

Perth and Kinross Council

Local Development Plan 2

SEA – Addendum to the Environmental Report

December 2017

SEA ADDENDUM TO THE ENVIRONMENTAL REPORT – COVER NOTE

Part 1	
To:	SEA Gateway Team 2-H (South) Victoria Quay Edinburgh EH6 6QQ Email: SEA.Gateway@gov.scot

Part 2	
An SEA Environmental Report is attached for the plan, programme or strategy (PPS) entitled:	
Perth and Kinross Local Development Plan 2 Proposed Plan	
The Responsible Authority is:	
Perth & Kinross Council	

Part 3	
<input checked="" type="checkbox"/>	An SEA is required because the Strategy falls under the scope of Section 5(3) of the Act and is likely to have significant environmental effects; or
<input type="checkbox"/>	An SEA is required because the Strategy falls under the scope of Section 5(4) of the Act and is likely to have significant environmental effects; or
<input type="checkbox"/>	An SEA is not required because the Strategy is unlikely to have significant environmental effects. However, the Council wishes to carry out an SEA on a voluntary basis. We accept that, as this SEA is voluntary, the statutory 5 week timescale for views from the Consultation Authorities cannot be guaranteed.

Part 4			
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GLOSSARY AND ACCRONYMS

Glossary

Allocation	Land identified as appropriate for a specific land use.
Alternatives	These are different ways of achieving the objectives of the plan.
Baseline	Data that describes the issues and conditions at the inception of the SEA. Serves as the starting point for measuring impacts, performance, etc., and is an important reference for evaluations.
Biodiversity	The variety of life on Earth at all its levels. From genes to ecosystems, and the ecological and evolutionary process that sustain it.
Brownfield Land	Land which has previously been developed. The term may cover vacant or derelict land; land occupied by redundant or unused building and developed land within the settlement boundary where further intensification of use is considered.
Consultation Authorities	Organisations with a particular status for involvement in the SEA process under the regulations. In Scotland these are Scottish Natural Heritage, Scottish Environment Protection Agency and Scottish Ministers (Historic Environment Scotland).
Climate Change	A change in the “average weather” that a given region experiences. Average weather includes all the features we associate with weather such as temperature, wind patterns and precipitation.
Cultural Heritage	Includes scheduled monument and their significant archaeological sites and landscapes, listed buildings, conservation areas, historic gardens and designed landscapes included in the published inventory and any others of national and Corporate importance which are likely to be included.
Cumulative effects	The effects that result from changes caused by a project, plan, programme or policy in association with other past, present or reasonably foreseeable future plans and actions. Cumulative impact can result from individually minor but collectively significant actions taking place over a period of time. Cumulative effects are specifically noted in the SEA directive in order to recognise the need for broad and comprehensive information regarding the effects.
Density	The intensity of development in a given area. Usually measured as a net dwelling density, calculated by including only those site areas which will be developed for housing and directly associated uses, including access roads within the site, private garden space, car parking areas, incidental open space and landscaping and children’s play areas, where these are provided.

Effective housing land supply	Effective housing land supply is the part of the established housing land supply which is free or expected to be free of development constraints in the period under consideration, and will therefore be available for the construction of housing.
Enhancement	Measures envisaged to maximise the benefits of the positive actions of implementing the plan.
Environment	Mostly used in an ecological sense to cover natural resources and the relationships between them. But, social aspects (including human health) are also considered part of the environment. Issues relating to aesthetic properties as well as cultural and historical heritage (often in built environment) are also included.
Environmental Report	Document required by the Environment Act/SEA Directive as part of an environmental assessment, which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.
Flood	The temporary covering by water from any source of land not normally covered by water, but does not include a flood solely from a sewerage system.
Flood risk	The combination of the probability of a flood and of the potential adverse consequences, associated with a flood, for human health, the environment, cultural heritage and economic activity.
Green Infrastructure	The network of protected sites, green spaces and linkages which provide which provide for multi-functional uses relating to ecological services, quality of life and economic value.
Impact	A consequence affecting direct beneficiaries following the end of their participation in an intervention or after the completion of public facilities, or else an indirect consequence affecting other beneficiaries who may be winners or losers. Impacts may be positive or negative, expected or unexpected.
Indicator	A means by which change in a system or to an objective can be measured. Output Indicator: An indicator that measures the direct output of the PPS. These indicators measure progress in achieving PPS objectives, targets and policies. Significant Effects Indicator: An indicator that measures the significant effects of the PPS. Contextual Indicator: An indicator used in monitoring, that measures changes in the context within which a PPS is being implemented.
Landscape character	The distinct, recognisable and consistent pattern of elements that occurs consistently in a particular landscape and how these are perceived. It reflects

	particular combinations of geology, landform, soils, vegetation, land use and human settlement.
Listed Buildings	A building of special architectural or historic interest. Listed buildings are graded A, B or C with grade A being the highest. Listing includes the interior as well as the exterior of the building, and any buildings or permanent structures (e.g. wells within its curtilage). Historic Environment Scotland is responsible for designating buildings for listing in Scotland.
Mitigation	Measures to avoid reduce or offset significant adverse effects on the environment.
Monitoring	Activities undertaken after the decision is made to adopt the plan or programme to examine its implementation. For example, monitoring to examine whether the significant environmental effects occur as predicted or to establish whether mitigation and enhancement measures are implemented and are working.
Natura 2000	Under the EU Habitats Directive SPAs and SACs are together intended to form a European-wide network of protected areas designed to maintain or restore the distribution and abundance of species and habitats of EU interest. Many areas qualify for both SPA and SAC designation and as a matter of Government policy sites designated under the Ramsar Convention are afforded the same level of protection.
Objective	A statement of what is intended, specifying the desired direction of change.
Precautionary Principle	The assumption that an activity or development might be damaging unless it can be proved otherwise.
Prime quality agricultural land	Prime agricultural land is agricultural land identified as being of Class 1, 2 or 3.1 in the land capability classification for agriculture as developed by the Macaulay Land Use Research Institute.
Ramsar site	What does Ramsar stand for? It's actually the name of a town in Iran where the Convention of Wetlands of International Importance was adopted in 1971. The UK Government signed up to the Convention in 1976. All Ramsar sites in Scotland are also either SPAs or SACs (Natura sites), and many are also Sites of Special Scientific Interest (SSSIs), although the boundaries of the different designations are not always exactly the same.
Responsible Authority	Under the Act, the authority by which or on whose behalf the plan is prepared, or its successor.
Scheduled Monument	A scheduled monument is a monument of national importance that Scottish Ministers have given legal protection under the Ancient Monuments and Archaeological Areas Act 1979. Although the majority are on land, a small number lie under the sea.

Secondary effects	A degree of professional judgement is required in assessing significance of environmental effects but to help ensure that determinations are consistent and appropriate Schedule 2 of the Act sets out specific criteria for determining the likely significance of effects on the environment of a PPS.
Strategic Flood Risk Assessment	Assessment used to refine information on areas that may flood, taking into account all sources of flooding and the impacts of climate change. Used to determine the variations in flood risk from all sources of flooding across and from their area. SFRAs should form the basis for preparing appropriate policies for flood risk management.
Sustainable development	This concept recognises that achieving economic growth has to be done in such a way that does not harm the environment or squander the natural resources we depend on, whilst at the same time distributing the wealth this creates equally to improve quality of life now and in the future.
Synergistic effects	A type of cumulative effect where two or more impacts combine to produce a complex interaction where the effect may be larger or smaller than component impacts. Synergistic effects are specifically noted in the SEA Directive in order to emphasise the need for broad and comprehensive information regarding the effects.
SEA Act	Environmental Assessment (Scotland) Act 2005.
SEA Directive	Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment".
Wellbeing	A holistic, subjective state which is present when a range of feelings, among them energy, confidence, openness, enjoyment, happiness, calm, and caring, are combined and balanced.

Acronyms

AQMA	Air Quality Management Area
GROS	General Register Office for Scotland runs the Census and uses Census and other data to publish information about population and households.
LDP	Local Development Plan
NNR	National Nature Reserve Areas considered to be of national importance for their nature conservation interest which are managed as nature reserves.
NSA	National Scenic Area Areas which are nationally important for their scenic quality.
PPS	A plan, programme or strategy.

SAC	Special Areas of Conservation Sites designated under the EC Habitats Directive. They are intended to ensure that rare, endangered or vulnerable habitats and species of Community interest are either maintained at or restored to a favourable conservation status.		its view of the purpose of planning, the core principles for the operation of the system and the objectives for key parts of the system,
SM	Scheduled Monument: Scheduled monuments are not always ancient, or visible above ground. There are over 200 'classes' of monuments from prehistoric standing stones and burial mounds, through the many types of medieval site - castles, monasteries, abandoned farmsteads and villages - to the more recent results of human activity, such as collieries and wartime pillboxes. Scheduling is applied only to sites of national importance, and even then only if it is the best means of protection. Only deliberately created structures, features and remains can be scheduled.	SSSI	statutory guidance on sustainable development and planning under Section 3E of the Planning etc. (Scotland) Act 2006, subject planning policies, including the implications for development planning and development management, and Its expectations of the intended outcomes of the planning system.
SEA	Strategic Environmental Assessment involves the preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated.		
SEPA	Scottish Environment Protection Agency is Scotland's environmental regulator. Its main role is to protect and improve the environment. SEPA is a non-departmental public body, accountable through Scottish Ministers to the Scottish Parliament.		
SIMD	Scottish Index of Multiple Deprivation identifies small area concentrations of multiple-deprivation across all of Scotland in a fair way. It allows effective targeting of policies and funding where the aim is to wholly or partly tackle or take account of area concentrations of multiple- deprivation.		
SNH	Scottish Natural Heritage Its role is to look after the natural heritage, help people to enjoy and value it, and encourage people to use it sustainably.		
SOA	The Single Outcome Agreement is between each Council in Scotland and the Scottish Government, based on the 15 national outcomes. The national outcomes reflect the Scottish Government's National Performance Framework but they also reflect established corporate and community plan commitments across Scotland's Councils and Community Planning Partnerships.		
SDP	Strategic Development Plan Strategic development plans will be prepared by SDPAs and approved by Scottish Ministers. It sets out a clear vision and spatial strategy for the area. Critically it focuses on the key land use and development matters that cross planning authority.		
SPA	Special Protection Areas Sites designated under the EC Birds Directive. They are intended to protect the habitats of rare, threatened or migratory bird species.		
SPP	Scottish Planning Policy is a statement of Scottish Government's policy on land use planning and contains:		

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1. INTRODUCTION

1.1 Requirement for SEA

The Environmental Assessment (Scotland) Act 2005 requires qualifying plans and programmes developed by public bodies to be subject to Strategic Environmental Assessment (SEA).

The Perth and Kinross Local Development Plan (LDP) is a statutory plan which will guide the use and development of land across an area up to at least the year 2028. The SEA process has the potential to make a real contribution to the plan preparation through ensuring that the environmental effects of the LDP’s strategy, policies and proposals are fully understood, and that the environment is given the same level of consideration in the LDP as social and economic factors.

1.2 Scope of the Environmental Assessment

The environmental topics that will be included in the environmental assessment and the reasons for their inclusion are set out in Table 1 below. The identification of the topics is based upon those specified in the SEA Act, the issues identified in the baseline study carried out for the Scoping Report, and also the range of issues that the LDP is likely to cover.

Table 1: Scope of the Environmental Assessment

SEA Topic	Reason
Biodiversity, Flora and Fauna	The Plan has the potential to cause significant environmental effects despite mitigation through existing Development Plan policy protection of internationally and nationally protected sites. The potential also exists to positively enhance biodiversity, flora and fauna through specific measures identified and implemented as part of development proposals.
Population	Potential significant positive and negative effects on communities through development proposals.
Human Health	Potential negative effects on the population’s health as a result of emissions from increased road traffic; or potential positive effects through the reduced need to travel, and the creation of quality open spaces.
Soil	Possible significant cumulative effects dependent on the Plan’s spatial strategy and land allocations, such as the loss of prime quality agricultural land, sealing as a result of construction, loss of biodiversity and the potential for development to disturb carbon rich soils and result in the loss of the carbon stores through the release of greenhouse gases to the atmosphere.
Water	Potential for effects on water quality and supplies, drainage, flooding and morphology. Opportunity exists to enhance the water environment through infrastructure investment.
Air	Emissions from road transport have the potential to raise greenhouse gas emissions and to result in negative effects on air quality; similarly there is the potential to reduce emissions through reducing the need to travel or distance to be travelled.
Climatic Factors	Potential opportunity to make contributions to climate change mitigation targets through the Plan, and also the need for long term adaptation to the effects of climate change.

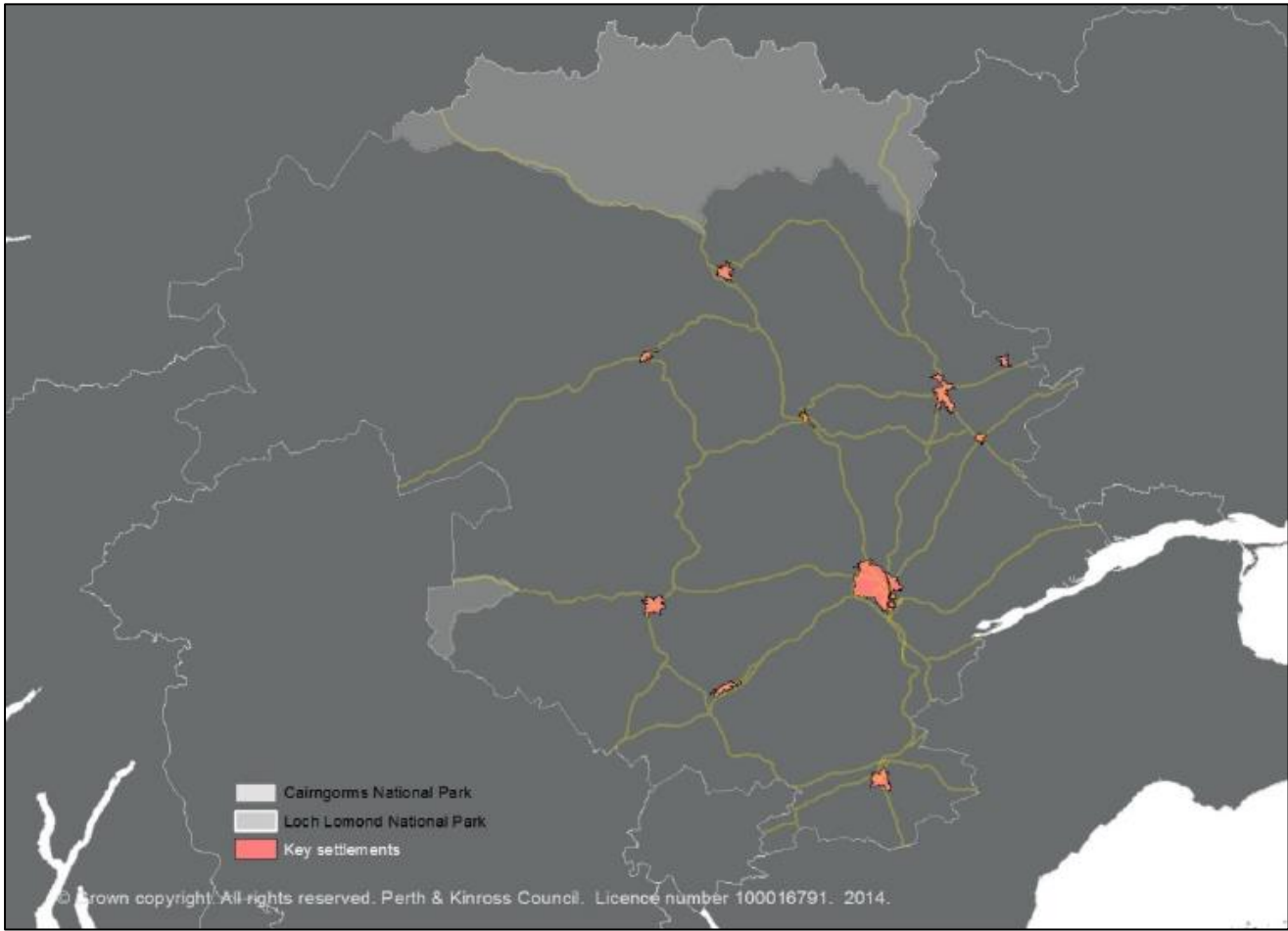
Material Assets	The Plan will tackle issues surrounding infrastructure, waste, and vacant and derelict land, and as such the SEA has a role to play in maximising positive effects.
Cultural Heritage	The LDP has the potential to generate both significant negative and potential positive effects on the historic environment, depending on the scale, design and location of development identified.
Landscape	Potential for significant changes to the landscape as a result of the implementation of a range of elements of the LDP’s Spatial Strategy. However, there may also be opportunities for mitigation and enhancement.

2. PLAN CONTEXT

2.1 The Perth and Kinross Area

The plan area covers 4,707km² and contains both highland and lowland landscapes. The area is characterised by a diverse mix of rural and urban communities, from the main population centre of Perth and towns such as Blairgowrie, Crieff, Kinross, Auchterarder and Pitlochry, to extremely remote communities such as Kinloch Rannoch in the Highland area. The area covered by the second Perth and Kinross LDP is shown in in Figure 1.

Figure 1: Map of the area covered by the LDP



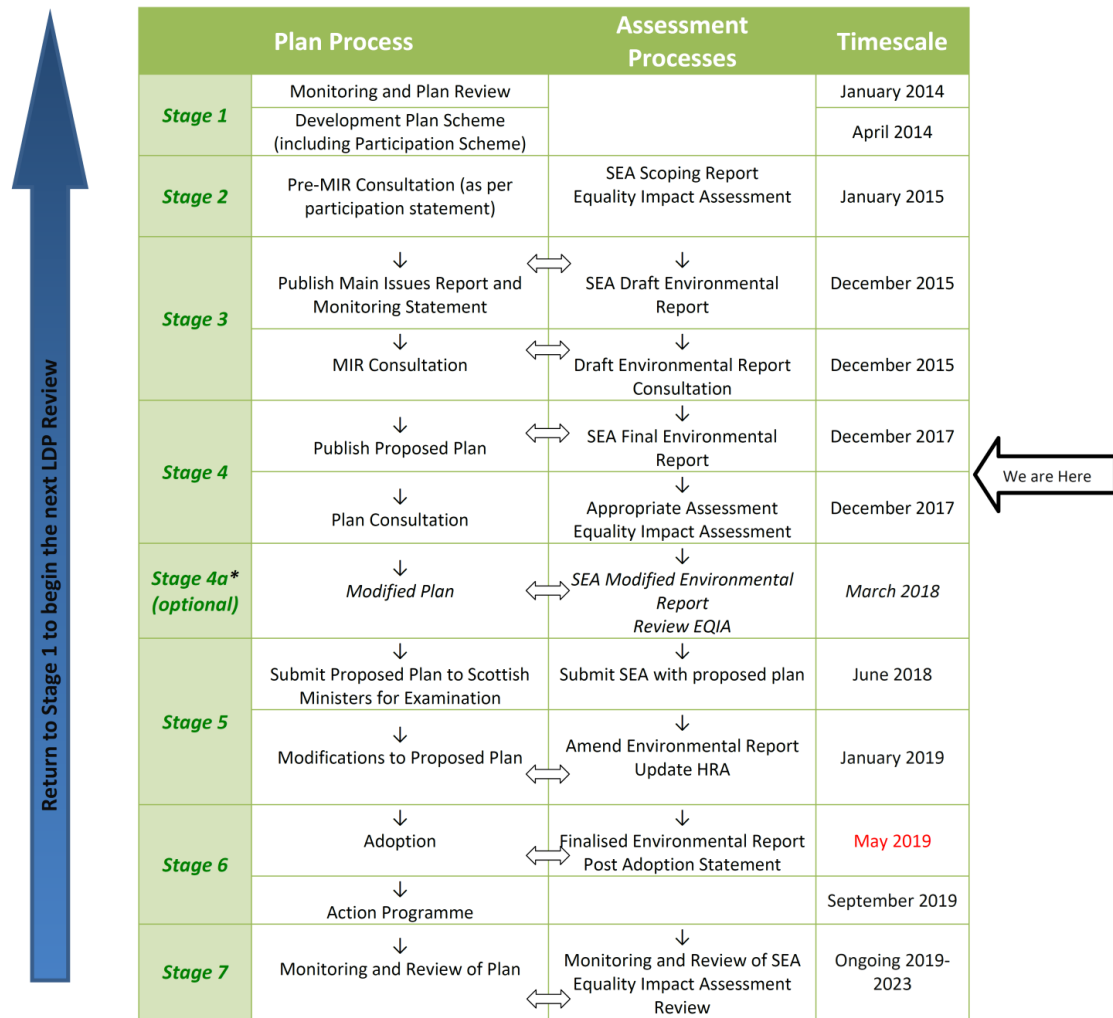
The 2011 Census recorded a population of 146,652 people and the 2013 based mid-year projections estimate that Perth and Kinross in 2013 had a population of 147,750 (National Records of Scotland). The first Local Development Plan was prepared using the 2008 midyear projections which estimated the population to be 144,180. This highlights a growth in the population of 2.4% between 2008 and 2013 with a further predicted growth rate of 24.2% between 2012 and 2037 (National Records of Scotland), which is one of the highest rates of growth in Scotland.

2.2 The Current LDP

The Planning etc. (Scotland) Act 2006 requires planning authorities at five yearly intervals to prepare LDPs for all parts of their district and keep those plans under review. The current LDP was adopted on 2nd February 2014 and Perth & Kinross Council is in the process of preparing the second LDP for its area.

Figure 2 below shows the current timetable for the production of the Plan, as contained in the Development Plan Scheme (November 2017).

Figure 2: Timetable for LDP Progress



2.3 The TAYplan Context

Angus, Dundee, Fife and Perth & Kinross Councils were designated as Strategic Development Planning Authorities and are jointly preparing the Strategic Development Plan for the area. This is known as TAYplan.

