention, make an efficient use of land and / or prioritise the use of brownfield land over greenfield land ? 2. Would the strategic option safeguard mineral resources, the extraction of which would be acceptable in policy terms, from permanent sterilisation? 3. Would the strategic option be supported by and / or ensure the provision of adequate infrastructure, services and facilities? 4. Would the strategic option promote the reduction, reuse and recycling of waste?	1. Would the site's development involve the re-use of existing buildings worthy of retention, make an efficient use of land and / or prioritise the use of brownfield land over greenfield land ? 2. Would the site's development avoid the permanent sterilisation of economic mineral resources the extraction of which would otherwise be acceptable in policy terms? 3. Would development of the site be supported by provision of adequate infrastructure, services and facilities and can these requirements be delivered? 4. Would the site's development promote the reduction, reuse and recycling of waste?	1. Would the policy approach promote the re-use of existing buildings worthy of retention and / or retention, make an efficient use of land and / or prioritise the use of brownfield land over greenfield land? 2. Would the policy approach safeguard mineral resources, the extraction of which would be acceptable in policy terms, from permanent sterilisation? 3. Would the policy approach ensure the provision of / commitment to the provision of adequate infrastructure, services and facilities? 4. Would the policy approach promote the reduction, reuse and recycling of waste?

Cultural Heritage	Would the LDP objective help to preserve or, where appropriate, enhance East Lothian's historic environment?	1. Would the strategic option preserve and if appropriate enhance: - the character or appearance of Conservation Areas? - listed building or their settings? - Scheduled Ancient Monuments or their settings? - ~~local archaeological sites~~ undesignated archaeological sites? - Historic Gardens or Designed Landscapes? - sites included in the Inventory of Historic Battlefields?	1. Would the development of the site directly preserve or if appropriate enhance: - the character or appearance of a Conservation Area? - a listed building or its setting? - a Scheduled Ancient Monument or its setting? - ~~a local archaeological site~~ undesignated archaeological sites? - a Historic Garden or Designed Landscape? - a site included in the Inventory of Historic Battlefields?	1. Would the policy approach preserve or if appropriate enhance: - the character or appearance of Conservation Areas? - listed building or their settings? - Scheduled Ancient Monuments or their settings? - ~~local archaeological sites~~ undesignated archaeological sites? - Historic Gardens or Designed Landscapes? - sites included in the Inventory of Historic Battlefields?
Landscape	Would the LDP objective help to conserve or enhance the character and appearance of settlements and the landscape?	1. Would the strategic option prevent development from harming locations containing built or natural landscape features of significance? 2. Would the strategic option protect the separate identity of settlements? 3. Would the strategic option allow for the consolidation /appropriate expansion of the existing settlement pattern and settlement structure?	1. Is the site outwith a visually sensitive location or one where a built or natural landscape feature of significance might be harmed? 2. Would development of the site retain the separate identity of settlements? 3. Would the site's development consolidate the existing settlement structure?	1. Would the policy approach prevent development from harming locations containing built or natural landscape features of significance? 2. Would the policy approach protect the separate identity of settlements? 3. Would the policy approach allow for the consolidation /appropriate expansion of the existing settlement pattern and settlement structure?

			4. Would the strategic option conserve or enhance important areas of open / green space?	4. Would development of the site conserve or enhance important areas of open / green space?	4. Would the policy approach conserve or enhance important areas of open / green space?

APPENDIX 3 Findings of SPACE Tool

The Scottish Government's Spatial Planning Assessment of Climate Emissions (SPACE) tool has been used to provide an estimate of greenhouse gas emissions arising from transport energy use, comparing the housing sites put forward in the MIR Preferred Strategy in with an alternative more dispersed strategy. The tool was originally developed to enable calculations of likely relative emissions that may arise as a result of different spatial planning scenarios. The results produced by the tool are relative, not absolute, and the emissions calculated are those generated 'in use' of development. The tool was used as a proxy to help inform thinking on spatial strategy development. While there are a number of assumptions underpinning the model and the information included, it nevertheless represented the best available method for predicting the relative impact of development planning scenarios at the MIR stage. The SPACE tool can be accessed via the Scottish Government's Planning website: http://www.scotland.gov.uk/Topics/Built-Environment/planning/Policy/Principal-Policies/Sustainability/SPACE