The second TAYplan was approved in October 2017. It sets out the vision where “By 2036, the TAYplan area will be sustainable, more attractive, competitive and vibrant without creating an unacceptable

burden on our planet. The quality of life will make it a place of first choice where more people choose to live, work, study and visit and where businesses choose to invest and create jobs.”

As well as identifying a vision for the TAYplan area, the SDP highlights the main cross-boundary land use planning issues, and indicates generally where development should and should not take place in Angus, Dundee City, Perth & Kinross and North-east Fife. (If you want to find out more about TAYplan you can go to the TAYplan website <http://www.tayplan-sdpa.gov.uk>).

Findings of the TAYplan SEA

The Strategic Environmental Assessment of the first TAYplan found that the Strategic Development Plan is likely to have a largely positive impact on the environment. It concluded that overall the effects are largely uncertain as they will depend on how the Plan is taken forward and implemented by lower level plans and policies.

The SEA goes on to suggest that the plan (TAYplan) should provide leadership to ensure that the planned economic, social, and environmental activity achieves a net gain for the environment which will ultimately enhance well-being for local communities and increase the attractiveness of the area to investors.

The Action Programme for the first TAYplan sets out the measures to be taken by each Local Authority to ensure the implementation of the plan. This includes mitigation measures that have been highlighted through the SEA. For Perth and Kinross it is suggested that:

- Assessment of development sites through the Local Development Plans should give consideration to the quality of the agricultural land; it's current and future potential use; other factors such as soil, drainage, air and water quality in the area; inclusion or consideration of biodiversity action such as hedgerows etc.
- Possible cumulative effects, require further detailed assessment, including: 1. development on the Firth of Tay and Eden Estuary in relation to disturbance of birds; 2. coastal development: coastal flooding and predicted sea level rise; 3. River Tay and Loch Leven catchments; and, 4. erosion of landscape quality through piecemeal development.
- LDPs should ensure: Greenfield development is used as an opportunity to enhance ecological networks through wildlife corridors, and habitat creation; and, a list of measures appropriate for green infrastructure.
- Ensure compliance with statutory duties of the historic environment.

These issues will be assessed through the SEA of LDP 2.

2.4 The Second LDP

An LDP is a statutory document that guides all future development and use of land. It acts as a catalyst for change and improvement in the area and shapes the environment and economy of Perth and Kinross.

The second LDP will provide clear guidance on what development will or will not be allowed and where. It will address a wide range of policy issues, including housing, retail, business, industry, transport, renewable energy, recreation, and built and natural heritage. The second LDP will contain the following:

- Vision and Objectives - this is a broad statement of how the development of Perth & Kinross could and should occur and what the area might look like in the future.
Spatial Strategy - this will indicate land use zonings and site specific proposals for implementation during the life of the Plan, which will help achieve the vision.
- Policies - these will give clear guidance on where development will be encouraged, and also where and in what circumstances it will not be permitted.

2.5 Proposed Plan

The first stage in the Perth & Kinross LDP process was the production of a Main Issues Report (MIR). Scottish Government guidance describes MIR's as important documents that will help facilitate the front-loading of effective engagement on the Plan, and for bringing development planning into line with the SEA process. The intention of the MIR is to stimulate discussion through consultation. The MIR for the second LDP focused on key issues and areas of change both, nationally and locally, since the adoption of the first LDP in February 2014. The Environmental Report that accompanied the MIR considered all reasonable alternatives to the Plan.

We have now prepared our Proposed Plan, which is the settled view of the Council. At this stage there are few reasonable alternatives and this is reflected in this assessment. The assessment of alternative(s) has been mainly considered through the assessment of the MIR.

3. BASELINE

3.1 Introduction

The identification of the current environmental baseline conditions and their likely evolution is an important part of the SEA process. A knowledge and understanding of existing conditions and the consideration of their significance helps with the identification of those issues which the plan, programme or strategy (PPS), in this case the second LDP, should be addressing and allows it to be successfully implemented and subsequently monitored.

The SEA Directive requires that the likely evolution of the environmental baseline of the area, without the implementation of the PPS to be identified. This is useful in the assessment of the significance of effects, particularly in respect of those conditions which may already be improving or worsening, and the rate of that change. The type of data collected for the Environmental Report and subsequent Addendum(s) will be largely determined by:

- The environmental topic to which it relates
- The SEA objectives
- The aspects of each environmental topic chosen for the basis of the assessment
- The level of assessment proposed
- The environmental data available

3.2 Relevant Plans, Programmes and Strategies

The review of plans, programmes and strategies as part of the SEA process is a useful way of ensuring that the relationship between these documents and the LDP is fully explored, and also that the relevant environmental protection and sustainability objectives are taken into account through the SEA.

Reviewing plans, programmes and strategies can also provide appropriate information on the baseline for the plan area and the key environmental and/or sustainability issues. The plans and programmes thought to have an influence on, or be influenced by, the LDP are set out in detail in Appendix A to this document.

The analysis concentrates on those plans which are considered to be particularly relevant to the LDP. Plans, programmes or strategies above the Scottish level have in most cases been excluded from the analysis. This is mainly because it is assumed that all relevant international, European and UK environmental legislation has been incorporated into regional and local legislation, strategies and guidance. Some of the reviewed documents have been summarised below.

National Planning Framework (NPF) 3

National Planning Framework 3 was published by the Scottish Government on the 23rd June 2014. The Framework plays a key role in co-ordinating policies with a spatial dimension and integrating and aligning strategic investment priorities. It takes forward the spatial aspects of the Government's

Economic Strategy, highlighting the importance of place and identifying key priorities for investment to create a more successful country, with opportunities to flourish through increasing sustainable economic growth. It provides the strategic spatial policy context for decisions by the Government and its agencies, complementing the statements of national policy set out in Scottish Planning Policy (SPP). The vision of the strategy is:

- A successful, sustainable place - "We will create high quality, diverse and sustainable places that promote well-being and attract investment";
- A low carbon place – "Our ambition is to achieve at least an 80% reduction in greenhouse gas emissions by 2050";
- A natural, resilient place – "We will respect, enhance and make responsible use of our natural and cultural assets"; and,
- A connected place – "We will maintain and develop good internal and global connections".

The national strategy seeks to provide a flexible framework for sustainable growth and development reflecting the varied assets of each 'place'. The aim for cities is to transform them into models of low carbon living, supporting growth, addressing regeneration and improving connections. Many of the largest and most vibrant towns are located close to the cities. The strategy recognises the national importance of rural towns and villages and through the vision seeks to have sustainable, economically active rural areas which attract investment and support vibrant, growing communities. As part of this there is a commitment to safeguarding our natural and cultural assets and making innovative and sustainable use of our resources.

Scottish Planning Policy

SPP was published by the Scottish Government on the 23rd June 2014 and shares a single vision with NPF3 for the planning system in Scotland which is that:

"We live in a Scotland with a growing, low-carbon economy with progressively narrowing disparities in well-being and opportunity. It is growth that can be achieved whilst reducing emissions and which respects the quality of environment, place and life which makes our country so special. It is growth which increases solidarity - reducing inequalities between our regions. We live in sustainable, well-designed places and homes which meet our needs. We enjoy excellent transport and digital connections, internally and with the rest of the world".

Four outcomes have been created to explain how planning should support this vision through the NPF3 and SPP.

Outcome 1: A successful, sustainable place - "We will create high quality, diverse and sustainable places that promote well-being and attract investment"

SPP sets out how this should be delivered on the ground by locating the right development in the right place, providing people with opportunities to make sustainable choices and improve their quality of

life. Planning has an important role in promoting strong, resilient and inclusive communities by delivering high-quality buildings, infrastructure and spaces in the right locations.

Outcome 2: A low carbon place – “Our ambition is to achieve at least an 80% reduction in greenhouse gas emissions by 2050”

SPP sets out how this can be delivered by seizing opportunities to encourage mitigation and adaption measures, planning can support transformational change required to meet emission reduction targets and influence climate change. Planning can influence people’s choices to reduce environmental impacts of consumption and production, particularly through energy efficiency and reduction of waste.

Outcome 3: A natural, resilient place – “We will respect, enhance and make responsible use of our natural and cultural assets”

SPP sets out how this should be delivered by protecting and making efficient use of existing resources and environmental assets. Planning can help manage and improve the condition of our assets, supporting communities in realising their aspirations for their environment and facilitating their access to and enjoyment of it. By enhancing our surroundings, planning can help make Scotland a uniquely attractive place to work, visit and invest therefore supporting the generation of jobs, income and wider economic benefits.

Outcome 4: A connected place – “We will maintain and develop good internal and global connections”.

SPP sets out how this should be delivered by aligning development more closely to transport and digital infrastructure, planning can improve sustainability and connectivity. Improved connections facilitate accessibility within and between places and support economic growth and an inclusive society.

The updated SPP will have a direct impact on our second LDP as we will have to consider the key policy changes and the implication these will have on our plan. Within the updated SPP there is a focus on creating prosperous and sustainable rural communities and businesses while protecting and enhancing the environmental quality and there is a presumption in favour of sustainable development. These include a town centre first policy that has extended the variety of uses in town centres, the need to consider the potential for heat networks and to ensure there are policies which will result in increased digital connectivity. SPP 2014 emphasises the importance of green infrastructure and incorporating planning for zero waste.

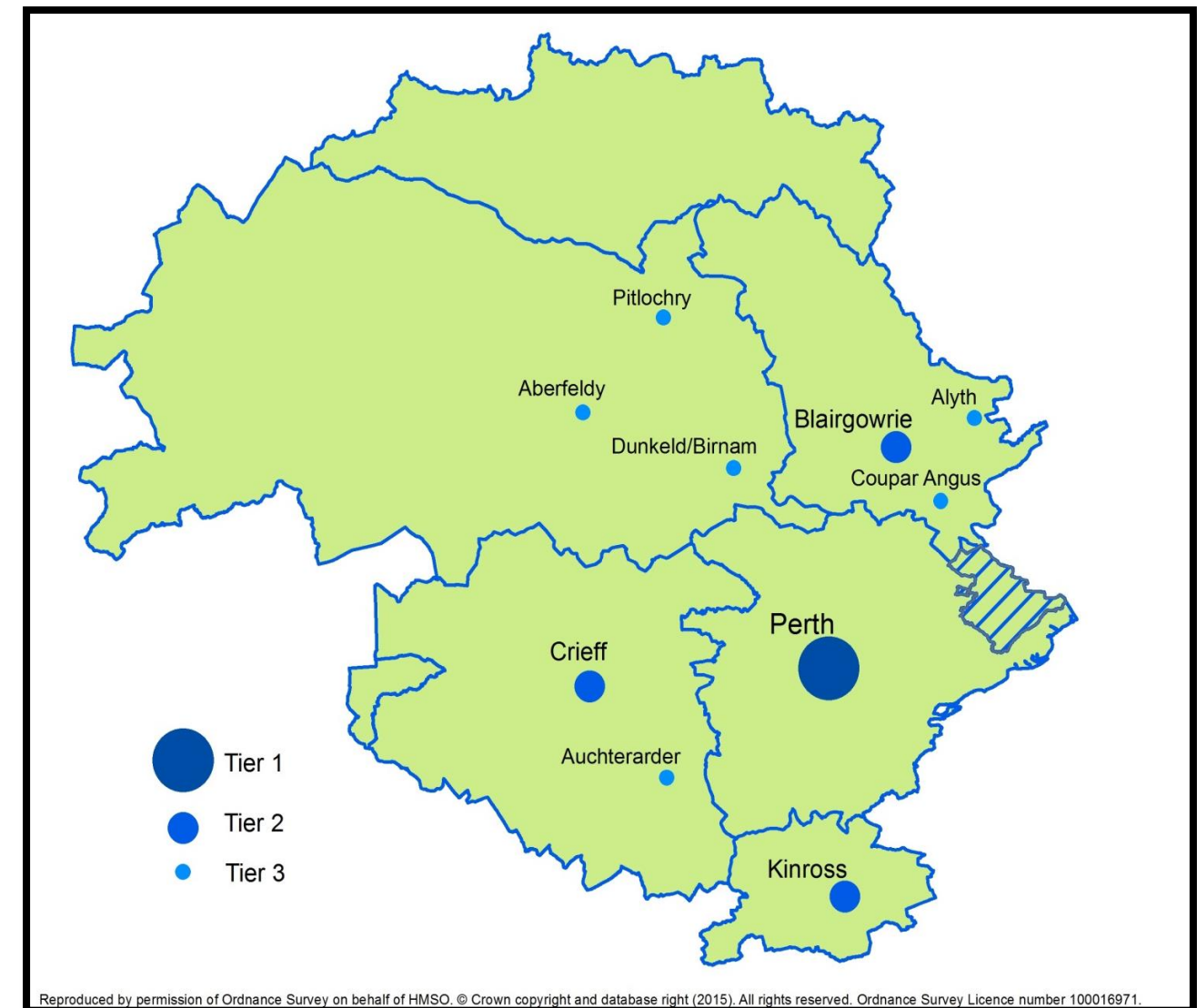
TAYplan

The Planning etc. (Scotland) Act 2006 requires that within a Strategic Development Planning Authority area the LDP is consistent with the Strategic Development Plan (SDP), which in the case of Perth and Kinross is TAYplan. The first TAYplan was adopted in June 2012 and this has now been superseded by TAYplan Strategic Development Plan, which was formally adopted in October 2017.

The vision and spatial strategy have remained unchanged since the adoption of the first SDP. This means that for Perth and Kinross Councils LDP there is unlikely to be any significant change in the vision or spatial strategy as it has to remain consistent with TAYplan. The proposed Plan highlights the importance of focusing growth within the principal settlements. The principal settlements are shown in

Figure 3. TAYplan encourages policy to shape better quality places, encourage investment, promote the development of town centre through a Town Centres first policy, reduce waste and promote renewable energy generation, green networks, natural and cultural assets and ensuring the right infrastructure is in place to encourage development. In addition, TAYplan sets the housing levels for the Dundee, Angus, North Fife and Perth and Kinross Councils.

Figure 3: Principal Settlements within the TAYplan Area



Perth and Kinross Council Community Plan/Single Outcome Agreement 2013-2023

The Perth and Kinross Council Community Plan/Single Outcome Agreement 2013-2023 sets out the key local outcomes that the Community Planning Partnership is committed to achieving for the people and communities of Perth and Kinross.

A Single Outcome Agreement is an agreement for delivery of local and national outcomes and establishes challenging targets that will drive forward significant improvements for the communities within Perth and Kinross.

The scope of the SOA covers the public services delivered in Perth and Kinross by PKC, NHS Tayside, Tayside Police, Tayside Fire and Rescue, Scottish Enterprise Tayside, Perth and Kinross Association of Voluntary Services and the voluntary sector it represents, UHI Perth College and other agencies and partners, both statutory and non-statutory, to provide high quality public services for local people and communities, whilst at the same time fulfilling duties in relation to Best Value, equalities and sustainable development.

The Perth and Kinross Council Community Plan/Single Outcome Agreement 2013-2023 highlights the Council's vision for 'a confident and ambitious Perth and Kinross, to which everyone can contribute and in which all can share'. The plan sets out 5 strategic objectives with their subsequent local outcomes, which are as follows:

1. Giving every child the best start in life.
 - a. Children have the best start in life.
 - b. Nurtured and supported families.
2. Developing educated, responsible and informed citizens.
 - a. Young people reach their potential.
 - b. People are ready for life and work.
3. Promoting a prosperous, inclusive and sustainable economy.
 - a. Thriving, expanding economy.
 - b. Employment opportunities for all.
4. Supporting people to lead independent, healthy and active lives.
 - a. Longer, healthier lives for all.
 - b. Older people are independent for longer.
 - c. High quality personalised care.
5. Creating a safe and sustainable place for future generations.
 - a. People in vulnerable circumstances are protected.
 - b. Resilient, responsible and safe communities.
 - c. Attractive, welcoming environment.

The Perth and Kinross Council Community Plan/Single Outcome Agreement 2013-2023 is the key driver for the Council's planning framework as it provides the rationale for decision making and prioritisation of resources above and beyond the Council's core statutory responsibilities.

Perth & Kinross Council's Corporate Plan 2013-2018

The Corporate Plan outlines the Council's vision "of a confident and ambitious Perth and Kinross, to which everyone can contribute and in which all can share. Through our strategic objectives we aim to maximise the opportunities available to our citizens to achieve their potential."

The plan adopts a "Whole Life Approach" with Local Outcomes that will be used to achieve the Strategic Objectives highlighted in the Perth and Kinross Council Community Plan/Single Outcome Agreement 2013-2023 as demonstrated below in Figure 4.

Figure 4: Corporate Plan Objectives



The Corporate plan highlights the steps the Council will take to ensure they lead and improve through:

- Prioritising prevention and promoting equality
- Services designed around people and communities
- Working together to achieve outcomes
- Improving performance
- Building the community asset base

The plan provides an important focus for the Perth and Kinross Community Planning Partnership and for the delivery of better outcomes for our communities. Central to this plan is a commitment to take action, based on evidence that will lead to demonstrable improvement in people's lives.

3.3 Relevant Aspects of the Current State of the Environment

The reason for including the data gathered is to help build a picture of the social, economic and environmental characteristics of the area, and the key environmental issues which it faces. Data has been collated for a range of topics likely to be influenced by the Local Development Plan.

The development of the SEA for the Plan relies upon a comprehensive and up to date environmental baseline. Appendix B to this report details the data which has already been collected, or is in the process of being collected and analysed in order to inform the development of the baseline.

3.4 Key Baseline Facts for Perth and Kinross

Table 2 below provides some key baseline facts for the Perth and Kinross LDP area and Appendix B shows the spatial distribution of the various designations and environmental matters across Perth and Kinross.

Table 2: Key Baseline Facts

Resource	Key Facts	Ecosystem Service
Biodiversity		
Biodiversity, Flora and Fauna	<ul style="list-style-type: none"> Approximately 36% of Perth and Kinross is designated under national or international legislation to protect the landscape habitats and species (this includes NSA, HGDL, NP, SAC, SPA, and SSSI). <ul style="list-style-type: none"> 2 National Nature Reserve Areas, 4 Ramsar sites 22 Special Areas of Conservation, 8 Special Protection Areas 119 SSSIs 8 Important Bird Areas (IBAs) 	Cultural
	<ul style="list-style-type: none"> Recorded distributions of Protected (both LBAP and Statutory Protected Species) species indicate presence in 44% of all 1km squares in P&K (2008) 	Cultural
	<ul style="list-style-type: none"> Baseline of 9% priority BAP habitat coverage in P&K (1984-2007) 	Cultural
	<ul style="list-style-type: none"> Overall increase in net coverage of BAP priority habitats, with 47% of habitats showing an increase, 26% remaining stable and 26% declining (1990 to 2007) 	Cultural
	<ul style="list-style-type: none"> The P&K area has the highest number of SSSIs per land mass in Scotland In 2014/15 78.2 percent of Biological protected sites and 96 percent of Geological protected sites were considered to be in favourable condition. 	Cultural

Resource	Key Facts	Ecosystem Service
	<ul style="list-style-type: none"> The Forestry Commission identified approximately 57,142 ha of ancient and semi-natural woodland in Perth and Kinross (2006). According to the NFI 17% of Perth and Kinross is forested, an increase of 1% or over 6,500 ha since 2002. (Forestry Commission, 2011) 	Cultural Provisioning Provisioning
Population		
	<ul style="list-style-type: none"> 146,652 (2011 Census) 	Cultural
Human Health		
Health and Wellbeing	<ul style="list-style-type: none"> Population density of 0.28 people/ per hectare (2011 Census) 	Cultural
	<ul style="list-style-type: none"> 10.6 per cent of residents in Perth and Kinross were aged between 65 and 74 and a further 9.5 per cent aged over 75 years. This compares to 9.1 per cent aged between 65 and 74 and 7.7 per cent aged 75 and over in Scotland as a whole (2011 Census) 	Cultural
	<ul style="list-style-type: none"> The percentage of residents surveyed in Perth and Kinross who rate their neighbourhood as a very good or fairly good place to live has remained steady between 94 - 97%. 	Cultural
	<ul style="list-style-type: none"> Most of Perth and Kinross's datazones are found in less deprived deciles in SIMD 2012. The SIMD 2012, shows that 6 (3.4%) of Perth & Kinross's 175 datazones were found in the 15% most (SIMD 2012) 	Cultural
	<ul style="list-style-type: none"> 87% of the area's households are within 4km of a 20ha woodland 87% of the area's households are within 500m of a 2ha woodland 	Provisioning Provisioning
Soil		
Geology, Soils and Minerals	<ul style="list-style-type: none"> In 2014/15 96 percent of Geological protected sites were considered to be in favourable condition. This represents a decline of 4 percent in the condition of geological notified features. 	Cultural
	<ul style="list-style-type: none"> The Perth and Kinross Council area contains or adjoins 30 Geodiversity sites 11.6% or 62,000ha of the area is occupied 	Cultural

Resource	Key Facts	Ecosystem Service
	<ul style="list-style-type: none"> by prime agricultural land Perth and Kinross planning area contains over 55,000 ha of Class 1 importance in terms of habitat and soil type. Perth and Kinross planning area contains over 55,000 ha of Class 1 and over 54,000 of Class 2 (Nationally important carbon rich soils, deep peat and priority peatland habitat) which represent areas likely to be of high conservation value and areas of potential high conservation value and restoration potential respectively. (SNH, 2015) 	Regulating Regulating
Vacant, Derelict and Contaminated Land	<ul style="list-style-type: none"> In 2007 there were approximately 9,800 contaminated sites across the area Relatively small area of the land stock is vacant or derelict – 46ha 	Regulating Cultural
Water		
Water Quality and Resources	<ul style="list-style-type: none"> 45% of the total number of rivers were classified as being of good status or better (2013) In the Perth and Kinross area in 2013 82% of the total number of groundwater bodies were classified as being of good status or better River Basin Management Planning: there are a range of target objective set for Rivers, Lochs, Transitional and Coastal areas in Perth and Kinross. Within these four classifications. There are specified pressures and identified mitigation measures for various issues including morphological alterations, alien species, diffuse source pollution, abstraction, point source pollution, and flow regulation. Large parts of Perth and Kinross are covered by the River Tay and River Earn drinking water supply catchments; abstractions from drinking water supply catchments are designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive, where it is essential that water quality and quantity within these areas are protected. 	Regulating Regulating
Flooding	<ul style="list-style-type: none"> The National Flood Risk Assessment has found that one in 22 of all residential 	Regulating

Resource	Key Facts	Ecosystem Service
	properties and one in 13 of all non-residential properties are at risk of flooding from rivers, the sea or heavy rainfall in urban areas	
Air		
Air Quality	<ul style="list-style-type: none"> Generally good air quality in most areas of Perth and Kinross – meets all of the Government's targets except at a few traffic hotspots in Perth and Crieff where annual mean concentrations of Nitrogen Dioxide and Particulate Matter are currently exceeding EU and Scottish air quality standards. Two Air Quality Management Areas one in Perth and one in Crieff due to road traffic 	Regulating Regulating
Climatic Factors		
Climate	<ul style="list-style-type: none"> Emissions of CO₂ within P&K (2012): <ul style="list-style-type: none"> 42% attributed to road transport 27% attributed to industry (46% in Scotland as a whole) 31% attributed to domestic sources (per capita greater than the Scottish average) In Perth and Kinross in 2013 mean domestic electric consumption was 5,577 kwh per household (higher than the Scottish average) In Perth and Kinross in 2013 mean domestic gas consumption was 15, 822 kwh (higher than the Scottish Average) 	Regulating Regulating Regulating
Material Assets		
Built Environment	<ul style="list-style-type: none"> Distinctive local vernacular architecture(s) 	Cultural
Waste	<ul style="list-style-type: none"> 41 Waste Management Sites within Perth and Kinross with an annual capacity of 1,422,433 tonnes (2013) Majority of waste material generated in the area was sent to destinations within the Perth & Kinross Council area 74,267 tonnes of Household Waste (2013) 49.3% of Household Waste disposed of to landfill (2013) 42.8% of Household Waste recycled (2013) 	Supporting Supporting Supporting Supporting Supporting
Cultural Heritage		

Those topics covered in Table 2, on which data has been gathered are shown below in Table 3 with an indication of the strength of their relationship with economic, social and environmental issues.

Table 3: SEA Topic and Associated Issue(s), and the Strength of the Relationship

Topic	Environmental	Social	Economic
Biodiversity			
Biodiversity, Flora and Fauna	○○○	○○	○
Woodland and Forestry	○○○	○○	○○○
Population			
Housing	○○	○○○	○
Human Health			
Health and Wellbeing	○○	○○○	○
Soil			
Vacant, Derelict and Contaminated Land	○○○	○○	○○
Geology, Soils and Minerals	○○○	○	○○
Water			
Water Quality and Resources	○○○	○○	○○
Flooding	○○○	○○	○○
Air			
Air Quality	○○○	○○	○○
Climatic Factors			
Climate	○○○	○○	○○
Material Assets			
Built Environment	○○○	○○	○○
Transport	○○○	○○○	○○○
Waste	○○○	○○	○○○
Cultural Heritage			
Historic and Cultural Heritage	○○○	○○	○○
Landscape			
Landscape character and trends	○○○	○○	○○

3.5 Data Gaps and Problems

It is a requirement of both the Act and Directive to record any difficulties encountered in compiling the required information for the assessment. This is particularly important as it is necessary to describe those measures envisaged for monitoring the implementation of the plan.

- No data available on genetic material
- There is currently no data on biofuels available
- Availability of up to date data on habitat change
- Information on the location and extent of priority species and habitats
- A lack of information on the current situation and trends in development pressures
- A lack of information on capacity of the landscape to accommodate development.

3.6 Summary of Environmental Issues in the Perth and Kinross Area

Following an evaluation of the relevant baseline data, the environmental problems and issues set out in Table 4 below have been identified as being relevant to the LDP. The implications of these potential problems and issues will require to be addressed in detail through the Addendum to the Environmental Report.

It should be noted that many of these problems will have been addressed through policies and guidance under the first LDP framework through the SEA and HRA process. However, due to the short timescales for review some of these problems or issues have not been fully addressed.

Table 4: SEA Topic and Associated Problems and Issues

SEA Topic	Associated Problems and Issues
Biodiversity, Flora and Fauna	<ul style="list-style-type: none">• Impact on biodiversity, including habitat networks and wildlife corridors as well as designated sites from increasing demand for development.• Impact of increased pressure for inappropriate development on designated sites and buildings including Ancient and Semi Natural Woodlands. Environmentally sensitive areas with biodiversity interests should be protected.
Population	<ul style="list-style-type: none">• Increasingly ageing population means there will be a need for increased level of services and facilities for elderly people and the need for new development to be directed to areas which are accessible by a range of modes of transport.• Significant projected population increase across Perth and Kinross
Human Health	<ul style="list-style-type: none">• Access to good quality recreation and open space• Impact of poor design on wellbeing• Access to facilities and services
Soil	<ul style="list-style-type: none">• Irreversible loss of soil through development, contamination or erosion – the best quality agricultural land should be protected from development.

SEA Topic	Associated Problems and Issues
	<ul style="list-style-type: none"> Increased development pressures on peat rich soil Loss of carbon stores provided by carbon rich soils
Water Quantity	<ul style="list-style-type: none"> Vulnerability of Perth and Kinross to the effects of a changing climate, such as the increased risk of flooding. It is important that the LDP takes into account those areas which are already at risk from the effects of climate change in order to avoid an exacerbation of the problems in these areas. Lack of specific standards for water efficiency. Large parts of Perth and Kinross are covered by the River Tay and River Earn drinking water supply catchments; abstractions from drinking water supply catchments are designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive, where it is essential that water quality and quantity within these areas are protected.
Water Quality	<ul style="list-style-type: none"> Impact of development on ecological status of waterbodies Eutrophication of lochs and a deterioration in the condition of some lochs including Loch Leven and the Lunan Valley Lochs which are also European wildlife sites. The need to protect such areas from adverse impacts will have a major influence on the ability of some of the Perth and Kinross area to accommodate the housing land requirement arising in these areas in full. Drainage constraints in some parts of the area and large parts of rural areas without access to a public water supply – potential pollution issues from increased use of private drainage solutions. In reviewing the appropriateness of the settlement strategy the LDP will need to weigh up the need to support development in rural areas in order to maintain the vitality of these areas against the potential adverse environmental impact of a possible proliferation of private septic tanks. Large parts of Perth and Kinross are covered by the River Tay and River Earn drinking water supply catchments; abstractions from drinking water supply catchments are designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive, where it is essential that water quality and quantity within these areas are protected.
Air	<ul style="list-style-type: none"> High emissions from road traffic and levels of air pollution in some parts of Perth and Kinross High dependency on the private car in some areas Worsening of air quality standards in some locations as a result of increased development Cross boundary effects
Climatic Factors	<ul style="list-style-type: none"> Vulnerability of Perth and Kinross to the effects of a changing climate, such as the increased risk of flooding. It is important that the LDP takes into account those areas which are already at risk from the effects of climate

SEA Topic	Associated Problems and Issues
	<p>change in order to avoid an exacerbation of the problems in these areas.</p> <ul style="list-style-type: none"> Cross boundary effects Consideration given to the need for a managed retreat of development in the Carse of Gowrie area where appropriate. Potential of renewable and low carbon energy technologies Creating sustainable communities Maximising resource use (including the release of greenfield sites) and energy efficiency Food security Identifying appropriate mitigation and adaptation measures Loss of carbon stores provided in carbon rich soils
Material Assets	<ul style="list-style-type: none"> Constraints on infrastructure delivery including the current economic climate Threats to recreation and open space Potential growth in waste as a result of the population increase
Cultural Heritage	<ul style="list-style-type: none"> Impact of increased pressure for inappropriate development on sites of historical importance, such as battlefields and historic landscapes, and also on listed buildings, conservation areas and scheduled monuments
Landscape	<ul style="list-style-type: none"> Increased pressure for development (including housing in the countryside) resulting in the incremental change and/or degradation of landscape, both in terms of designated sites and wider landscapes. Resultant effects on health and quality of life. Impact on Special Landscape Areas and their characteristics Balancing the desire to grow the tourism sector and safeguard the special characteristics of landscapes which attract tourists to the area

3.7 Likely Evolution of the Baseline without the Local Development Plan

The SEA Directive requires that the baseline conditions of the plan area that would occur without implementation of the second LDP are identified.

Without the second LDP, Perth and Kinross Council will continue to rely on the requirement identified in the existing LDP and therefore risk being out of date and not in line with the policies or strategies of TAYplan and the updated SPP.

Perth and Kinross is experiencing and anticipating many changes over the coming years such as significant population increase in many areas, in particular the Perth Core Area and greater impact on flooding in the Carse of Gowrie. The current LDP does not reflect the most up to date housing need and demand assessment for the area and so the without the second LDP the council will fail to meet the requirement for national planning policy to have a five year effective housing land supply. The

availability of immediately available employment land will continue to be an issue without an up to date LDP which identifies the most sustainable location(s) for employment land to meet demands.

Overall, the existing LDP for Perth and Kinross is likely to be increasingly unable to meet the changing and expanding needs of the region. This has the potential for an increase in development that is not properly planned for and considered which will have a negative impact on the environmental baseline.

4. DEVELOPMENT OF SEA OBJECTIVES

The SEA Directive does not require the identification of objectives but the development of specific SEA objectives is accepted as being a good way in which the environmental effects can be described, analysed and compared. Identifying SEA objectives is also a useful way of establishing what baseline data needs to be collated and helps in the development of indicators which can realistically be monitored to help identify the impacts of the plan. It should be noted that the SEA Objectives are separate from the goals of the LDP, as SEA objectives are mostly limited to environmental issues which will be complementary to the LDP’s environmental aims.

The SEA objectives for the LDP are set out in Table 5 below; alongside those Assessment Questions that were used to measure the performance of the plan against its SEA objectives. The SEA objectives were originally developed through the SEA of the first LDP. These have changed slightly to correspond with changes to national legislation but will still allow for comparison and a consistent approach to monitoring. The objectives were developed for each of the SEA topics areas listed under Schedule 3 of the Environmental Assessment (Scotland) Act 2005.

Table 5: SEA Topics / Objectives

Ref.	SEA Topic	Objective	Assessment Questions
SEA 1	Biodiversity, Flora and Fauna	Conserve and enhance the diversity of species and habitats	Will it protect and enhance valuable wildlife habitats and species, both those statutorily designated and those of local value? Will it affect habitat fragmentation? Will it improve or deteriorate the natural environment in those areas where the levels of biodiversity are low?
SEA 2	Population	Accommodate population and household growth and direct that growth to appropriate locations	Will it create and sustain vibrant and diverse communities?
SEA 3	Human Health	Improve the quality of life for communities in Perth and Kinross	Will it ensure the accessibility of healthcare services, including access to environments that may be beneficial to health, by non-car means, e.g. through the incorporation of services in new developments?

SEA 4		Maximise the health and wellbeing of the population through improved environmental quality	Will it reduce health problems relating to environmental pollution (in particular air quality)? Will it reduce poverty and health inequalities?
SEA 5	Soil	Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils and protect carbon rich soils	Will it make use of previously used/brown field land and buildings? Will prime agricultural land or carbon rich soils be lost as a result of the strategy? Will it contribute to conserving, or reducing loss of, functionality of soils?
SEA 6	Water	Protect and where possible enhance the water environment	Will it prevent deterioration and enhance ecological status of the water environment? Will it protect areas designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive?
SEA 7		Safeguard the functional floodplain and avoid flood risk	Will it avoid development on the FFP or areas at medium to high risk of flooding?
SEA 8	Air	Protect and enhance air quality	Will it reduce air pollution levels?
SEA 9		Direct development to sustainable locations which help to reduce journey lengths and the need to travel	Will it encourage use of sustainable transport?
SEA 10	Climatic Factors	Reduce emissions of greenhouse gases	Will it reduce emissions?
SEA 11		Reduce the area’s vulnerability to the effects of climate change through identifying appropriate mitigation and adaptation measures	Will it avoid exacerbating the impacts of climate change? Will it avoid development on the FFP or areas at medium to high risk of flooding? Will it ensure adaptation to the effects of climate change? Will it avoid new development in areas at risk from erosion, including coastal erosion? Will it reduce the number of properties, and infrastructure, at risk from flooding?
SEA 12	Material Assets	Minimise waste per head of population to meet Zero Waste Plan Objectives	Will it encourage the safe treatment and disposal of waste, and prevent, reduce, reuse and recycle waste?

SEA 13		Maximise the sustainable use/re-use of material assets (land and buildings)	Will it encourage the re-use of land and buildings?
SEA 14		Promote and ensure high standards of sustainable design and construction	Will it help to reduce energy usage and encourage energy efficiency? Will it ensure new development is located in line with sustainable principles?
SEA 15	Cultural Heritage	Protect and enhance, where appropriate, the historic environment	Will it protect the historic environment? Will it enhance where appropriate the historic environment? Will it ensure high design quality and respect for local character, distinctiveness and surrounding development?
SEA 16	Landscape	Protect and enhance the character, diversity and special qualities of the area's landscapes to ensure new development does not exceed the capacity of the landscape to accommodate it	Will it improve or maintain the landscape character of the area? Will it seek to protect, restore and enhance the landscape?
SEA 17		Protect and enhance townscape character and respect the existing pattern, form and setting of settlements	Will it respect landscape capacity, visual amenity, and the spatial diversity of communities?

5. PROPOSED METHODOLOGY

This section sets out the methodology developed to assess the likely effects on the environment as a result of implementing the second Local Development Plan.

It concentrates on significant effects likely to be generated by the LDP and those that are within the control of the land use planning system. It is not possible nor is it necessary for the assessment to consider every conceivable effect. Nonetheless, all potential significant effects have been assessed through the methodology below.

5.1 Proposed Scope and Level of Detail

The 'Spatial Scope' for the SEA is defined as all the land within the Perth & Kinross Council area, and neighbouring areas that share the same landscape character and/or same habitat type.

The timeframe for the SEA is consistent with that of the LDP with regular monitoring and a five year review period built in through legislative requirements.

5.2 Predicting the Effects of Implementation

Predicting the effects of implementation is an essential part of the SEA. The purpose of carrying out an SEA is to allow the decision maker to make 'informed decisions' based on effective predictions and predicting environmental conditions is a good method of testing out assumptions and guiding decisions. However, predicting future events and environmental conditions will always be difficult when faced with a range of uncertainties such as those in relation to delivery and effectiveness of the proposed mitigation and enhancement measures or in the accuracy of the environmental baseline. For this reason decision makers require information that is sufficiently accurate to allow them to assess the preferred course of action.

In order to avoid or reduce error, it is proposed to follow a range of techniques including:

- Early engagement of key stakeholders and interested parties (including the public) to help to ensure that the right baseline data is collected, and to inform what alternatives and mitigation and enhancement measures are considered;
- Interdisciplinary working to help challenge assumptions and suggest possible solutions
- Ensure the consideration of all significant impacts;
- Ensure the assessment is carried out by people who have knowledge of the area, the plan, and environmental issues;
- Apply the precautionary principle i.e. assume that adverse effects will happen, and put in place mitigation and enhancement measure to prevent, reduce or offset those potential impacts; and
- Consider cumulative, indirect, synergistic, and short, medium and long term impacts whether temporary or permanent and carry out a regular review of data necessary to identify these impacts.

5.3 Assessment of the Local Development Plan

The Strategic Environmental Assessment of the Local Development Plan considers the two key stages of the Local Development Plan process. The Environmental Report was published alongside the Main Issues Report and provided an assessment of the issues highlighted within that report. The Main Issues Report focused on areas of change and so the Environmental Report focussed the assessment of these areas and issues. This stage was the best point to consider reasonable alternatives which was the focus of this Environmental Report.

The Environmental Report Addendum has been published alongside the Proposed Plan and provides greater detail including updated site assessments where necessary, and an assessment of the Policies. The Environmental Report Addendum provides the finalised assessment findings and where appropriate takes account of reasonable alternative(s). It should be noted though that at this stage in the LDP process there are few reasonable alternatives, the majority of the reasonable alternatives were considered and assessed in the initial Environmental Report which was published alongside the Main Issues Report.

5.4 Alternatives

Part 2 Section 14(2)9b) of the Environmental Assessment (Scotland) Act 2005 requires the Environmental Report to identify, describe and evaluate the likely significant effects on the environment of implementing the plan and reasonable alternatives to the plan, taking into account its geographical scope. Alternatives considered must be realistic and deliverable. During the development of the Main Issues Report, alternative options within the LDP have been considered and assessed in the same level of detail as the preferred alternative.

In most cases the preferred alternative to come out of the Main Issue Report was the one that had the potential to achieve the best balance between environmental, social and economic considerations, with potential environmental effects reported across all alternatives, as required. This option then underwent a more detailed assessment and evaluation in the Environmental Report Addendum.

5.5 Proportionate Assessment

The first stage of the SEA was to review the assessment of the Approved LDP (2014). This has allowed a proportionate approach to the assessment to be adopted.

Where the plan is not changing the findings of the previous Environmental Report have been adopted and reported within this Environmental Report Addendum without the need to be reassessed; this has helped ensure that the SEA remains proportionate.

5.6 Ecosystem Services Approach

Where possible an ecosystem services approach has been used. This has helped ensure the environment is viewed in terms of its benefits and uses rather than just through the identification of

negative/positive environmental effects of the plan. By using an ecosystems services approach we aim to raise the profile of the environment which should result in a more integrated and valuable SEA process and outcome by allowing plan makers to see how the environment can support the delivery of the LDP. Primarily, the use of Ecosystem Services has been incorporated as part of the Environmental Issues and Baseline sections to help frame the context in which we have undertaken the SEA.

5.7 Compatibility of Visions/Objectives

The compatibility of the SEA Objectives was tested through the assessment of the previous LDP. This assessment has been brought forward as it illustrates the potential conflicts or opportunities for enhancement of the SEA Objectives. These Objectives have been tested for compatibility against the LDP2 Objectives. In both instances a compatibility matrix was used to carry out the assessment

In addition, the Addendum has considered the potential environmental effects of the Visions contained in the Proposed Plan, as set out in each of themed chapters. This assessment has been set out in a table (see Section 6.1) identifying and summarising the key environmental effects, including potential mitigation measures, where required.

5.8 Compatibility of Spatial Strategies

The compatibility of the themed Spatial Strategies has also been tested against the SEA Objectives, to consider potential environmental effects, and requirements for mitigation, where required. This assessment has been set out in a Table (see Section 6.2), considering the potential for significant environmental effects, including cumulative and synergistic effects.

5.9 Site Assessments

For all sites, both preferred and alternatives, a site assessment has been produced as well as an SEA assessment (this includes new sites and sites already assessed and considered through previous plans). We have chosen to streamline this process by using a site assessment template that integrates the two processes. In addition the site assessment template highlights issues which need to be considered in further assessments including the Habitats Regulation Appraisal. An example of the template used is shown in Appendix C. Please note: the site assessments have considered each site in line with the adopted LDP1 settlement boundaries.

5.10 Cumulative Effects of Site Allocations

A comparative matrix has been used to assess the cumulative impacts of the allocations proposed, as well as the alternatives where these have not previously been assessed, within each settlement. The suggested alternatives have been compared side by side to establish the possible environmental resulting from each alternative. An example of the matrix used is shown in figure 5.

Figure 5 – Example Matrix for Cumulative Assessment

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	-		--	
	Commentary...		Commentary...	
Population	+/-		+/-	
	Commentary...		Commentary...	
Human Health Cont....	--		-	
	Cont....	Cont....	Cont....	Cont....

5.11 Settlement Boundaries

The previous assessment of settlement boundaries that was undertaken for LDP1 provides a comprehensive analysis of each settlement as well as the surrounding area (a 2km buffer around each settlement was assessed). This assessment has informed the review of settlement boundaries for LDP2. To progress this assessment we considered the impact of any new data on the existing assessments and highlighted whether or not this would result in significant environmental impacts.

Where alternative(s) were proposed these were considered as an alternative boundary and the impacts of this change has been recorded. The outcome of this assessment has been recorded in a table with the preferred alternative(s) as well as mitigation measure highlighted, where appropriate.

5.12 Policy Assessment

A matrix approach has been used to undertake the assessment of the Proposed Plan policies. Figure 6 provides an example of the matrix used. To keep the appraisal understandable and simple in its presentation, symbols have been used to express the judgement used in each criterion, with an overall summary which clearly highlights the reasoning behind the predicted findings.

This appraisal will be informed by a series of professional judgements about the likely significant effects of policies and policy areas, using the best information available.

Figure 6: Matrix to be used for Policy Analysis

Policy Name	SEA Objective																	Summary of Overall Likely Effects
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Example	++	++	++	++	-	--	--	--	--	+/-	+/-	+/-	-	+	+	+	+/-	Example...
Example	+/-	+/-	+/-	+/-	-	-	-	+	+	+	+	+	+/-	+/-	+/-	+/-	+/-	Example...

5.13 Greenbelt Boundary Assessment

The proposed LDP2 Greenbelt Boundary has been assessed to consider the potential of any significant environmental effects arising. The assessment has been presented in a matrix table and considers three options/alternatives for the Greenbelt boundary: 1) LDP1 Adopted Greenbelt Boundary; 2) Main Issues Report Proposed Greenbelt Boundary; 3) Proposed LDP Greenbelt Boundary. The results of the matrix are then further discussed in text identifying where environmental effects are considered against each option.