In terms of transport emissions, the SPACE tool incorporates baseline information on car dependency of different geographical areas and combines this with submitted information on anticipated average trip lengths from different sites for commuting purposes, access to retailing,

and to other facilities. This results in output figures for greenhouse gas emissions based on the range of anticipated car journeys arising from selected scenarios. The emissions resulting from other service vehicles (for example delivery vehicles) are not included. The Council has used this aspect of the SPACE tool to model the 'compact' strategy, using the suite of proposed housing sites presented in the Main Issues Report. A representation of an alternative 'dispersed' scenario has been compared with this, which removes proposed sites in the Musselburgh area and replaces them with an equivalent number of dwellings at potential alternative sites in the Haddington, Dunbar, East Linton, and Drem areas. The results of the model are presented below:

- Baseline ('do nothing'): 0 t tonnes of CO_2 equivalent per annum
- Proposed strategy: 14,295 tonnes of CO_2 equivalent per annum
- Dispersed strategy: 21,796 tonnes of CO_2 equivalent per annum

This indicates that the alternative dispersed strategy is predicted to result in increased emissions from transport energy use of 7,500 tonnes of CO_2 equivalent per annum (base date 2014), when compared to the MIR preferred strategy. <u>This represents an increase of over 52%.</u>

APPENDIX 4 SEA Objectives & Relevant Mitigating LDP Policies

	SEA OBJECTIVES & RELEVANT MITIGATING LDP POLICIES			
	SEA TOPIC	**SEA OBJECTIVE**	**POLICY APPROACHES**	**RELEVANT LDP POLICIES**
SEA ASSESSMENT QUESTIONS				
	Biodiversity, Flora and Fauna	Would the LDP objective help conserve or enhance biodiversity?	1. Would the policy approach help conserve or enhance sites designated for their international, national or local nature conservation interest? 2. Would the policy approach help conserve or enhance wider habitat connectivity? 3. Would the policy approach help conserve or enhance protected trees or woodland important for its type, extent or landscape significance?	1. Policy NH1: Protection of Internationally Designated Sites; PROP MH16: Levenhall Links to Prestonpans: Area for Habitat Improvement; Policy NH2: Protection of Sites of Special Scientific Interest and Geological Conservation review Sites; Policy NH3 Protection of Local Sites and Areas; Policy NH4: European Protected Species; Policy NH5: Biodiversity and Geodiversity Interests, Including Nationally Protected Species; Policy NH6: Geodiversity Recording and Alternative Exposures; Policy NH7: Protecting Soils; 2. Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); 3. Policy DC10: The Green Network; Policy NH8: Trees and Development.
	Population	Would the LDP objective help to maintain or enhance the quality of life for East Lothian's residents?	1. Would the policy approach contribute to the regeneration of a disadvantaged area? 2. In the case of housing, would the policy approach promote the provision of affordable housing within an area of particular affordable housing need? 3. Would the policy approach help ensure local access to active travel or public transport options to facilities, or services, or employment opportunities?	1. Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity; 2. Policy HOU1: Established Housing Land; Policy HOU2: Maintaining an Adequate 5-year Effective Housing Land Supply; Policy HOU3: Affordable Housing Quota; Policy HOU4: Affordable Housing Tenure Mix; Policy HOU5: Residential Care and Nursing Homes – Change of Use; Policy HOU6: Residential Care and Nursing Homes – Location; Policy HOU7: Housing in Multiple Occupation; Policy HOU8: Gypsy / Traveller's Sites; 3. Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals; Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Allotment