5.14 Cumulative Assessment of other Policies, Programmes or Strategies (PPS)

The assessment of cumulative effects is an important part of the SEA process, as the combined impact of various plans and policies can have significant environmental effects. Due to the geographical scales at which cumulative effects can occur it is considered most appropriate to assess them at a strategic level; however, it should be noted that even at the strategic level it is not always possible to fully measure such effects due to the interdependent or cross boundary nature of some impacts.

It is considered that the most appropriate way of testing and assessing the impacts that are arising from the emerging LDP, is to consider them alongside those impacts identified in the Environmental Reports or Sustainability Appraisals of those PPS which are applicable to Perth and Kinross area and those of neighbouring authorities. This approach assesses whether any potential negative environmental effects of the LDP (that cannot be avoided or reduced through other mitigation measures) will be offset by improvements in other areas, and also whether opportunities exists to enhance positive environment actions in other areas. Figure 7 below demonstrates how the results of this assessment have been presented.

Figure 7: Matrix to be used for Assessing Cumulative Effect of LDP alongside other PPSs

PPS 1	PPS 2	PPS 3	PPS 4	Overall Effects on the LDP Area
Biodiversity, Flora and Fauna				
Population				
Human Health				
Soil				
Water				
Air				

Climatic Factors				
Material Assets				
Cultural Heritage				
Landscape				

5.15 What will not be covered in the Assessment of LDP2?

To ensure the SEA is proportionate we will only assess issues that can be addressed by implementing the LDP2. This means that a large scale infrastructure project such as the Cross Tay Link Road will not be assessed as part of this SEA; it has its own SEA process. The same can be said for other plans and projects such as the Perth City Plan and The Tay Valley Eco Project, however the SEA will assess any proposals which will be used to help deliver these projects through LDP2.

The SEA will not consider sites which already have Planning Permission as the LDP cannot change the allocations on these sites as the development principle has been established through the Planning Application process. The detail of masterplans will also not be assessed at this stage; the overall sites have been considered as part of the site assessment but the detailed masterplans will require their own SEA/EIA.

5.16 Other Assessments

SFRA

Although a SFRA has not been published at this stage, the TAYplan SFRA which was published in 2014 has been used to inform the assessment of LDP2. This presents an evidence base identifying:

- Where flood risk is likely to be important
- How much of the area is defended
- Where new development is likely to add risk
- Where flood risk may need to be assessed in further detail

To allow the assessment of flood risk for each site we have used the following data:

- SEPA Flood Maps
- Historical Flooding Data

As well as this we have held meetings with SEPA and a representative of the Council’s flooding team to ensure we have used all available data and knowledge when considering flood risk.

HRA

Article 6(3) of the Habitats Directive requires that any plan or project, which is not directly connected with, or necessary to the management of a European Site, but would be likely to have a significant effect, either alone or in combination with other plans or projects, should be subject to an Appropriate Assessment. LDP2 is subject to such an assessment. This means that the Plan can only be approved once it has been determined, following an assessment, that it will not adversely affect the integrity of a Natura 2000 site.

The site assessments have considered the potential to impact on a Natura site. This information will be carried forward into the HRA and Appropriate Assessment which has been published alongside the Proposed Plan.

5.17 Summary

The Environmental Assessment (Scotland) Act 2005 requires an acknowledgement of any difficulties, such as technical deficiencies or lack of know-how encountered in undertaking the assessment and in compiling the required information. In this case the most significant difficulty was experienced in determining which aspects of the original LDP Assessment which could be carried forward.

Nonetheless, the methodology adopted has allowed an assessment to be made of potential environmental effects of the relevant aspects of the Proposed Plan, building on the information produced for the first LDP assessment, while remaining proportionate.

In summary, the use of site assessment tables and a matrix based approach has allowed us to build on the map-based settlement-wide approach taken previously. These site assessments can be reviewed and updated throughout the LDP process which will allow them to be used in the monitoring of the LDP and any future assessments.

6. ASSESSMENT OF PROPOSED LOCAL DEVELOPMENT PLAN

Section 6 provides an assessment of the significant environmental effects from implementing the Proposed Local Development Plan. The section is split in to the following assessments:

- Assessment of Visions and Objectives
- Assessment of Spatial Strategies
- Assessment of Sites
- Cumulative Assessment of Sites/Proposals
- Assessment of Settlement Boundaries
- Assessment of Policies
- Assessment of Greenbelt Boundary Changes
- Cumulative Assessment of PPS

6.1 ASSESSMENT OF VISIONS & OBJECTIVES

Part of the Environmental Assessment process is to consider the possible significant environmental effects that may arise from the visions and objectives contained in the Local Development Plan.

The overarching vision of the Proposed Plan has not significantly changed since the first Local Development Plan was assessed in 2010, however the Plan has included additional visions specific to the four themes of the LDP. In addition, the SEA objectives have not significantly changed from the LDP1 SEA. As such, the assessment of LDP2 visions against SEA objectives has brought forward those findings which are relevant from the previous assessment and these have been incorporated in to the LDP2 assessment. The objectives developed for LDP2 have changed from the objectives contained in the Adopted LDP, however many of the themes contained therein are carried forward. Relevant key findings from the LDP1 SEA in relation to the assessment of objectives will be incorporated, where applicable.

The SEA initially considers the Vision in broad terms, and analyses the potential for improvement of environmental considerations within the Strategy, followed by an assessment of the LDP Objectives. This stage of the assessment is useful in identifying weaknesses in the framework which can then be fed into the spatial assessment to give consideration of cumulative effects with the environmental impacts of the proposed spatial strategies. In doing so, this will ensure that proposed mitigation measures give full consideration to both aspects of the proposals.

6.1.1 Assessment of Visions

The Visions for Perth and Kinross draw on and complement those of the Council's Corporate Plan and the Strategic Development Plan (TAYplan). It acknowledges the considerable strengths of the area and recognises the many challenges it faces; in particular the significant population growth experienced over recent years and the indication that this trend is likely to continue. The need to embrace this opportunity and ensure that the area's prosperity continues and improves is recognised through the

vision, as too is the desire to ensure that any benefits are more widely and equitably shared, and that the environment is protected and enhanced.

TAYPlan 2 Vision

The over-arching vision of LDP2 is taken from TAYplan Strategic Development Plan (2016). The vision states that:

"By 2036, the TAYplan area will be sustainable, more attractive, competitive and vibrant without creating an unacceptable burden on our planet. The quality of life will make it a place of first choice where more people choose to live, work, study and visit and where businesses choose to invest and create jobs."

The TAYplan Vision has already been assessed through the SEA process, as part of the Environmental Report of the TAYplan Strategic Development Plan Proposed Plan (2014). See Section 5 of the TAYPlan Proposed Plan Environmental Report for further information.

Spatial Strategy Visions

The LDP2 has developed additional visions relevant to the four themed chapters, which provide more detailed aspirations for the Council area across a range of different issues. The four visions focus on:

- Successful, Sustainable Place
- Low Carbon Place
- Natural, Resilient Place
- Connected Place

Each of these visions has been assessed below (see table 6) identifying potential significant environmental effects, and where mitigation may be required to address negative effects identified.

Table 6: Assessment of LDP2 Visions

LDP2 Vision	Summary of Environmental Effects
<p>A Successful, Sustainable Place Vision</p> <p>Perth & Kinross Local Development Plan recognises the considerable strengths of the area and the many challenges it faces. We should embrace these challenges and ensure that the area's prosperity continues and improves, sharing the benefits of this success widely and equitably. Our vision is for a flourishing Perth and Kinross which represents the heart of Scotland, a culturally rich, economically dynamic and socially inclusive region providing opportunities to both existing and future residents of the area.</p>	<p>This vision is likely to give rise to positive effects on SEA Objectives 2, 3, 4, 9, 11, 13, 14 and 15 through the key principles of sustainable development across a wide range of factors such as accommodating population and household growth, ensuring environmental quality and quality of life for residents in locations that are sustainable, adapting to the effects of climate change and adopting high standards of sustainable design, as well as protecting the built environment.</p> <p>There are likely to be unknown or unclear effects on SEA Objectives 1, 5-8, 10, 12, 16-17 which would be more appropriately assessed through the application of relevant LDP policies for site proposals.</p>
<p>A Low Carbon Place Vision</p> <p>We attach significance to environmental concerns and wish to reduce our impact on our local and global environment. In particular, we want to put a Plan in place that will allow us to adapt and prepare for future changes to our climate, and that recognises our area which is highly valued for the beauty of its natural and built environment and strong identity as a popular place to live, work and visit. We want our Plan to ensure that development does not place an unsustainable burden on future generations and which will enable us to live a Zero Waste lifestyle, maximising the value from waste resources.</p>	<p>This vision is likely to have generally positive effects on SEA Objectives 8, 10, 11, 12 and 14 particularly in relation to improving air quality, reducing GG emissions, adapting to, and mitigating against, the effects of climate change, adopting sustainable waste management practices, and promoting high standards of sustainable design and construction.</p> <p>There are potentially unknown effects on SEA Objectives 1, 5-7, 13, and 15-17 (biodiversity, soils, water environment, air quality, greenhouse gases, and, townscape landscape) however the general thrust of the vision supports low carbon development in sustainable locations and which supports the area's natural and built environment and overall environmental quality.</p> <p>Any significant negative effects which arise from related development proposals are likely to be mitigated through the application of relevant LDP policies at the site level.</p>
<p>A Natural, Resilient Place Vision</p> <p>We recognise the high quality of our natural heritage and aim to ensure that policy reflects this. Our plan for Perth and Kinross will conserve and enhance the natural environment, with particular focus on areas where habitats and landscape are important locally, nationally and internationally. We mitigate the effects of climate change, and promote the long-term resilience of both natural and built environments. New development will be sympathetic to the landscape in which it is set, and will not place unnecessary burden on the environment. We want our Plan to ensure that the environment of Perth and Kinross remains resilient to climate change, and achieve sustainable development.</p>	<p>This vision is likely to have significantly positive effects on a range of environmental considerations including Objectives 1, 3, 4, 5, 6, 7, 8, 10, 11 and 16. The overall vision is to improve, and/or safeguard, the environmental conditions of the Council area, including safeguarding a range of environmental considerations such as designated sites, biodiversity, soils, water environment, and landscape.</p> <p>There are likely to be negative effects on population and household growth due to the restrictive nature of the vision to safeguard the Council's environmental assets, however any negative effects are likely to be lessened as a result of the focus on ensuring new development is directed to 'sustainable' locations.</p>
<p>A Connected Place Vision</p> <p>We recognise that the Local Development Plan area has experienced significant population growth and is likely to continue to do so. We have a good mix of rural and urban environments and it is important that we make best use of the infrastructure already in place to support growth in employment opportunities and help deliver accessible cultural, retail and leisure facilities. The Green Network can function as an active travel route and we particularly want to facilitate infrastructure that connects places in a sustainable way. Whether this means paths for walking and cycling, or facilitating strategic improvements to the transport and digital network, our vision is that the plan's proposals for A Connected Place will support economic growth.</p>	<p>This vision is likely to have significantly positive effects on SEA objectives 2, 3 and 9 in relation to ensuring a sufficient infrastructure network for a range of services and facilities which will direct growth to sustainable locations, improve quality of life for communities and reduce journey lengths and the need to travel.</p> <p>There are likely to be unknown or unclear effects on the remaining SEA objectives, however any significant effects are likely to be mitigated through the application of relevant LDP policies.</p>

6.1.2 Assessment of Visions – Cumulative/Synergistic Effects

Considering the Visions in terms of synergistic effects, there is an expectation that the Natural, Resilient Place Visions would potentially have a tension or incompatibility with the other Visions. These Visions are in place to restrict development proposals to protect a range of environmental considerations. Whilst there is the potential for a tension between the Natural, Resilient Place Visions and the other Visions, it is considered that this is necessary across the LDP to ensure that development proposals are assessed against a balanced policy framework that considers all the necessary environmental, social and economic issues.

In terms of cumulative effects the overall conclusion is that the effects are largely uncertain across the Visions as they will depend on how the Plan is taken forward, implemented and decisions taken on individual proposals. Overall, the Visions combine to create a framework that ensures all relevant environmental and other considerations are taken in to account and given due cognisance.

6.1.3 Assessment of Objectives

Inter-compatibility of SEA Objectives

This assessment firstly considers to what extent the SEA Objectives (see table 7) are complimentary to identify any potential conflicts and opportunities for enhancement. The results are presented in the compatibility matrix in Table 8, which shows that the Objectives are largely compatible.

Table 7: SEA Objectives

Ref.	Objective
SEA 1	Conserve and enhance the diversity of species and habitats
SEA 2	Accommodate population and household growth and direct that growth to appropriate locations
SEA 3	Improve the quality of life for communities in Perth and Kinross
SEA 4	Maximise the health and wellbeing of the population through improved environmental quality
SEA 5	Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils and protect carbon rich soils
SEA 6	Protect and where possible enhance the water environment
SEA 7	Safeguard the functional floodplain and avoid flood risk
SEA 8	Protect and enhance air quality
SEA 9	Direct development to sustainable locations which help to reduce journey lengths and the need to travel

As the Objectives are largely replicated from those Objectives identified in the LDP1 SEA, the results have not significantly changed. There is a clear tension identified between SEA 1 ‘Conserve and enhance the diversity of species and habitats’ and SEA 14 ‘Maximise the sustainable use/re-use of material assets (land and buildings)’. This will mainly arise from the redevelopment of brownfield sites and the likely impacts on biodiversity at those specific locations.

There is also a tension predicted from promoting development under SEA 2 (‘Accommodate population and household growth and direct to appropriate locations’) and the potential impacts on soil resources (SEA 5), water environment (SEA 6), air quality (SEA 8), greenhouse gas emissions (SEA 11), waste generation (SEA 13), landscape character and quality (SEA 16) and townscape character (SEA 17).

A tension may also arise from the promotion of development, even in sustainable locations under SEA Objective 9, on the impact on soil resources (SEA 5), especially as some prime quality agricultural land and possibly carbon rich soils will potentially be lost to development through the release of greenfield land. Consideration needs to be given to this issue to ensure that there is a mechanism put in place to protect valuable soil resources.

There are a number of uncertainties identified in relation to the area’s historic environment and potential impacts on townscape character of settlements as there is a lack of certainty as to how such resources will be protected. Such objectives will require additional support through the policy framework to ensure that development does not result in negative impacts.

SEA 10	Reduce emissions of greenhouse gases
SEA 11	Reduce the area’s vulnerability to the effects of climate change through identifying appropriate mitigation and adaptation measures
SEA 12	Minimise waste per head of population to meet Zero Waste Plan Objectives
SEA 13	Maximise the sustainable use/re-use of material assets (land and buildings)
SEA 14	Promote and ensure high standards of sustainable design and construction
SEA 15	Protect and enhance, where appropriate, the historic environment
SEA 16	Protect and enhance the character, diversity and special qualities of the area’s landscapes to ensure new development does not exceed the capacity of the landscape to accommodate it
SEA 17	Protect and enhance townscape character and respect the existing pattern, form and setting of settlements

Table 8: Compatibility of Strategic Environmental Assessment Objectives

	SEA 1	SEA 2	SEA 3	SEA 4	SEA 5	SEA 6	SEA 7	SEA 8	SEA 9	SEA 10	SEA 11	SEA 12	SEA 13	SEA 14	SEA 15	SEA 16	SEA 17
SEA 1																	
SEA 2	-																
SEA 3	++	++															
SEA 4	++	++	++														
SEA 5	+	-	++	++													
SEA 6	++	-	++	++	++												
SEA 7	++	++	++	++	+	++											
SEA 8	+	-	++	++	++	++	?										
SEA 9	+	++	++	++	-	+	++	++									
SEA 10	++	+	++	++	++	++	++	++	++								
SEA 11	+	-	++	++	++	++	~	++	++	++							
SEA 12	~	++	++	++	~	++	~	++	++	++	++						
SEA 13	?	-	++	++	++	++	~	++	~	++	++	++					
SEA 14	--	++	++	++	+	+	+	+	?	++	+	++	++				
SEA 15	+	-	++	++	~	~	?	~	?	~	~	+	~	+			
SEA 16	++	-	++	++	++	++	++	++	+	++	?	+	~	-	++		
SEA 17	?	+	++	++	?	~	++	+	++	?	+	++	~	+	++	++	

Matrix Key

++	Compatible	~	Unclear Relationship	-	Mostly Incompatible
+	Mostly Compatible	?	Uncertain Relationship	--	Incompatible

Compatibility of LDP Objectives with SEA Objectives

LDP2 Objectives (see Table 9) have been assessed against the SEA Objectives to determine their compatibility and highlight areas that may require further consideration. The analysis considered an LDP Objective compatible with an SEA Objective if there was the likelihood that the objective could deliver on the stated criteria. Where it was considered that the objective could deliver but would depend on more detailed or supporting objectives the relationship was marked as uncertain. Table 10 presents the compatibility of the LDP Objectives with SEA environmental objectives.

Table 9: LDP2 Objectives

Ref.	Objective
LDP1	Creation and continuation of high quality places that meet the needs of the existing and future communities
LDP2	Support of local businesses to ensure economic growth in the region
LDP3	Provide ongoing supply of readily available commercial/industrial land of 25 ha across Perth and Kinross
LDP4	Focus on retail and commercial development in accessible centres that provide employment and services to residents and visitors
LDP5	Ensure provision of housing that is socially inclusive and meets a wide range of needs
LDP6	Promotion of a strong cultural character through community sport and recreational facilities offering opportunities for social interaction and local identity
LDP7	Maintenance the distinctiveness of the area through protection and enhancement of the historic environment
LDP8	Improve the long-term resilience and robustness of the natural and built environment to climate change
LDP9	Ensure that development and land uses make a positive contribution to helping to minimise the causes of climate change and adapting to its impacts
LDP10	Protect the natural and built environment, and ensure that new development embraces the principles of sustainable design and construction, energy efficiency and heat decarbonisation
LDP11	Protect and enhance the character, diversity and special qualities of the area's landscapes to ensure that new development does not exceed the capacity of the landscape in which it lies

LDP12	Conserve and enhance habitats and species of international, national and local importance
LDP13	Identify and promote green networks where these will add value to the provision, protection and enhancement, and connectivity of habitats, recreational land, and landscapes in and around settlements and active travel
LDP14	Identify and provide for new and improved social and physical infrastructure to support and expanding and changing population
LDP15	Establish clear priorities to ensure stakeholders and agencies work in partnership so that investment is co-ordinated and best use is made of limited resources to enable the delivery of the strategy, supporting the aims and objectives of the Regional Transport Strategy, and the Tay Cities Deal
LDP16	Ensure investment in the renewal and enhancement of existing infrastructure is consistent with the strategy of the Plan in order to make best use of the investment embedded in our existing settlements
LDP17	Provide a flexible policy framework to respond to changing economic circumstances and developing technology

Table 10: Compatibility of the SEA and LDP2 Objectives

	SEA 1	SEA 2	SEA 3	SEA 4	SEA 5	SEA 6	SEA 7	SEA 8	SEA 9	SEA 10	SEA 11	SEA 12	SEA 13	SEA 14	SEA 15	SEA 16	SEA 17
LDP 1	--	++	++	++	-	~	~	+	++	+	++	+	+	++	~	-	-
LDP 2	?	-	++	+	?	?	?	-	++	?	-	-	-	+	?	-	-
LDP 3	-	++	++	+	-	-	-	-	++	-	-	-	-	++	?	?	?
LDP 4	~	+	+	+	?	~	~	-	++	~	~	-	-	+	?	?	?
LDP 5	-	++	+	+	-	-	-	~	++	~	~	-	~	++	?	~	-
LDP 6	~	+	++	++	?	?	~	~	++	~	~	~	~	++	?	~	~
LDP 7	~	+	++	++	~	~	~	~	+	~	~	+	~	?	++	++	++
LDP 8	++	++	++	++	++	++	++	++	+	++	++	++	++	++	~	++	~
LDP 9	+	+	++	++	++	++	++	++	+	++	++	++	++	++	~	++	?
LDP 10	-	++	+	+	+	++	+	+	+	+	+	++	+	-	-	+	+
LDP 11	-	+	++	++	+	++	++	~	-	++	~	+	~	+	++	++	++
LDP 12	++	++	++	++	+	++	++	++	-	++	++	~	?	-	+	++	?
LDP 13	++	-	++	++	+	++	++	++	-	++	++	+	?	-	?	++	++
LDP 14	-	++	++	+	?	?	?	?	++	+	?	-	?	++	?	?	?
LDP 15	~	++	++	++	~	~	~	~	++	++	~	~	~	~	~	~	~
LDP 16	?	++	++	++	?	+	?	+	++	++	+	-	++	~	~	~	~
LDP 17	?	++	++	+	?	?	?	?	?	?	?	?	?	?	?	?	?

Matrix Key

++	Compatible	~	Unclear Relationship	-	Mostly Incompatible
+	Mostly Compatible	?	Uncertain Relationship	--	Incompatible

LDP Objectives 1, 2, 3, 4, 5 14, 15 and 16 all involve the need for the further development of housing, employment uses and infrastructure within the region and as a result will not help to ensure that the biodiversity of the region will be maintained or enhanced. Mechanisms will have to be put into place to ensure future development causes minimal disruption to the biodiversity of the surrounding area and opportunities for enhancement are realised. Some of the objectives also have the potential to impact on the areas landscape and mitigation of such impacts will be required.

There are a number of uncertainties identified particularly in relation to biodiversity, soil resources, the water environment and the area's historic environment. There is a lack of certainty how such resources will be protected. Such objectives will require additional support through the policy framework to ensure that significant negative impacts caused by development proposals are avoided or suitably mitigated.

'Uncertainties' do not mean that objectives are incompatible, rather this is a reflection of the fact that the relationship will be determined by implementation and/or other factors, e.g. additional guidance, objectives or actions to ensure that the objectives can be fully complimentary. Objectives that offer protection and enhancement to environmental quality should therefore be operational objectives with associated actions to improve their effectiveness. Section 8 of this report proposes a number of enhancements that support these objectives.

Reduction of Green House Gases (GHGs) and the improvement in air quality is another area that presents 'uncertainties'. The Proposed LDP proposes a number of objectives that promote sustainable development principles, and as a result seeks to reduce emissions. It is difficult for the LDP to ensure reduction of emissions, as this requires both behavioural changes as well as technological changes. The proposals in the LDP however, provide a good foundation from which to indirectly influence the production of GHG emissions, including through sustainable design and construction methods, and promoting development in sustainable locations where public transport is more easily and readily available.

The SEA Objective to 'Minimise waste per head of population' is not strongly supported by the LDP Objectives and therefore there is a need to ensure that the production of waste is minimised as further development will undoubtedly result in increased waste levels and place a burden on existing waste facilities, particularly for housing and employment proposals.

The main tensions in the Framework lie in ensuring that the natural and built environment, biodiversity and natural resources, including valuable soil resources are protected whilst at the same time ensuring suitable land for housing, employment and infrastructure is available for population growth and economic well-being of the area.

6.1.4 Assessment of Objectives – Cumulative/Synergistic Effects

Considering the Objectives in terms of synergistic effects, there is an expectation that the Natural, Resilient Place Objectives would potentially have a tension or incompatibility with the other Objectives. These Objectives are in place to restrict development proposals to protect a range of environmental considerations. Whilst there is the potential for potential incompatibility between the Natural, Resilient Place Objectives and the other Objectives, it is considered that this is necessary across the LDP to ensure that development proposals are assessed against a balanced policy framework that considers all the necessary environmental, social and economic issues.

In terms of cumulative effects the overall conclusion is that the effects are largely uncertain across the Objectives as they will depend on how the Plan is taken forward, implemented and decisions taken on individual proposals. Overall, the Objectives combine to create a framework that ensures all relevant environmental and other considerations are taken in to account and given due cognisance.

6.1.5 Visions & Objectives – Summary of Assessment

The proposed Vision and Objectives provide a good basis from which to give consideration to environmental sustainability in the area. This assessment has identified some areas where additional measures should be incorporated into the Plan that will allow the Vision and Objectives to be achieved. Achievement of the Visions and Objectives is also dependant on the spatial allocation of development. Each of the proposed spatial strategies will be assessed in the following section of this report. The assessment of the Visions and Objectives will be incorporated into this analysis, where applicable, allowing for the consideration of the implications of cumulative impacts of the Vision, Objectives and the Spatial Strategy, and also to identify any conflicts that may exist between these aspects of the Plan. This process will ensure that mitigation proposals in Section 8 are comprehensive and ensure that the LDP protects and enhances the environment of Perth and Kinross.

6.1.6 Alternatives

Part 2, Section 14(2) of the Environmental Assessment (Scotland) Act 2005 requires the responsible authority (in this case Perth & Kinross Council) to identify, describe and evaluate within the Environmental Report process the likely significant effects on the environment of implementing the LDP and reasonable alternatives to the Plan, taking into account its objectives and geographical scope.

Similar to the context of the LDP1 SEA, it was considered that there were no reasonable alternatives to the Visions developed for the Local Development Plan due to the need for it to be consistent with the TAYplan Vision and the desire to complement the Council's Corporate Plan Vision. As such three alternative scenarios for the implementation of the Vision have been assessed to illustrate how there is potential to vary the level and type of impact on the environment through focusing on one agenda (Social, Economic or Environmental) over another. This assessment of potential scenarios has been largely compiled using a similar assessment undertaken for LDP1 SEA.

Table 11 below presents the results of the assessment carried out for three possible scenarios for implementing the proposed LDP:

- Social
- Economic
- Environmental

As expected *Scenario 3: Environmental* is likely to overall have the most positive impact on the environment of Perth and Kinross; however in reality the preferred strategy is a combination of all three possible scenarios and their potential effects due to the nature and purpose of the Plan and in order to achieve a balance between social, economic and environmental interests across the area.

Matrix Key

++	+	0	+/-	-	--
significant Positive	Positive	Unknown/Unclear	Mixed Effects	Adverse	Significant Adverse

Table 11: Assessment of the Environmental Effects of the 3 Alternative Scenarios for the Implementation of the Vision

SEA Objectives	Alternative Scenarios			Comments
	1. Social	2. Economic	3. Environ mental	
Biodiversity, Flora and Fauna				
Conserve and enhance the diversity of species and habitats	-	--	++	Scenario 1 is expected to have minor negative effects on biodiversity, flora and fauna due to the desire to balance the drive for more development and greater access to green space to improve the quality of life of citizens and also the support for the protection and enhancement of the special qualities of the area’s environment to ensure it is a nice place to live. The regeneration of vacant and/or derelict sites could negatively impact on biodiversity present at those locations. Scenario 2 is likely to have major negative effects on biodiversity due to its strong emphasis on growth and development. However, it does also recognise the value of protecting the special qualities of the area’s environment as a means of attracting inward investment. As expected Scenario 3 is likely to significantly support the SEA Objective for the conservation and enhancement of habitats and species.
Population and Human Health				
Accommodate population and household growth and direct that growth to appropriate locations	++	++	-	Overall Scenario 1 is likely to have the most positive effect on the SEA Objectives for Population and Human Health due to its strong emphasis on improving the quality of life for the population of the area through the desire for improved housing, employment and recreation opportunities, and also the provision of facilities and services. It also recognises the role the environment plays in contributing to citizen’s quality of life.
Improve the quality of life for communities in Perth and Kinross	++	+/-	+/-	Scenario 2 is likely to have a positive impact on the objective to accommodate the expanding population due to its strong emphasis on

Maximise the health and wellbeing of the population through improved environmental quality	++	0	++	<p>employment opportunities keeping pace with population growth. However, it could also have negative effects depending on the type and design of developments and their locations.</p> <p>Scenario 3 whilst being likely to have positive effects on the objective to maximise the health and wellbeing of the population through improved environmental quality, also has the potential to have negative effects on the Population and Human Health topics due to the conflict between the desire to accommodate population growth and the scenarios emphasis on protecting and enhancing the environment of the area. However, the inclusion of ‘appropriate locations’ in the objective and the focus of the scenario on ensuring that development does not exceed the capacity of the environment to accommodate it should reduce some of the tension.</p>
Soil				
Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils and protect carbon rich soils	-	-	++	<p>The potential for development under Scenarios 1 and 2 could lead to the loss of prime agricultural land and/or carbon rich soils around settlements and in the wider countryside.</p> <p>Scenario 3 is likely to have a significantly positive effect on this objective as a result of the focus on identifying and retaining valuable ecosystem services.</p>
Water				
Protect and where possible enhance the water environment	0	0	++	<p>Scenario 1 could have a minor positive effect on the objective to safeguard the functional floodplain as it aims to reduce the vulnerability of the area to flood risk but this will be dependent on the location and design of development. The likely effect of this scenario the water environment is unknown as it will depend on the location of development and the availability of appropriate infrastructure.</p> <p>The overall likely effects of implementing Scenario 2 on the water environment is unknown as again it will be dependent on location, type of development, availability of appropriate infrastructure and practices. It is less likely that the flood plain will be protected under this scenario.</p>
Safeguard the functional floodplain and avoid flood risk	+/-	0	++	<p>Scenario 3 is likely to support the SEA Objectives for the Water environment.</p>
Air				
Protect and enhance air quality	+/--	+/--	++	<p>Scenarios 1 and 2 have the potential to have both positive and negative effects on the objectives for Air. Potential positive effects could be as a result of their aims to improve environmental quality for the residents of the area and to provide locally accessible employment opportunities alongside housing, which depending on their location and the availability of other green travel options/infrastructure should help to reduce journey lengths and the need to travel. However, an increase in population for residential and employment reasons could generate more journeys within the area which has the potential to exacerbate air quality issues, particularly in “hotspot” locations. In addition the effect of new economic development is largely unknown as it will be dependent on the type of business and onsite practices.</p> <p>Scenario 3 is likely to be the most supportive of the three scenarios to the objectives on Air, although some tension exists between them due to the objective’s reference to development.</p>
Direct development to sustainable locations which help to reduce journey lengths and the need to travel	+	+	+/-	
Climatic Factors				
Reduce the area's vulnerability to the effects of climate change through identifying appropriate mitigation and adaptation measures	+/-	0	++	<p>Despite Scenario 1 aiming to reduce the vulnerability of the area to flood risk and create locally accessible employment opportunities, the overall effects of this scenario on the Climatic Factors Objectives are unknown as they are dependent on a range of other factors such as location and design and construction of development, identification and application of appropriate mitigation and adaptation measures, and also the availability of green travel infrastructure.</p> <p>Again the overall effect of Scenario 2 on the Climatic Factors Objectives is unknown due to potential positive effects relying on a range of other factors. The creation of locally accessible employment opportunities could contribute to greenhouse gas reduction through reducing journey lengths and the need to travel for work but its success will rely on that development being in appropriate/sustainable locations and also the availability of green travel infrastructure to link residential and employment areas. The types of development and the application of high</p>

Reduce greenhouse gas emissions	0	0	++	standards of sustainable design and construction will also influence the degree of the effect. Scenario 3 is likely to have a significantly positive effect on the Climatic Factors Objectives.
Material Assets				
Promote and ensure high standards of sustainable design and construction	0	0	++	Scenario 1 is likely to have mostly a positive effect on the objectives for Material Assets due to the desire to improve the quality of the public realm and the environment, to create attractive and vibrant communities, and also to regenerate vacant and derelict sites. However, an increase in population is likely to generate more waste within the area and as such has the potential to cause a negative effect. The promotion and application of high standards of sustainable design and construction will rely on policy direction and regulation and therefore any effects are currently unknown.
Minimise waste per head of population to meet Zero Waste Plan Objectives	+/-	+/-	++	
Maximise the sustainable use/re-use of material assets (land and buildings)	++	+	++	Scenario 2 is likely to have the same overall effect as 1, although it does not place the same explicit emphasis on the desire to regenerate vacant and derelict sites as Scenario 1 does. Scenario 3 is the most supportive scenario in terms of the objectives for Material Assets.
Cultural Heritage				
Protect and enhance, where appropriate, the historic environment	+/-	+/-	++	Scenario 1 provides some support to the objective for Cultural Heritage through its emphasis on protecting and enhancing the culture and identity of the area. However, the desire for growth under this scenario may also cause conflict which will be dependent on the location and design of development in relation to historic environment features/elements. Scenario 2 also offers some support to this objective through recognising the importance of protecting and enhancing the special qualities of the area which make it an attractive place to live, work and visit. However, tension again exists between the emphasis on growth under this scenario, the effect of which will be dependent on the location and design of that development in relation to features/elements of the historic environment. Scenario 3 is supportive of the objective for Cultural Heritage due to emphasis being placed on protecting the historic environment and the need to ensure that development does not exceed the capacity of the environment to accommodate it.
Landscape				
Protect and enhance the character, diversity and special qualities of the area's landscapes to ensure new development does not exceed the capacity of the landscape to accommodate it	+/-	+/-	++	Scenario 1 and 2 are mostly supportive of the objectives for Landscape due to the emphasis on creating attractive communities, making improvements to the quality of the public realm and also on protecting and enhancing the area's landscapes under Scenario 1 and the recognition of the importance of protecting and enhancing the special qualities of the area due to their value as assets to attract inward investment under Scenario 2. However, conflict does exist due to the desire for development under both scenarios which has the potential to have negative effects on both landscape and townscape. Scenario 3 is supportive of the objectives for Landscape and its implementation is likely to result in positive effects.
Protect and enhance townscape character and respect the existing pattern, form and setting of settlements	+/-	+/-	+	

6.2 ASSESSMENT OF SPATIAL STRATEGIES

Part of the Environmental Assessment process is to consider the potential for any significant environmental effects, and mitigation measures where required, from the Spatial Strategy of the plan under consideration. The Proposed Local Development Plan has incorporated a Spatial Strategy for each of the four themed chapters: Sustainable, Successful Place; Low Carbon Place; Natural, Resilient Place; and Connected Place. Each Spatial Strategy includes a general policy statement as well as a Strategy map detailing various considerations. This section will consider the likely environmental

effects of the four spatial strategies, including an assessment of any cumulative/synergistic effects across the strategies.

Table 12 includes the assessment of likely significant environmental effects, including mitigation measures. As noted in Section 6.1, this assessment has taken due cognisance of the assessment of Visions and Objectives, where applicable.

Table 12 – Assessment of Spatial Strategies

Spatial Strategy	Summary of Environmental Effects
A SUCCESSFUL, SUSTAINABLE PLACE	
<p><u>Spatial Strategy for A Successful, Sustainable Place</u></p> <p>The Local Development Plan adopts the TAYplan hierarchical approach of focusing development in the Principal settlements. In addition, the strategy firstly seeks to utilise brownfield land within the settlements and secondly, land adjacent to existing settlements.</p> <p>Tier 1 Perth Core Area – will accommodate the majority of new development.</p> <p>The Perth Core Area includes the City and surrounding villages containing approximately 58% of the Council’s population:</p> <p>Perth, Scone, Almondbank, Bridge of Earn, Oudenarde, Methven, Stanley, Luncarty, Balbeggie, Perth Airport.</p> <p>Tier 2 Existing Regional Service Centres: will accommodate a smaller share of new development as settlements that have a range of services to support this growth.</p> <p>Kinross/Milnathort, Blairgowrie/Rattray, Crieff.</p> <p>Tier 3 Existing Local Service Centres: will accommodate a very small share of new development to support their continuing growth.</p> <p>Auchterarder, Aberfeldy, Pitlochry, Dunkeld/Birnam, Coupar Angus, Alyth.</p>	<p>There has been no change in the hierarchical approach focusing growth in the Principal Settlements, as contained in Section 4.2 of the Adopted LDP (2014) and the TAYplan Strategic Development Plan (2016). Section 6 of the Environmental Report (2014) for TAYplan Strategic Development Plan identifies the significant environmental effects from the Housing Scale and Distribution Strategy promoted through TAYplan.</p> <p>Proposed development within these tiered settlements has been considered in detail under the separate site assessments, cumulative assessments and, where applicable, settlement boundary assessments. See sections 6.3, 6.4 and 6.5 for further detail.</p>
A LOW CARBON PLACE	
<p><u>Low Carbon Place: Spatial Strategy</u></p> <p>Through the Local Development Plan, we are committed to helping reduce, mitigate against, and adapt to, the effects of climate change. Supporting the shift from fossil-fuels to renewable and low carbon energy sources is a significant step in ensuring we are playing our</p>	<p>The Low Carbon Spatial Strategy is expected to give rise to positive environmental effects in relation to SEA objectives 8 (air quality), 10 (reduce GG emissions), 11 (Climate Change adaptation), 12 (sustainable waste), and 14 (sustainable design and construction), through the overall strategy to promote and encourage renewable and low carbon energy sources, heat networks and sustainable waste management practices.</p>

<p>part in the wider sustainability agenda. As a Council, we have a strong obligation to optimise the potential for renewable and low carbon energy across the Perth and Kinross area, whilst at the same time ensuring that sustainable environmental protections are in place.</p> <p>The Low Carbon Spatial Strategy shows the key opportunities where future sources of renewable and low carbon transport fuel, electricity, and heat may be identified. The Spatial Strategy includes:</p> <ul style="list-style-type: none"> - Spatial Framework for Wind (identifying where wind farms are likely to be acceptable subject to detailed site consideration). - Areas where there is potential for Deep Geothermal energy sources, based on Hot Sedimentary Aquifer geological conditions. - Strategic District Heating opportunities, as identified in Policy 7 (Energy Waste & Resources) of TAYplan Strategic Development Plan (2016-36). - Proposal for a Low Carbon Hub at Broxden (Perth) where the Council is seeking to showcase the latest low carbon energy and fuel sources. <p>Generally, the Council supports a wide range of sources of renewable and low carbon transport fuel, electricity, and heat; each proposal will be assessed on its own merits against the provisions of the Local Development Plan and any other material considerations.</p>	<p>The Strategy is likely to have unknown effects in relation to SEA Objectives 1 (biodiversity), 5 (soils), 6 (water environment), 7 (floodplain and flood risk), and 15 (historic environment), as these are most appropriately assessed at the site level through the application of relevant LDP policies. As a result of the potential landscape impacts of the type(s) of projects that the Strategy is promoting, there is the potential for negative landscape impacts (SEA objective 16); however this should be mitigated through the application of relevant LDP policies at the site level including the policy on landscape and renewable/low carbon energy.</p> <p>Uncertain effects are likely to arise for the remaining SEA objectives due to the high level nature of the Strategy, and further consideration would be most appropriate for specific projects through the LDP policy framework.</p> <p>The spatial elements of the Strategy, as contained in the Proposed Plan, are considered in detail below.</p>
<p>Spatial Framework for Wind (identifying areas where wind farms may be acceptable, subject to detailed consideration)</p>	<p>The spatial framework is expected to direct wind farm proposals to the most environmentally acceptable locations through avoiding National Parks and National Scenic Areas (Group 1), placing significant protection across a range of environmental designations and other considerations (Group 2), and identifying areas left-over likely to be acceptable for wind farm proposals, subject to further consideration (Group 3). As a result, this is expected to give rise to positive environmental effects in relation to biodiversity, soils, water environment (through protection of water-based designated sites), the historic environment, landscape and townscape character.</p> <p>Individual proposals are likely to give rise to a range of impacts and these impacts would be most appropriately assessed through the LDP policy framework, including the spatial framework for wind.</p>
<p>Areas where there is potential for Deep Geothermal Energy Sources, based on Hot Sedimentary Aquifer geological conditions</p>	<p>The spatial identification of Hot Sedimentary Aquifer geological conditions is to inform the Development Plan where there may be potential for future deep geothermal energy sources, subject to detailed site investigation and assessment.</p> <p>The area identified on the Spatial Strategy map covers a large area of the Council area due to the geological conditions identified as suitable for deep geothermal energy. As proposals will vary from site to site, it is considered any environmental effects are unknown at this stage and would be most appropriately assessed through the LDP policy framework, particularly policies relating to the water environment and soils, and potentially landscape/placemaking depending on the size/nature of the above-ground equipment required. It is considered in principle there is the potential for positive environmental effects in relation to air quality (Objective 8) and reducing GG emissions (Objective 10).</p>
<p>Strategic District Heating Opportunities, as identified in Policy 7 of TAYplan Strategic Development Plan (2016-36)</p>	<p>The identification of district heating opportunities in the key settlements of Perth, Kinross and Blairgowrie is expected to give rise to positive environmental effects in relation quality of life (Objective 3), air quality (Objective 8), reducing GG emissions (Objective 10), Climate Change adaptation (Objective 11), maximising use of existing assets (Objective 13), high standards of sustainable design and</p>

	<p>construction (Objective 14); however, it is important to note that biomass proposals may give rise to negative air quality impacts.</p> <p>There are unknown effects in respect of SEA Objectives 1 (biodiversity), 5 (soils), 6 (water environment), 7 (floodplain/flood risk), 12 (waste), 15 (historic environment), 16 (landscape) and 17 (townscape character), and would therefore be most appropriately assessed at the site level as part of a detailed assessment through the relevant LDP policies.</p>
Proposal for a Low Carbon Hub at Broxden (Perth) where the Council is seeking to showcase the latest low carbon energy and fuel sources.	The assessment of environmental effects for this site has been assessed through the site assessment process. The principle of the low carbon transport hub is considered to give rise to a number of positive impacts in terms of air quality, sustainable location, reducing GG emissions, Climate Change mitigation, and sustainable design and construction, as a result of promoting more sustainable methods of electricity production and transport fuel type(s).
A NATURAL, RESILIENT PLACE	
<p><u>Spatial Strategy for A Natural, Resilient Place</u></p> <p>The spatial strategy aims to protect and enhance these unique attributes, to ensure that we allow future generations to enjoy the same benefits as us. The map on the following page demonstrates the key natural assets that we have and areas we intend to protect through national and local policy. This policy grouping aims to build the resilience of our cities and towns. Planning plays an important part in reducing the vulnerability of existing and future development and can help improve resilience by controlling the output of pollutants, encouraging sustainable development and reducing the areas vulnerability to flooding.</p>	Through protecting and safeguarding the Council's environmental assets, the Spatial Strategy is expected to result in significantly positive effects on biodiversity, soils, the water environment, and flood plain/flood risk with resultant direct and indirect positive effects on quality of life and environmental quality, air quality, greenhouse gas emissions, and climate change mitigation. There is also potential for the Spatial Strategy to result in negative effects on SEA Objective 2 (population/household growth) as a result of the intention to restrict development, however, this effect is likely to be lessened through the second part of the Objective whereby the focus is on directing the growth to 'sustainable locations'.
<p><u>Spatial Strategy Map</u></p> <p>The Map for the Spatial Strategy for A Natural, Resilient Place includes the following items:</p> <ul style="list-style-type: none"> • Flood Risk Areas • Special Landscape Areas • National Designations • Strategic Green Network 	<p>The first three items on the map (Flood Risk Areas, Special Landscape Areas, National Designations) are already considered under the Policy Assessment section (see section 6.6) and are purely a visual representation for the relevant policies.</p> <p>For the Strategic Green Network, this indicative area is expected to provide significant positive benefits in terms of biodiversity, quality of life, environmental quality, protecting soil resources, safeguarding the flood plain and avoiding flood risk, improving air quality, reduce GG emissions, and climate change mitigation, and possible direct/indirect benefits on the historic environment, landscape, and townscape character. There is also potential for the Spatial Strategy to result in negative effects on SEA Objective 2 (population/household growth) as a result of the intention to restrict development, however, this effect is likely to be lessened through the second part of the Objective whereby the focus is on directing the growth to 'sustainable locations' and the opportunity to enhance the green network through development proposals.</p>
A CONNECTED PLACE	
<p><u>Spatial Strategy for A Connected Place</u></p> <p>The spatial strategy aims to make Perth and Kinross one of the best connected areas in Scotland, by building upon our excellent existing transport links and working in partnership with key stakeholders and agencies. The map on the following page demonstrates the existing transport connections that we have and those areas we intend to improve to make Perth and Kinross even more connected. This policy grouping aims to make settlements across Perth and Kinross better connected to transport links. Planning plays an important part in ensuring that such connections are made, and such development is key to the development of the region of as a whole, particularly economic.</p>	<p>This Spatial Strategy is likely to have significantly positive effects on SEA objectives 2, 3 and 9 in relation to ensuring a sufficient infrastructure network for a range of services and facilities which will direct growth to sustainable locations, improve quality of life for communities and reduce journey lengths and the need to travel.</p> <p>There are likely to be unknown or unclear effects on the remaining SEA objectives as proposals will vary for each site and the type/nature of the proposal. Any significant effects are likely to be mitigated through the application of relevant LDP policies.</p>

<p><u>Spatial Strategy Map</u></p> <p>The ‘A Connected Place’ map shows the location of the existing road network across Perth and Kinross, and also the Park & Ride facility at Broxden. Roundabout improvements at the Broxden and Crieff Road junctions and a new/improved train station for Perth have also been identified.</p>	<p>The proposals on the map are not subject to this SEA as they have been proposed through alternative Plans or Strategies. The new/improved train station at Perth was previously identified in the <i>Perth City Plan 2015-2035</i> as an ‘Integrated Transport Interchange’, and improvements at the Crieff Road junction within the Cross Tay Link Road project. Improvements to Broxden Roundabout were identified under Transport Scotland’s <i>Strategic Projects Review</i> (Intervention D14: A9 Upgrading from Dunblane to Inverness). The LDP policy framework will ensure that any significant environmental effects are addressed at the application stage.</p>
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6.2.1 Spatial Strategies - Assessment of Cumulative/Synergistic Effects

Considering the Spatial Strategies in terms of synergistic effects, there is an expectation that the Natural, Resilient Place strategy would likely have tensions with the other Strategies. This is due to this Strategy being in place to restrict development proposals to protect a range of environmental considerations. Whilst there is the potential for a tension between the Natural, Resilient Place Strategy and the other Strategies, it is considered that this is necessary across the LDP to ensure that development proposals are assessed against a balanced policy framework that considers all the necessary issues.