			Provision; Proposal OS6: Allotment Sites; Policy EMP1: Business and Employment Locations; Policy EMP2: Operational Harbours; Policy TOUR1: Archerfield Estate; Policy TOUR2: Belhaven Chalets; Policy TOUR3: Dunbar Castle Vaults; Policy TOUR4: Hotels and Guest Houses; Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green Network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points; Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; Proposal T15: Old Craighall Junction Improvements; Proposal T16: A1 Junction Improvements at Queen Margaret Drive Interchange; Proposal T17: A1(T) Interchange Improvements; Proposal T18: Land Safeguard for Trunk Road Interchange at Adniston and Eastern Tranent By-pass; Policy T19: Transport Improvements to Musselburgh Town Centre; Proposal T20: Transport Related Air Quality Measures: Relocation of Bus Stops; Proposal T21: Musselburgh Urban Traffic Control System; Proposal T22: Reopen Link to Vehicular Access at Queen Margaret Drive / Whitehill Farm Road; Proposal T23: Transport Improvements to A198, Meadowmill Roundabout & Bankton Interchange; Proposal T24: Land safeguard for A198 / B1361 Meadowmill Roundabout Improvements; Proposal T25: Land Safeguard for Dualling of A198 and Reconfiguration of Bankton Interchange; Policy T26: Transport Improvements to Tranent Town Centre; Proposal T27: Tranent Town Centre One-way System; Proposal T28: Junction Improvements at Elphinstone Road and Edinburgh Road; Policy T29: Town Centre Parking Strategy; Policy T30: Road Safety and 20mph Zones; Policy T31: Electric Car & Bus Charging Points; Policy T32: Transport Infrastructure Delivery Fund.
Human Health	Would the LDP objective help maintain, or provide opportunities to	1. Would the policy approach help ensure reasonable accessibility to existing open space, sports	1. Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals; Policy OS1: Protection of Open Space;

	improve, human health?	facilities or the core path network? 2. Would the policy approach help preserve or enhance the Central Scotland Green Network? 3. Would the policy approach help to ensure noise remained within acceptable levels? 4. Would the policy approach help to control levels of emissions to help ensure that the threshold for an AQMA designation is not triggered?	Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS5: Allotment Sites. 2. Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green Network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points; Policy DC10: The Green Network; Policy NH8: Trees and Development; 3. Policy NH13: Noise; Policy RCA1: Residential Character and Amenity; 4. Policy NH12: Air Quality; Policy RCA1: Residential Character and Amenity.
Water	Would the LDP objective help to maintain or enhance the water environment and reduce flood risk?	1. Would the policy approach avoid unacceptable development in areas at risk of flooding and ensure that the overall flood risk in the area is not increased as a result of development? 2. Would the policy approach help to maintain or enhance the ecological status of the water environment?	1. Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network; 2. Policy NH9: Water Environment (including Advice Box 6).
Soil	Would the LDP objective help to conserve or enhance soil quality, quantity and function?	1. Would the policy approach prevent loss of prime quality agricultural land? 2. Would the policy approach prevent loss of rare or carbon-rich soils?	1. Policy NH7: Protecting Soils; 2. Policy NH7: Protecting Soils.
Air	Would the LDP objective help to maintain or enhance air quality?	1. Will the policy approach maintain or enhance current levels of air quality? 2. Does the policy approach promote good public transport	1. Policy NH12: Air Quality; 2. Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green Network Strategy;

		accessibility so that the need to travel by car is minimised? 3. Does the policy approach promote local access to existing facilities, services and employment?	Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points; Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; 3. Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity; Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals); (Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites; Policy EMP1: Business and Employment Locations; Policy EMP2: Operational Harbours.
Climatic Factors	Would the LDP objective help to contribute to reducing GHG emissions and energy consumption or adapting to the effects of climate change?	1. Would the policy approach help reduce the need to travel as well as the distance travelled? 2. Does the policy approach promote development that is energy and resource efficient? 3. Is the policy approach likely to increase resilience to the effects of climate change through, for example, flood, storm, landslip or subsidence?	1. Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity; Policy SECF1: Safeguarded Education and Community Facilities; New Education Provision PROP ED1 – PROP ED7; PROP CF1: Provision of New Sports Pitches and Changing Accommodation; Policy HSC1: Health Care Sites; PROP HSC2: Health Care Facilities Proposals; Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5:

			Allotment Provision; Proposal OS6: Allotment Sites; Policy EMP1: Business and Employment Locations; Policy EMP2: Operational Harbours. **Transport Location of New Development** (Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; **Active Travel Networks** (Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green Network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points); **Public Transport** (Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; 2. Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies; Policy WD1: Wind farms; Policy WD2: Smaller Scale Wind Turbine Development; Policy WD3: All wind turbines; Policy WD4: Access tracks; Policy WD5: Re-powering; Policy WD6: Decommissioning and Site Restoration; 3. Policy NH9: Water Environment (including Advice Box 6); Policy NH10: Sustainable Drainage Systems (including Advice Box 7); Policy NH11: Flood Risk (including Advice Box 8); Policy DC10: The Green Network.
Material Assets	Would the LDP objective help to manage, maintain or promote the efficient, effective or appropriate use of material assets?	1. Would the policy approach promote the re-use of existing buildings worthy of retention and / or retention, make an efficient use of land and / or prioritise the use of brownfield land over greenfield land? 2. Would the policy approach safeguard mineral resources, the extraction of which would be	1. Policy TC1: Town Centre First Principle; Policy TC2: Town and Local Centres; Policy TC3: Protection of Local Facilities; Policy TC4: Hot Food Outlets; Policy RCA1: Residential Character and Amenity; Policy DC2: Conversion of Rural Buildings to Housing 2. **Minerals** (Policy MIN1: Protection of Mineral Reserves; Proposal MIN2: Safeguarding Oxwellmains Quarry; Proposal MIN3: Safeguarding Longyester and Skateraw Sand and Gravel Quarries; Proposal MIN4: Safeguard Bangley and Markle Mains Hard Rock Quarries; Policy MIN5: Mineral Resources;

		acceptable in policy terms, from permanent sterilisation? 3. Would the policy approach ensure the provision of / commitment to the provision of adequate infrastructure, services and facilities? 4. Would the policy approach promote the reduction, reuse and recycling of waste?	Policy MIN6: Opencast Coal Extraction; Policy MIN7: Onshore Oil and Gas; Policy MIN8: Mineral Extraction Criteria; Policy MIN9: Supporting Information; Policy MIN10: Restoration and Aftercare; Policy MIN11: Prior Extraction of Shallow Coal. 3. **Delivery** Policy DEL1: Infrastructure and facilities provision; **Transport Location of New Development** (Policy T1: Development Location and Accessibility; Policy T2: General Transport Impact; **Active Travel Networks** (Proposal T3: Segregated Active Travel Corridor; Policy T4: Active Travel Routes and Core Paths as part of the Green Network Strategy; Proposal T5: Cycle Route Network; Policy T6: Reallocation of Road Space and Pedestrian and Cycle Crossing Points); **Public Transport** (Policy T7: Information Technology; Policy T8: Bus Network Improvements; Proposal T9: Safeguarding Land for Larger Station Car parks; Proposal T10: Safeguarding Land for Platform Lengthening; Proposal T11: Safeguarding Land for Improvements to Musselburgh Station; Proposal T12: Railway Station Safeguarding East Linton; Proposal T13: East Coast Main Line: Four Track Section, New Rail Station and Vehicular Overbridge; Policy T14: Longniddry – Haddington Route Safeguard; **Trunk and Local Road Network** (Proposal T15: Old Craighall Junction Improvements; Proposal T16: A1 Junction Improvements at Queen Margaret Drive Interchange; Proposal T17: A1(T) Interchange Improvements; Proposal T18: Land Safeguard for Trunk Road Interchange at Adniston and Eastern Tranent By-pass; Policy T19: Transport Improvements to Musselburgh Town Centre; Proposal T20: Transport Related Air Quality Measures: Relocation of Bus Stops; Proposal T21: Musselburgh Urban Traffic Control System; Proposal T22: Reopen Link to Vehicular Access at Queen Margaret Drive / Whitehill Farm Road. Proposal T23: Transport Improvements A198 and Meadowmill Roundabout; Proposal T24: Land safeguard for A198 / B1361 Meadowmill Roundabout Improvements; Proposal T25: Land Safeguard for Dualling of A198 and Reconfiguration of Bankton Interchange; Policy T26: Transport Improvements to Tranent Town Centre; Proposal T27: Tranent Town Centre One-way System; Proposal T28: Junction Improvements at Elphinstone Road