In terms of cumulative effects the overall conclusion is that the effects are largely uncertain across the Spatial Strategies as they will depend on how the Plan is taken forward, implemented and decisions taken on individual proposals. Overall, the Spatial Strategies combine to create a policy framework that ensures all relevant environmental and other considerations are taken in to account and given due cognisance.

6.2.2 Summary of Assessment of Spatial Strategies

The proposed Spatial Strategies, as well as the Visions and Objectives, provide a good basis from which to give consideration to environmental sustainability in the area. This assessment has identified some areas where additional measures should be incorporated into the Plan that will allow the Strategies to be achieved whilst ensuring potential environmental effects are avoided or minimised. Achievement of the Spatial Strategies is also primarily dependant on the spatial allocation of development and the themed policy groups will be applied to development proposals to ensure that any significant environmental effects are avoided or minimised.

6.3 ASSESSMENT OF SITES

All sites submitted through the LDP process have been assessed. The majority of these sites were assessed using the Site Assessment Template (Appendix C) and the full list of Site Assessments can be found in Appendix E. If a site was less than 0.5ha it was assessed as a settlement boundary amendment rather than a site. This is because it would not be reasonable to consider a site of that size as an allocation within the LDP. These site assessments have allowed officers to consider all reasonable alternatives and choose the most suitable alternatives within each settlement. In addition, all LDP1 sites have been assessed taking into account up to date environmental information – this assessment is provided in Appendix E to the Addendum.

6.4 CUMULATIVE ASSESSMENT OF SITE ALLOCATIONS

A comparative matrix has been used to assess the cumulative impacts of the allocations proposed within each settlement. Only settlements where more than one allocation is proposed have been assessed. This assessment provides a summary of the individual site assessments for those proposals being taken forward in LDP2.

Cumulative Assessment findings were based on the results of the initial site assessments which can be found in Appendix E. This matrix based approach has used a scoring system as shown below.

Site Assessment Judgement Criterion

++	+	0	-	--
Significantly positive	positive	Neutral	adverse	Significantly adverse

The following section details the cumulative assessments undertaken for each of the settlements highlighted, where more than one allocation has been identified.

Cumulative assessments have been completed for the following settlements:

<u>Perth Housing Market Area</u> Perth Abernethy Bridge of Earn Burrelton/Woodside Dunning Scone Stanley	<u>Highland Housing Market Area</u> Aberfeldy Dunkeld and Birnam Pitlochry
<u>Kinross Housing Market Area</u> Balado Blairingone Kinross Milnathort Powmill	<u>Strathearn Housing Market Area</u> Auchterarder Crieff
<u>Strathmore Housing Market Area</u> Alyth Blairgowrie and Rattray Coupar Angus Meikle	

6.4.1 Cumulative Assessment: Perth

Key Environmental Issues for Perth

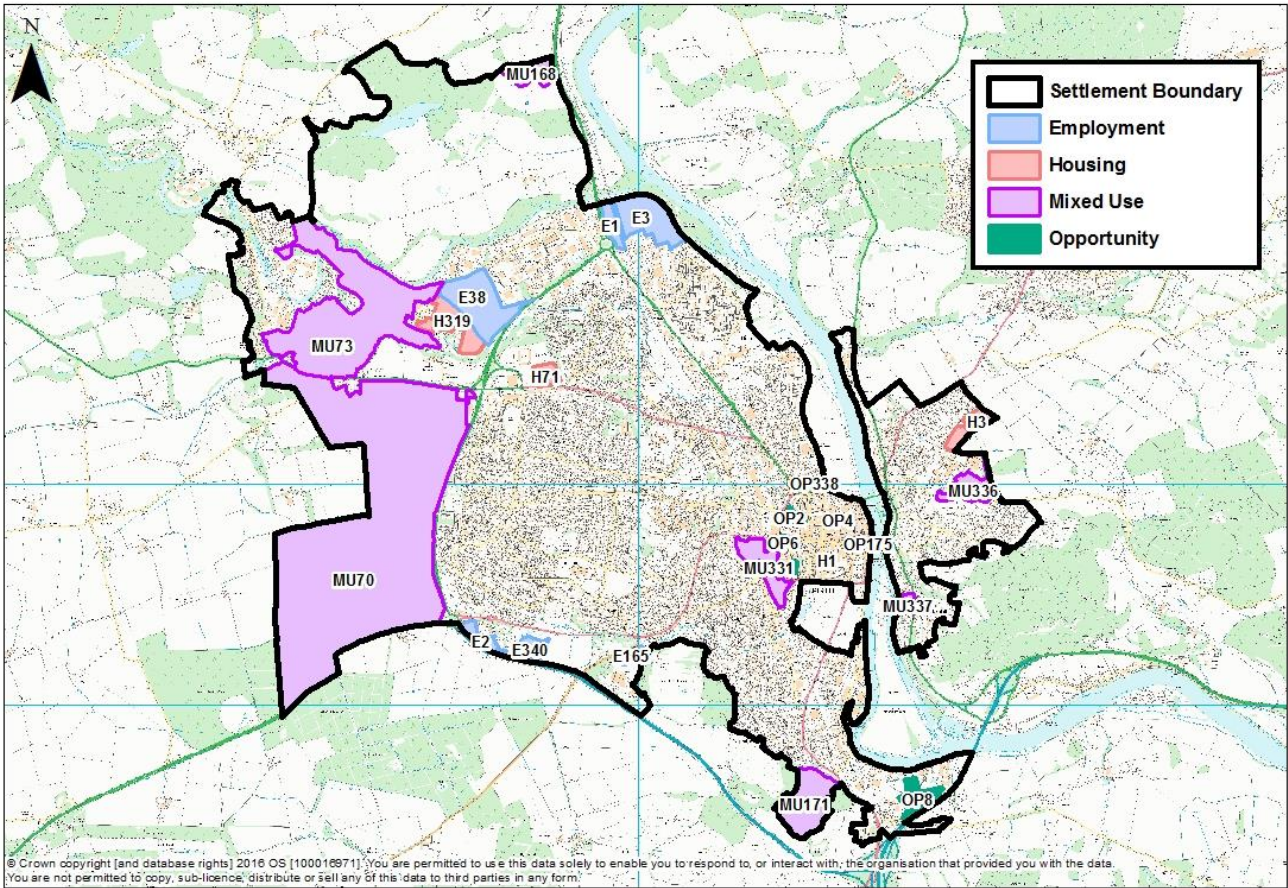
The SEA of LDP 1 assessed the key sensitivities and development pressures within Perth. This highlighted that the key issues for Perth include loss of prime agricultural land, the historic environment, water and flooding and landscape. Much of the area was assessed as having development potential in that it was either free from or has limited strategic constraints. Where there are limited constraints on existing LDP sites these will be sufficiently mitigated through requirement for: FRA and application of flood risk policy, expansion and connection to the bus network, reuse of good soils, protection of ancient woodland and habitat/biodiversity/green network requirements. The allocations all lie within the River Tay catchment so where there is a possible impact this will be mitigated through requirements for: Construction Method Statement to be provided for all aspects of the development to protect the watercourse. Methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on the River Tay SAC. Where the development of the site is within 30m of a watercourse an otter survey should be undertaken and a species protection plan provided, if required so as to ensure no adverse effects on the River Tay SAC.

Housing and Employment Land Requirement

The Proposed Plan identifies that there is no need to identify land to accommodate additional homes in the years to 2028. The Proposed plan for Perth is to keep the existing allocations but the risks to the pace of delivery of the Strategic Development sites, and need to plan for a longer term beyond 2028 means that providing more certainty on the Strategic Development sites is advisable.

The Proposed Plan for Perth is for an enlarged more sustainable MU70 to be supported. In terms of other changes from the existing LDP, land at Perth Quarry is currently identified as employment land but support is given to widening the acceptable uses here to include residential as the reuse of this site could potentially deliver wider public benefits by way of recreational facilities with potentially employment gains. Whilst land north of Burghmuir reservoir is identified in the current LDP as public open space this continued allocation is untenable as the land does not have wider public access or an amenity value. Therefore it is considered best to remove its allocation as public open space. Options from the City plan (redevelopment of Perth Railway Station to provide an integrated railway and bus interchange and plans to develop the former City Hall as a visual arts attraction for the City) are also supported.

The Proposed Plan therefore presents the following: continue with existing allocations in the adopted plan but identify Perth Quarry as a housing and leisure allocation, remove the public open space allocation from land north of Burghmuir reservoir, allocate Perth railway station as an opportunity site for a new entrance and integrated railway and bus station with reuse of underutilised land and buildings, allocate the City Hall as an opportunity for sympathetic restoration as a cultural space, and support an enlarged more sustainable MU70 and adjust the settlement envelope accordingly. Also allocations which have been developed OP1, OP3 and OP5 will be removed, whilst Newton Farm H71 will be amended to reflect the revised line of the CTRL and also the new football training grounds.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Perth there are 17 allocations that will be carried forward from the previous SEA, and 5 entirely new (Hillside Hospital, Murray Royal Hospital, City Hall, North of Bertha Park, and Perth Station) and 1 expanded (MU70) and 2 alternative uses allocation (Perth Quarry, Ruthvenfield) are proposed. The site assessments for which can be found in Appendix E. In order to develop an understanding of the potential cumulative impacts of development in Perth the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Proposed Plan
Biodiversity Flora and Fauna
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1

H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
Mu331
MU337
MU336
MU168
Overall Impact
Population
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
Mu331
MU337
MU336
MU168
Overall Impact
Human Health
MU70
MU73
E340 and E165 (formerly MU1)
MU171

E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
MU331
MU337
MU336
MU168
Overall Impact
Soil
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
MU331
MU337
MU336
MU168

Overall Impact
Water
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
MU331
MU337
MU336
MU168
Overall Impact
Air
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9

OP4
OP175 City Hall
MU331 Perth railway station
MU337
MU336
MU168
Overall Impact
Climatic Factors
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
MU331
MU337
MU336
MU168
Overall Impact
Material Assets
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2
E3
E38
OP338
H1
H3
H4

H71
H319
Op8
Op2
OP6
OP9
OP4
Op175
MU331
MU337
MU336
MU168
Overall Impact
Cultural Heritage
MU70
MU73
E340 and E165 (formerly MU1)
MU171 Perth Quarry
E1
E2
E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
MU331
MU337
MU336
MU168
Overall Impact
Landscape
MU70
MU73
E340 and E165 (formerly MU1)
MU171
E1
E2

E3
E38
OP338
H1
H3
H4
H71
H319
Op8
Op2
OP6
OP9
OP4
OP175
MU331
MU337
MU336
MU168
Overall Impact

Conclusions

Preferred Option

Biodiversity Flora and Fauna

Requirements for retention and protection of mature trees and woodland and for new native planting have been added as appropriate. It is envisaged that the new development would incorporate formal and informal green spaces and recreational areas, and there will be green network improvements delivered through the strategic development sites and on E340 and E165. On Berthapark major development area where there is Ancient woodland this will be protected and in all the strategic development sites there is a requirement for green networks in particular networks to link sites with Perth and the surrounding countryside. On MU70 there will be a requirement for a Blue-Green Network along the watercourse, with riparian features that connect to the Scouring Burn.

Sites all lie within the River Tay catchment so where there is a possible impact on this that will be mitigated through: Construction Method Statement to be provided for all aspects of the development to protect the watercourse. Methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on the River Tay SAC. Where the development of the site is within 30m of a watercourse an otter survey should be undertaken and a species protection plan provided, if required so as to ensure no adverse effects on the River Tay SAC.

Existing measures within the LDP will provide an additional safeguard against any impact of this policy include: Policy NE1A: International Nature Conservation Sites; Policy EP3A: Water Quality; Policy EP3C:

Surface Water Drainage; EP3B: Foul Drainage (as per the suggested amendment in Table 7.1); River Tay SAC Advice for Developers Supplementary Guidance; Policy NE3 Biodiversity.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Perth accessible from the proposed sites, and access to and possible provision of additional employment opportunities. The expanded MU70 would increase the provision of employment land has potentially both direct and indirect spin off employment benefits.

Human Health

Application of Policy CF1B ensures appropriate provision of informal and formal open space alongside any development proposals. Also requirements to retain existing core paths, integrate a network of new paths, and make connections to the wider network of paths outwith allocations are made. On extended MU70 there is possible noise impact from the A9 but noise impact assessment and noise attenuation measures will be required. Provision of land for a medical centre will be required at both Berthapark and MU70 to cope with future demand. The expanded MU70 would increase the provision of employment land has potentially both direct and indirect spin off employment benefits but slightly offsetting this there would be the loss of Friarton Quarry as an existing employment site.

Soil

There is an effect on prime agricultural land and loss of greenfield land however some allocations are reusing existing brownfield sites. There are areas of prime agricultural land on all the major expansion sites so the impact overall will be some loss of prime agricultural land but there is a requirement to use good soils locally.

Water

Where appropriate detailed FRA/DIA is required at planning application stage to define area at risk and appropriate detailed design layout (including SUDS).

There are areas within the natural flood plain within existing LDP allocations OP338, E1, E3, E38, and MU73 (however the River Almond and Tay flood prevention schemes mitigates this flood risk). The Scottish Planning Policy sets out a flood risk framework to guide development. Areas of medium to high risk – where the annual probability of coastal or watercourse flooding is greater than 0.5% (1:200 years) – may be suitable for development provided flood protection measures to the appropriate standard (1:200 years) already exist and are maintained, are under construction, or are a planned measure in a current flood risk management plan. Greenfield/undeveloped land which are protected by a FPS and within the built up area (OP338, E1, E3, E38 and MU73) are considered to be suitable for development but this should be subject to appropriate mitigation measures: including water resistance, and water resilience measures and evacuation procedures.

Even if it is questioned as to whether the far northern end of E3 lies within the built up area then the suitability of this site for development is a matter for careful consideration through review of this Development Plan and its Strategic Environmental Assessment. In this case the E3 site is considered to be an important component of the

settlement strategy (as part of the Council's food and drink park) and no other equally suitable site is available so it is considered that development (apart from civic infrastructure and the most vulnerable uses) is suitable here. Any development in such areas should however be subject to appropriate mitigation measures: including water resistance, and water resilience measures and evacuation procedures."

Air

Existing air quality issues have been identified and a policy approach is provided in the existing LDP EP11 Air Quality management areas. All sites are on or near existing or proposed bus stops.

Climatic Factors

There are services and facilities either within easy active travel distance or within either an existing or proposed bus route (proposed for the strategic development sites) to provide access to them, and capacity exists within the road network.

The sites layout and design should make most of southerly aspects, whilst planting and noise attenuation measures will provide some shelter from prevailing winds, whilst appropriate measures are in place for Flood Risk (see water).

Material Assets

Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Proportional developer contributions and land will be sought towards primary education provision, and land is sought to provide for a medical centre on Bertha park and MU70. Whilst a secondary school is being provided on Bertha park. There are no significant constraints to development though.

Cultural heritage

There are allocated sites for listed buildings (OP338 St John's School, and OP6 Waverley hotel) with developer requirements for sensitive reuse/consideration to conversion/high quality design. Where there is non-designated archaeology within sites there are requirements for archaeological survey to be undertaken and that impacts on the historic environment will be avoided wherever possible through sensitive layout and design.

The inventory of Historic Battlefields - Battle of Tippermuir lies within the expanded MU70 site. However preparation of a Battlefield Conservation plan to pinpoint action and further clarify the crucial landscape context of the battle will be required and for this to inform future Masterplan work and Landscape Framework / Greenspace Network Management Plan.

The City Hall is a B listed building and lies within the Conservation Area. Historic environment policies seek sympathetic restoration and will ensure any adaptations do not adversely affect its special interest.

Historic Environment Scotland has already confirmed that it would support a re-purposing of the building as a cultural space in line with our previously stated aspirations.

A planning balance may need to be found between impacts and the need to secure the long term future of the heritage assets.

At the Murray Royal Hospital site there might be need for a planning balance to be found. This planning balance could potentially include enabling development which is development that has a detrimental impact but is supported as per Policy HE2: Listed Buildings of the Perth and Kinross Council Local Development Plan “where it can be shown to be the only means of retaining a listed building”. However this enabling development needs to be necessary to make the proposal financially viable and the minimum enabling development necessary. Also to ensure that either enabling/or even non detrimental new build development is used to cross fund works the phasing of the new development alongside redevelopment will be important.

Landscape

PM1 Placemaking policy will ensure proposals have a high standard of layout and design whilst site specific requirements for landscaping should improve the setting for development.

Whilst the potential re-positioning of the greenbelt to support an extended MU70 will have an impact, it may be a more defensible, better boundary in the longer term. However, with felling and planting programmed for the West Lamberkine wood (mainly post 2032) and a larger MU70 boundary and change to the Green Belt boundary supported there is a need to ensure that there is advanced planting along boundaries and key views, as soon as practical to ensure a robust and more useable woodland structure is retained/created at West Lamberkine wood and extending north of West Lamberkine wood. For MU70 there is a requirement for a framework of woodlands and tree belts and new planting areas to link them and create a new outer western edge with a robust and more useable woodland structure.

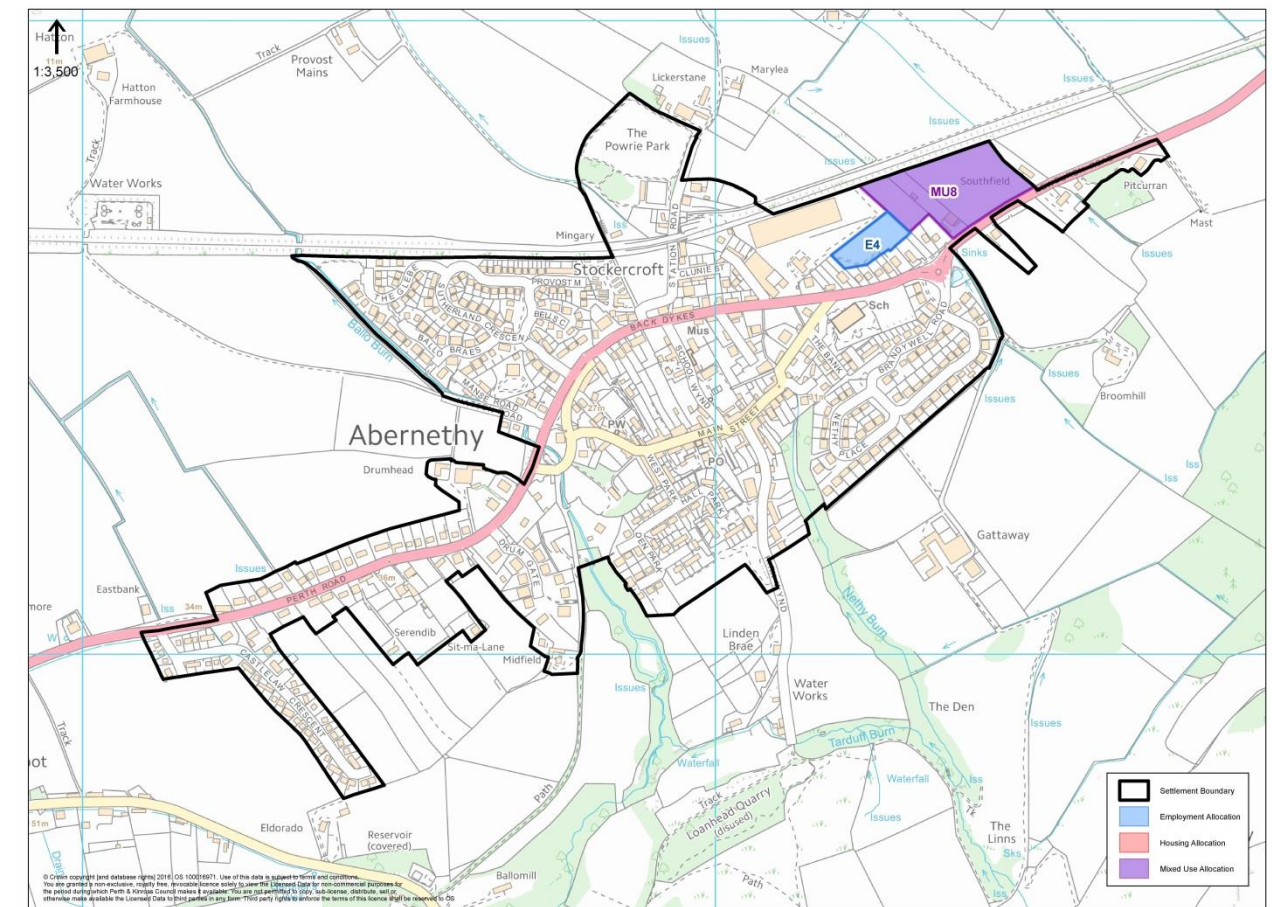
At the Murray Royal Hospital site an appropriate landscape plan will be important to ensuring any development sympathetically integrates into its parkland setting. Due to the topography and the significantly visible nature of the site, consideration should be given to use of natural materials and sympathetically coloured materials for external finishes, avoiding large areas of white render so as to reduce visual prominence and settle the buildings into the natural surroundings.

At the site north of Bertha Park there is a requirement for new native woodland planting toward the open rural landscape to the north, east and west, and in views from the A9 and CTLR to minimise the landscape the visual impact of the development.

6.4.2 Cumulative Assessment: Abernethy

Key Environmental Issues for Abernethy

Abernethy is a settlement identified as falling within the Perth landward area. The key environmental issues for Abernethy include the capability of the surrounding land for agriculture, cultural heritage considerations, landscape designation associated with the Ochil Hills to the south, potential risk of river flooding from the Ballo burn, and geo-diversity interests from a variety of sites.



Housing and Employment Land Requirement

The HNDA and TAYplan 2 identifies that there is no need for additional housing land to be allocated in LDP2 above that which is already allocated in the current LDP within the Perth Housing Market Area. No additional land allocations are proposed in Abernethy, however site H9 will be removed as it is no longer classed as effective in terms of delivering the housing land supply.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Abernethy there are 2 allocations within the Proposed Plan. As new information relating to flooding, cultural heritage and landscape designations has become available since the adoption of LDP1 a new cumulative impact assessment is required. This will allow us to develop an understanding of the potential cumulative impacts of development in Abernethy in light of this new data. The site assessments for each site have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Biodiversity Flora and Fauna
E4
MU8
Overall Impact
Population
E4
MU8
Overall Impact
Human Health
E4
MU8
Overall Impact
Soil
E4
MU8
Overall Impact
Water
E4
MU8
Overall Impact
Air
E4
MU8
Overall Impact
Climatic Factors
E4
MU8
Overall Impact
Material Assets
E4
MU8
Overall Impact
Cultural Heritage
E4
MU8
Overall Impact
Landscape
E4
MU8
Overall Impact

Conclusions

Biodiversity Flora and Fauna

No significant impacts identified. Impacts could be mitigated via retention of important trees, planting, hedgerows and landscaping to reinforce biodiversity value.

Population

Impacts generally positive in providing access to and provision of a choice of housing and employment opportunities, range of services and facilities within Abernethy accessible from the proposed sites, and extending access to employment opportunities.

Human Health

Potentially negative effects from flood risk. However, effects on the accessibility of public transport, and access to – and potential for the provision of new – managed open spaces and facilities generally positive giving an overall neutral effect. Effects can be mitigated through the application of LDP transport policies and Flood Risk Assessment and community infrastructure policies.

Soil

Development will result in the loss of prime agricultural land. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Risk of flooding affecting site MU8 albeit at a limited extent. Application of LDP policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment likely to be required for all sites.

Air

No existing air quality issues in Abernethy. An increased number of houses/level of employment land is likely to lead to more vehicle use and therefore higher emission levels so overall cumulative impact on air quality likely to be slightly negative.

Climatic Factors

There are various services and facilities in the town centre which are accessible from the sites so reducing the need to travel, and Abernethy is generally well served by public transport. However there are potential flood risks from development of the proposed sites. Overall impact therefore likely to be neutral. Siting and design to take account of solar orientation, and sustainable design and construction techniques and energy efficiency measures to be incorporated into site design and layout.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services. Overall impact neutral.

Cultural heritage

Limited impact on cultural heritage. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policies which protect the historic environment.

Landscape

Overall impact is slightly adverse due to development on greenfield land. A landscape framework would help to ensure development fits in sensitively with surrounding landscape.

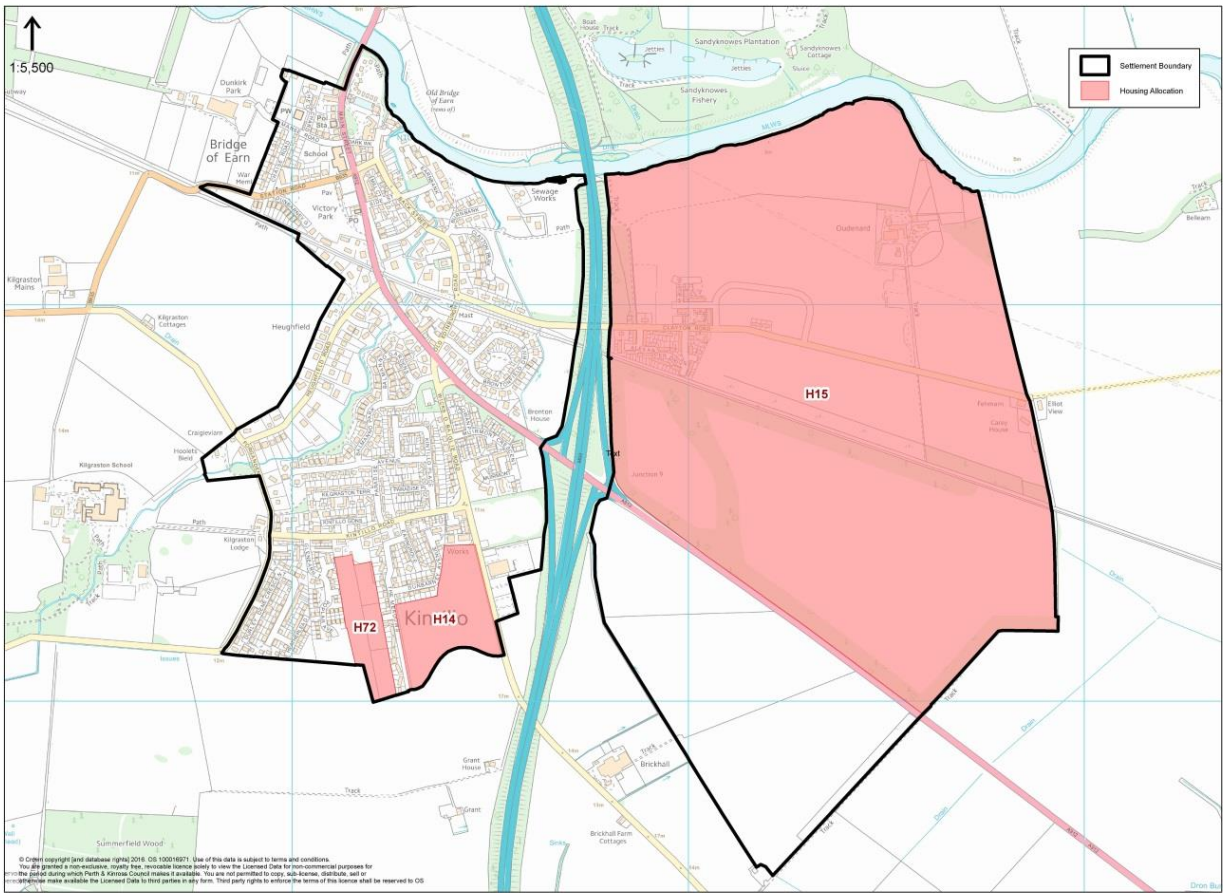
6.4.3 Cumulative Assessment: Bridge of Earn

Key Environmental Issues for (Bridge of Earn and Oudenarde)

The SEA of LDP 1 assessed the key sensitivities and development pressures within Perth Core (including Bridge of Earn and Oudenarde). This highlighted that the key issues within this area include prime agricultural land, surface water environments and flooding prime agricultural land, the historic environment, water and flooding and landscape. On the significant Oudenarde H15 1,600 home expansion site planning permission has been granted and the Section 75 agreement has been signed, 10 ha of the site is within the 1;200 year flood risk area however detailed FRA defined area at risk and appropriate design and levels, and no built development will take place on the functional flood plain or area of known flood risk, and a sustainable drainage system was required.

Housing and Employment Land Requirement

The HNDA and TAYplan 2 identifies that there is no need for additional housing land to be allocated in LDP2 above that which is already allocated in the current LDP within the Perth Housing Market Area. The Proposed Plan seeks to take forward all the existing LDP housing and employment allocations in Bridge of Earn. The MIR presented no alternative to meet this target within Bridge of Earn with the alternative options focussed on Perth city which is considered the most sustainable location to identify further growth.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Bridge of Earn and Oudenarde there are 4 allocations that will be carried forward from the previous SEA. The site assessments for which can be found in Appendix E. In order to develop an understanding of the potential cumulative impacts of development in Bridge of Earn and Oudenarde the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Preferred Option
Biodiversity Flora and Fauna
H15
Employment
H14
H72
Overall Impact
Population
H15
Employment
H14

H72
Overall Impact
Human Health
H15
Employment
H14
H72
Overall Impact
Soil
H15
Employment
H14
H72
Overall Impact
Water
H15
Employment
H14
H72
Overall Impact
Air
H15
Employment
H14
H72
Overall Impact
Climatic Factors
H15
Employment
H14
H72
Overall Impact
Material Assets
H15
Employment
H14
H72
Overall Impact
Cultural Heritage
H15
Employment
H14
H72
Overall Impact
Landscape
H15

Employment
H14
H72
Overall Impact

Conclusions

Biodiversity Flora and Fauna

To help mitigate impacts on H15 there is a specific developer requirement for construction method statement to be developed and implemented and to include sustainable design and construction techniques and incorporate energy efficiency measures and make them resilient to the projected climatic changes in precipitation and temperature. Also landscape designs were required to retain existing habitats or create new habitats, to compensate for lost habitats lost elsewhere in Perth and Kinross.

It is envisaged that all the new development in Bridge of Earn and Oudenarde would incorporate formal and informal green spaces and recreational areas. Existing measures within the LDP will provide an additional safeguard: Policy NE1A: International Nature Conservation Sites, Policy EP3A: Water Quality, EP3B: Foul Drainage Policy, EP3C: Surface Water Drainage. Also on all sites landscape frameworks and suitable boundary treatments will be required alongside retention of important trees, structural planning, hedgerows etc.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, and range of services and facilities accessible from the proposed sites, and access to and provision of additional employment opportunities and a village shop alongside housing development at Oudenarde.

Human Health

Application of Policy CF1B ensures appropriate provision of informal and formal open space alongside any development proposals. Open space requirements have already been agreed on H15 and Public open space and landscaping will comprise some 30% of the total development area and includes a riverside park, linear green corridors between residential and other uses, a village green, play areas and shelter belt planting. There is possible noise impact from the motorway but noise impacts will be reduced with the use of low noise road surfacing, landscaping and acoustic screening, if this is appropriate.

Soil

There is an effect on prime agricultural land and loss of greenfield land with allocations outwith the existing settlement and H72 and H14 affecting prime agricultural land. Good soils should be reused elsewhere in the locality.

Water

10 ha of the H15 site lies within the 1;200 year flood risk area however detailed FRA defined area at risk and appropriate design and levels, and no built development will take place on the functional flood plain or area of known flood risk, and a sustainable drainage system was required

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites are on or near or in the case of H15 will provide bus stops within easy active travel distance.

Climatic Factors

There are services and facilities in Bridge of Earn which are accessible from all the sites reducing the need to travel and capacity exists within the road network. Sites layout and design should make most of southerly aspects, whilst planting and will also provide some shelter from prevailing winds.

Material Assets

Includes a wide range of issues but the overall impact is likely to be neutral. A new railway station will be provided subject to receiving funding and support from Transport Scotland and a study has been commissioned to consider this jointly with proposal for Newburgh Station re-opening the railway station with Fife Council and SEStran. A new school will be provided, and a village shop and employment land. A planning application has also been submitted for a surgery expansion and junction improvements to A912 are underway to facilitate access to Oudenarde and Brickhall Farm. There are no significant constraints to the sites identified.

Cultural heritage

22 ha of the Oudenarde H15 is covered by non-designated archaeology.

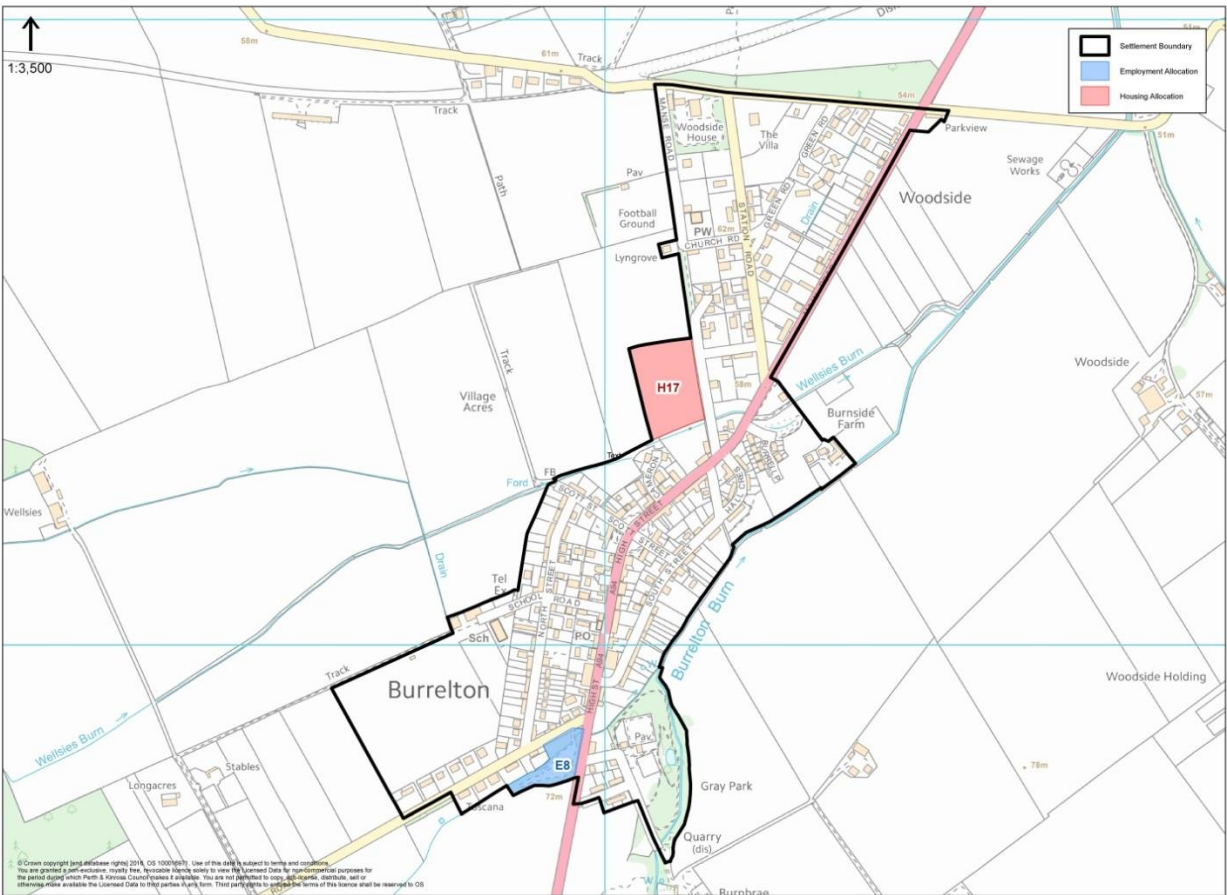
Landscape

On all sites landscape frameworks and suitable boundary treatments will be required alongside retention of important trees, structural planning, hedgerows etc.

6.4.4 Cumulative Assessment: Burrelton/Woodside

Key Environmental Issues for Burrelton/Woodside

Burrelton & Woodside are identified as falling within the Perth landward area. The key environmental issues for Burrelton & Woodside include the capability of the surrounding land for agriculture, cultural heritage considerations.



Housing and Employment Land Requirement

The HNDA and TAYplan 2 identifies that there is no need for additional housing land to be allocated in LDP2 above that which is already allocated in the current LDP within the Perth Housing Market Area.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Burrelton and Woodside there are two allocations that could be carried forward from the adopted LDP. No changes to these allocations are proposed. However, new information relating to flooding, cultural heritage and landscape designations has become available since the adoption of LDP1. As such a new cumulative impact assessment is required in order to develop an understanding of the potential cumulative impacts of development in Burrelton and Woodside in light of this new data. The site assessments for each site have been brought together to ensure there is no significant cumulative impact on the environment. This has then been compared against the alternative option for Burrelton & Woodside to allow for a comparative analysis of the cumulative impacts. This can be seen below.

Biodiversity Flora and Fauna
H17
E8
Overall Impact

Population
H17
E8
Overall Impact
Human Health
H17
E8
Overall Impact
Soil
H17
E8
Overall Impact
Water
H17
E8
Overall Impact
Air
H17
E8
Overall Impact
Climatic Factors
H17
E8
Overall Impact
Material Assets
H17
E8
Overall Impact
Cultural Heritage
H17
E8
Overall Impact
Landscape
H17
E8
Overall Impact

Conclusions

Biodiversity Flora and Fauna

No significant impacts identified. Impacts could be mitigated via retention of important trees, planting, hedgerows and landscaping to reinforce biodiversity value.

Population

Impact generally positive in providing access to and provision of a choice of housing opportunities, range of services and facilities within Burrelton. School has very limited capacity and will require an extension which could be supported through a financial contribution from H17.

Human Health

Risk of flooding on H17 – a flood risk assessment is required. There is access to public transport, a primary school and managed open spaces and facilities. These are generally positive giving an overall neutral effect.

Soil

Development will result in the loss of agricultural land. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Risk of flooding affecting site H17. Application of LDP policy EP3 will reduce negative impacts; r Flood Risk Assessment is required for this site.

Air

No existing air quality issues in Burrelton/Woodside. An increased number of houses/increased capacity of primary school is likely to lead to more vehicle use and therefore higher emission levels so overall impact on air quality likely to be slightly negative. Mitigation through sustainable construction and transport methods, and implementation of sustainable travel plan for primary school.

Climatic Factors

There are various services and facilities in the village which are accessible from the sites so reducing the need to travel. However, there are potential flood risks from development of the H17 site. Overall impact therefore likely to be neutral. Siting and design to take account of solar orientation, and sustainable design and construction techniques and energy efficiency measures to be incorporated into site design and layout.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services. Overall impact neutral.

Cultural heritage

Archaeology evident in the surrounding area. No conservation area and very few listed buildings. No scheduled monuments in close vicinity.

Landscape

Overall impact is slightly adverse due to development on greenfield land. For both sites, a landscape framework would help to ensure development fits in sensitively with surrounding landscape.