			and Edinburgh Road; Policy T29: Town Centre Parking Strategy; Policy T30: Road Safety and 20mph Zones; Policy T31: Electric Car & Bus Charging Points; Policy T32: Transport Infrastructure Delivery Fund **Digital Communications** Policy DCN1: Digital Communications Networks; Policy DC2: Provision for Broadband Connectivity in New Development; **Major Hazard Sites and Pipelines** (Policy OI1: Pipeline Consultation Zone; Policy OI2:Torness Consultation Zone; Policy OI3: Edinburgh Airport Safeguarding Zone); **Energy Generation, Distribution and Transmission** Policy SEH1: Sustainable Energy and Heat; Policy SEH2: Low and Zero Carbon Generating Technologies; Policy WD1: Wind farms; Policy WD2: Smaller Scale Wind Turbine Development; Policy WD3: All wind turbines; Policy WD4: Access tracks; Policy WD5: Re-powering; Policy WD6: Decommissioning and Site Restoration; Proposal EGT1: Former Cockenzie Power Station; Proposal EGT2: Torness Power Station; Proposal EGT3: Forth Coast Area of Co-ordinated Action; Policy EGT4: Enhanced High Voltage Electricity Transmission Network); 4. **Waste** (Policy W1: Waste Management Safeguards; Policy W2: Waste Management Developments; Policy W3: Waste Separation and Collection; Policy W4: Construction Waste).
Cultural Heritage	Would the LDP objective help to preserve or, where appropriate, enhance East Lothian's historic environment?	1. Would the policy approach preserve or if appropriate enhance: - the character or appearance of Conservation Areas? - listed building or their settings? - Scheduled Ancient Monuments or their settings? - ~~local archaeological sites~~ undesignated archaeological sites? - Historic Gardens or Designed Landscapes?	1. Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; Policy DC5: Housing as Enabling Development; Policy DC2: Conversion of Rural Buildings to Housing; Area Based Conservation Policies.

		- sites included in the Inventory of Historic Battlefields?	
Landscape	Would the LDP objective help to conserve or enhance the character and appearance of settlements and the landscape?	1. Would the policy approach prevent development from harming locations containing built or natural landscape features of significance? 2. Would the policy approach protect the separate identity of settlements? 3. Would the policy approach allow for the consolidation /appropriate expansion of the existing settlement pattern and settlement structure? 4. Would the policy approach conserve or enhance important areas of open / green space?	1. Policy DC9: Special Landscape Areas; Policy DC10: The Green Network; Policy NH8: Trees and Development; Policy CH1: Listed Buildings; Policy CH2: Development Affecting Conservation Areas; Policy CH3: Demolition of an Unlisted Building in a Conservation Area; Policy CH4: Scheduled Monuments and Archaeological Sites; Policy CH5: Battlefields; Policy CH6: Gardens and Designed Landscapes; 2. Policy DC7: Development in the Edinburgh Green Belt; Policy DC8: Countryside Around Towns; Policy DC10: The Green Network 3. Policy DP1: Landscape Character; Policy DP2: Design; Policy DP3: Housing Density; Policy DP4: Major Development Sites; BW3: Blindwells Area Design Framework;Policy DP5: Extensions and Alterations to Existing Buildings; Policy DP6: External Security; Policy DP7: Infill, Backland and Garden Ground Development; Policy DP8: Design Standards for New Housing Areas; Policy DP9: Development Briefs; Policy DC1: Rural Diversification; Policy DC2: Conversion of Rural Buildings to Housing; Policy DC3: Replacement Dwellings in the Countryside; Policy DC4: New Build Housing in the Countryside; Policy DC5: Housing as Enabling Development; Policy DC6: Development in the Coastal Area; Policy DC7: Development in the Edinburgh Green Belt; Policy DC8: Countryside Around Towns; Policy DC10: The Green Network; 4. Policy OS1: Protection of Open Space; Policy OS2: Change of Use to Garden Ground; Policy OS3: Minimum Open Space Standard for New General Needs Housing Development; Policy OS4: Play Space Provision in new General Needs Housing Development; Policy OS5: Allotment Provision; Proposal OS6: Allotment Sites.

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