6.4.5 Cumulative Assessment: Dunning

Key Environmental Issues for Dunning

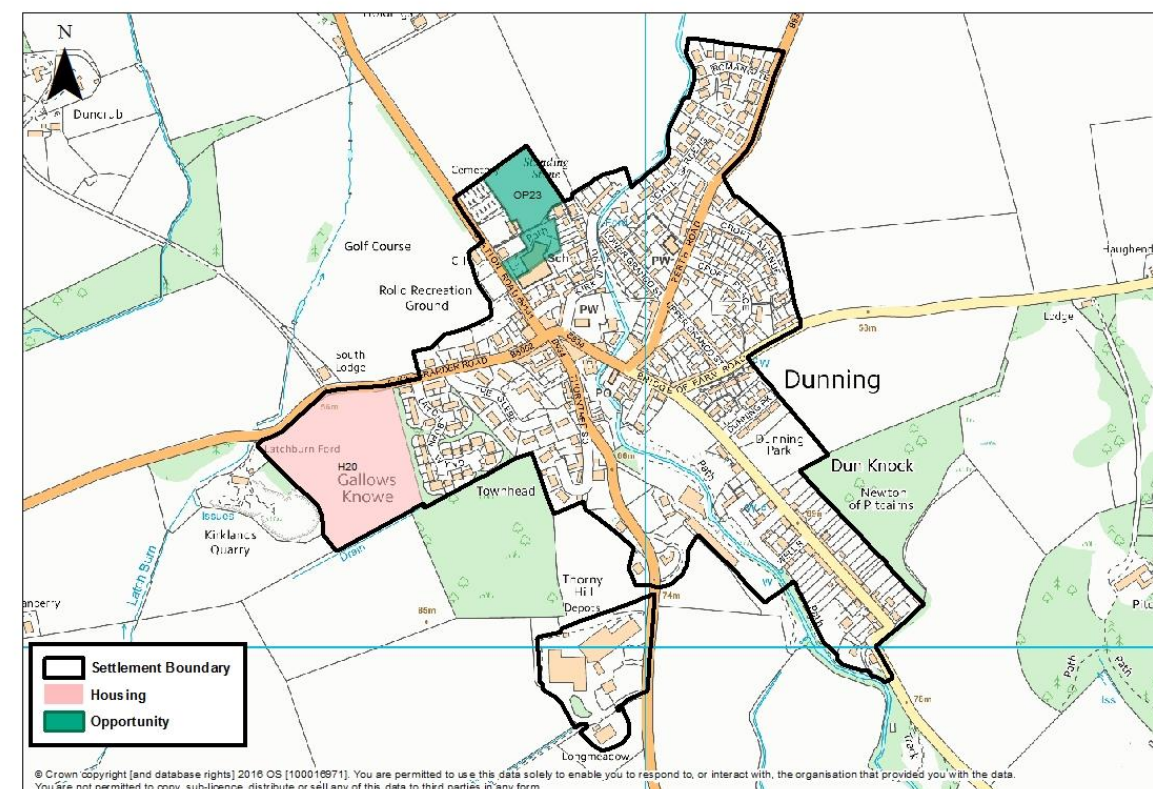
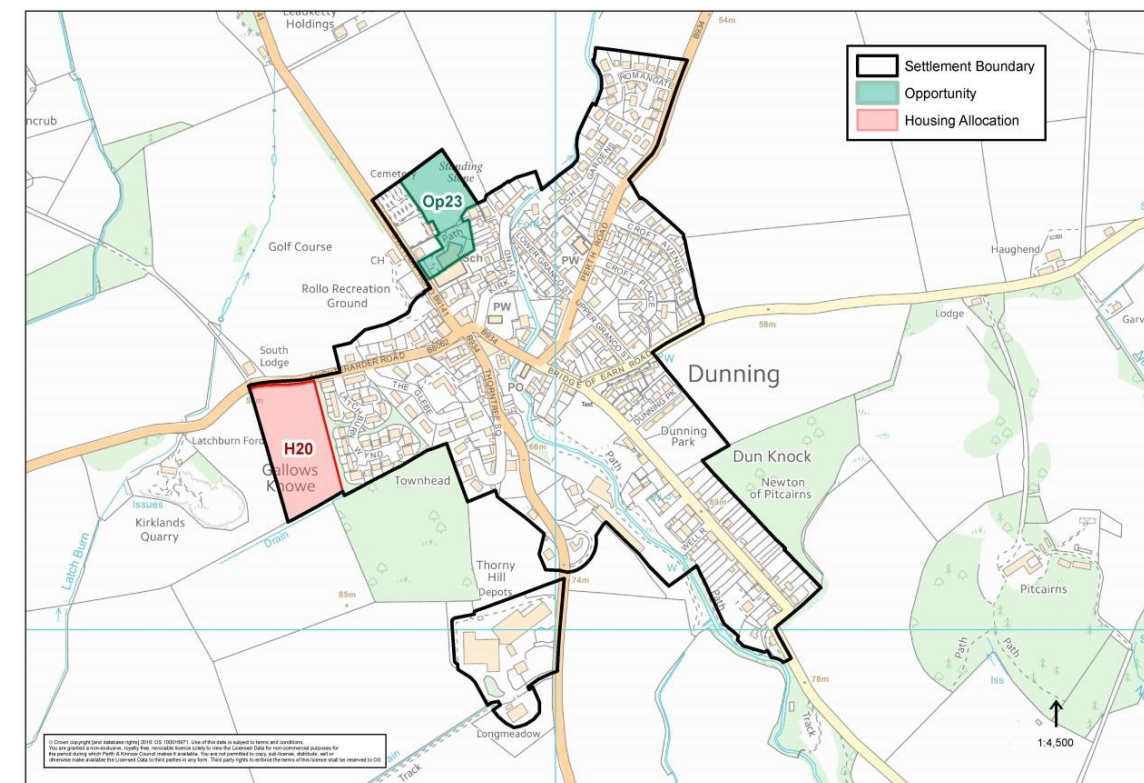
Dunning is a settlement identified as falling within the Perth landward area. The key environmental issues for Dunning include the capability of the surrounding land for agriculture, cultural heritage considerations, landscape designation of whole settlement and surrounding within the Ochil Hills SLA, and potential risk of river flooding from the Dunning burn.

Housing and Employment Land Requirement

The MIR identifies that there is no need for additional housing land to be allocated in LDP2 above that which is already allocated in the current LDP. However there has been a proposal submitted to extend the existing allocated site H20 in Dunning. It is felt that this extension could create a better boundary to the edge to the settlement and so has been considered as a reasonable alternative to the existing sites (from the 2014 adopted LDP). The two alternatives are highlighted in the attached maps.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Dunning there are two allocations that could be carried forward from the adopted LDP. No changes to these allocations are proposed. However, new information relating to flooding, cultural heritage and landscape designations has become available since the adoption of LDP1. As such a new cumulative impact assessment is required in order to develop an understanding of the potential cumulative impacts of development in Dunning in light of this new data. The site assessments for each site have been brought together to ensure there is no significant cumulative impact on the environment. This has then been compared against the alternative option for Dunning to allow for a comparative analysis

of the cumulative impacts. This can be seen below.



Alternative 1	Alternative 2
Biodiversity Flora and Fauna	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Population	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Human Health	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Soil	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Water	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Air	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Climatic Factors	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Material Assets	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact
Cultural Heritage	
H20	H20
Op23	Op23

	H20 Extension
Overall Impact	Overall Impact
Landscape	
H20	H20
Op23	Op23
	H20 Extension
Overall Impact	Overall Impact

Conclusions

Alternative 1

Biodiversity Flora and Fauna

No significant impacts identified. Impacts could be mitigated via retention of important trees, planting, hedgerows and landscaping to reinforce biodiversity value.

Population

Impact generally positive in providing access to and provision of a choice of housing opportunities, range of services and facilities within Dunning. Proposed increase in primary school capacity.

Human Health

Very slight risk of flooding for site Op23. However, effects on the accessibility of public transport and access to – and potential for the provision of new – managed open spaces and facilities generally positive giving an overall neutral effect. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment and policy CF1B.

Soil

Development will result in the loss of agricultural land. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Slight risk of flooding affecting site Op23. Application of LDP policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment likely to be required for this site.

Air

No existing air quality issues in Dunning. An increased number of houses/increased capacity of primary school is likely to lead to more vehicle use and therefore higher emission levels so overall impact on air quality likely to be slightly negative. Mitigation through sustainable construction and transport methods, and implementation of sustainable travel plan for primary school.

Climatic Factors

There are various services and facilities in the village which are accessible from the sites so reducing the need to travel, and Dunning is adequately served by public transport. However there are potential flood risks from development of the Op23 site. Overall impact therefore likely to be neutral. Siting and design to take account of solar orientation, and sustainable design and construction techniques and energy efficiency measures to be incorporated into site design and layout.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services. Overall impact neutral.

Cultural heritage

Significant level of cultural heritage interests in village. Site Op23 within the boundary of identified local archaeological site and the Dunning Conservation Area. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1

Landscape

Overall impact is slightly adverse due to development on greenfield land. For both sites, a landscape framework would help to ensure development fits in sensitively with surrounding landscape.

Alternative 2

Biodiversity Flora and Fauna

Possible impacts on biodiversity due to loss of agricultural land and potential that protected species may be impacted by development of the H20 extension. Impacts could be mitigated via retention of important trees, planting, hedgerows and landscaping to reinforce biodiversity value.

Population

Impact generally positive in providing access to and provision of a choice of housing opportunities, range of services and facilities within Dunning. Additional development may put pressure on the primary school but this could be mitigated through developer requirements.

Human Health

Very slight risk of flooding for site Op23. However, effects on the accessibility of public transport and access to – and potential for the provision of new – managed open spaces and facilities generally

positive giving an overall neutral effect. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment and policy CF1B.

Soil

Development will result in the loss of agricultural land. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Slight risk of flooding affecting site Op23. Application of LDP policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment likely to be required for this site.

Air

No existing air quality issues in Dunning. An increased number of houses/increased capacity of primary school is likely to lead to more vehicle use and therefore higher emission levels so overall impact on air quality likely to be slightly negative. Mitigation through sustainable construction and transport methods, and implementation of sustainable travel plan for primary school.

Climatic Factors

There are various services and facilities in the village which are accessible from the sites so reducing the need to travel, and Dunning is adequately served by public transport. However there are potential flood risks from development of the Op23 site. Overall impact therefore likely to be neutral. Siting and design to take account of solar orientation, and sustainable design and construction techniques and energy efficiency measures to be incorporated into site design and layout.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services. Overall impact neutral.

Cultural heritage

Significant level of cultural heritage interests in village. Site Op23 within the boundary of identified local archaeological site and the Dunning Conservation Area. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1

Landscape

Overall impact is slightly adverse due to development on greenfield land. For both sites, a landscape framework would help to ensure development fits in sensitively with surrounding landscape.

Conclusions

As expected the increase in development will have negative impacts on the environment however it is not felt that these will be significant and generally these can be mitigated through LDP policies and the use of developer requirements.

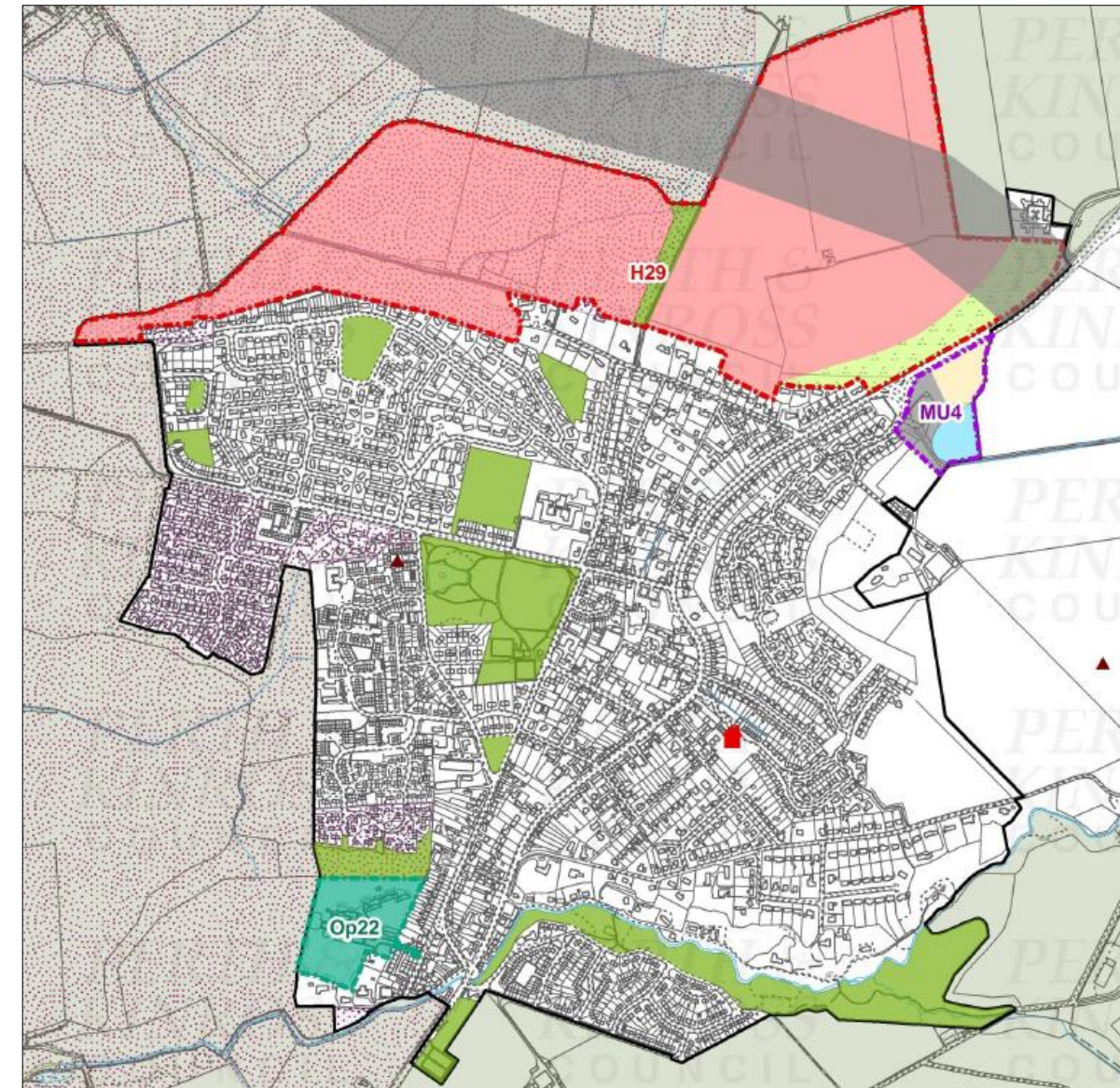
6.4.6 Cumulative Assessment: Scone

Key Environmental Issues for Scone

Scone is one of the settlements identified as falling within the Perth Core Area. The SEA of LDP 1 assessed the key sensitivities and development pressures within the Perth Core Area. This highlighted that 87% of the area faces only limited constraints although some areas are more sensitive to development and should be avoided or assessed further. The preservation and enhancement of the distinctive landscape of the Perth area was highlighted as being of particular importance in maintaining community wellbeing, biodiversity and supporting the local economy (tourism in particular). Key issues arising in the Perth Core Area include prime quality agricultural land, surface water environments and flooding. In the area to the north-east of the City (which includes Scone) the SEA highlights that development potential in some locations is limited or fully constrained, mainly from surface waterbody corridors and the Scone Palace garden and designed landscape designation. Sensitivities in this area include: numerous features of the historic environment, ancient and semi-natural woodland inventory sites, prime quality agricultural land, surface water and riparian areas and areas at risk from flooding.

Housing and Employment Land Requirement

The HNDA and TAYplan 2 identifies that there is no need for additional housing land to be allocated in LDP2 above that which is already allocated in the current LDP within the Perth Housing Market Area. There are no proposals for additional land allocations in Scone.



The potential need for additional employment land in the Perth area amounts to approximately 70ha and the existing adopted LDP designations are sufficient to meet this identified employment land requirement. No additional land allocations are proposed in Scone.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Scone there are 2 allocations that could be carried forward from the previous SEA. The site assessments for these can be found in Appendix E. No changes to these allocations are proposed. However, new information relating to flooding, cultural heritage and landscape designations has become available since the SEA of LDP1. As such a new cumulative impact assessment is required in order to develop an understanding of the potential cumulative impacts of development in Scone in light of this new data. The site assessments for each site have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Proposed LDP
Biodiversity Flora and Fauna
H29
MU4
Op22
Overall Impact
Population
H29
MU4
Op22
Overall Impact
Human Health
H29
MU4
Op22
Overall Impact
Soil
H29
MU4
Op22
Overall Impact
Water
H29
MU4
Op22
Overall Impact
Air
H29
MU4
Op22
Overall Impact
Climatic Factors
H29
MU4
Op22
Overall Impact
Material Assets
H29
MU4
Op22
Overall Impact
Cultural Heritage
H29
MU4
Op22
Overall Impact

Landscape
H29
MU4
Op22
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Potential for impact on UK BAP priority species (Red Squirrel and Hedgehog) which have been recorded within sites and other species recorded in the vicinity. Number of linear features, hedgerows, trees and drainage ditches on H29 in particular which are likely to have biodiversity value. Impacts on MU4 and Op22 likely to be less but still potentially adverse. Impacts could be mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Scone accessible from the proposed sites, and extending access to employment opportunities. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Human Health

Potentially negative effects from flood risk and impact on open space. However, effects on the accessibility of public transport and access to – and potential for the provision of new – managed open spaces and facilities generally positive giving an overall neutral effect. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment and policy CF1B. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Soil

Development will result in the loss of category 3.1 agricultural land. Small part of this will be offset from the redevelopment of brownfield land at Op22. Overall impact adverse due to scale of greenfield land loss at H29. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Water

Risk of surface water flooding affecting all sites. Potential for river flooding outwith Op22 to the south and east although area of river flooding further from site than previous flood data indicated. Also potential surface water quality issues; a number of pressures identified including morphological

alterations and point source pollution from sewage disposal. Application of LDP policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Air

No existing air quality issues in Scone and no indication that additional development will result in air quality objectives being breached although would increase traffic problems at Bridgend if developed in advance of the Cross Tay Link Road. Perth is an Air Quality Management Area and an increased number of houses is likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Climatic Factors

There are services and facilities in the town centre which are accessible from the sites so reducing the need to travel, and Scone is well served by public transport. However there are potential flood risks from development of the proposed sites. Overall impact therefore likely to be slightly adverse. Siting and design to take account of solar orientation, and sustainable design and construction techniques and energy efficiency measures to be incorporated into site design and layout. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services. Primary school has insufficient capacity and there are concerns regarding the capacity at Scone WWTW due to the scale of development proposed at H29. Development dependent on the Cross Tay Link Road. Overall impact therefore assessed as adverse. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Cultural heritage

Sensitivities from listed building and archaeological interests. Scone Palace Garden and Designed Landscape affects significant portion of H29. Impacts likely to be minimal on MU4 and Op22 but overall impact assessed as adverse due to the scale of the potential adverse impact on the designed landscape at H29. Any adverse impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

The Sidlaw Hills SLA is close to the south eastern boundary of H29. This site is also impacted by the Scone Palace garden and designed landscape and the Green Belt. MU4 adjacent to the Sidlaw Hills SLA

on the eastern and southern boundaries. Op22 not affected by SLA but is visible on entry to the village. Potential adverse impacts can be mitigated by the application of LDP policies ER6, NE5 and the historic environment policies. Specific developer requirements will require the provision of suitable boundary treatment to create village edge. Impacts are not expected to be any greater or lesser than for the Preferred Option.

6.4.7 Cumulative Assessment: Stanley

Key Environmental Issues for Stanley

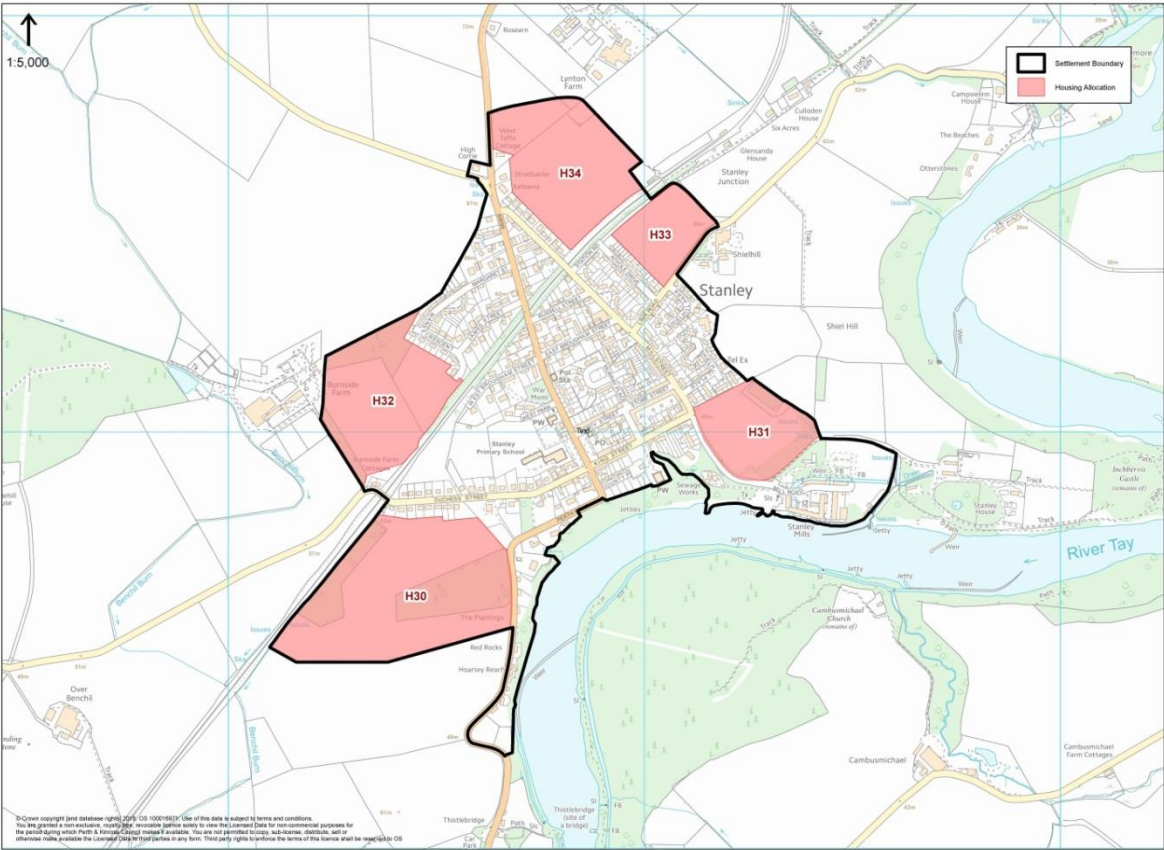
Stanley is one of the settlements identified as falling within the Perth Core Area. The SEA of LDP 1 assessed the key sensitivities and development pressures within the Perth Core Area. This highlighted that 87% of the area faces only limited constraints although some areas are more sensitive to development and should be avoided or assessed further. The preservation and enhancement of the distinctive landscape of the Perth area was highlighted as being of particular importance in maintaining community wellbeing, biodiversity and supporting the local economy (tourism in particular). Key issues arising in the Perth Core Area include prime quality agricultural land, surface water environments and flooding. In the area to the north of the City (which includes Stanley) the SEA highlights that development potential in some locations is limited or fully constrained. Sensitivities in this area include: features of the historic environment, ancient and semi-natural woodland inventory sites, prime quality agricultural land, surface water and riparian areas and areas at risk from flooding.

Housing and Employment Land Requirement

The HNDA and TAYplan 2 identifies that there is no need for additional housing land to be allocated in LDP2 above that which is already allocated in the current LDP within the Perth Housing Market Area. There are no proposals to change any of the land allocations in Stanley.

The potential need for additional employment land in the Perth area amounts to approximately 70ha and the existing adopted LDP designations are sufficient to meet this identified employment land requirement. No additional land allocations are proposed in Stanley.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Stanley there are 5 allocations that could be carried forward from the previous SEA. The site assessments for these can be found in Appendix E. No changes to these allocations are proposed. However, new information relating to flooding, cultural heritage and landscape designations has become available since the SEA of LDP1. As such a new cumulative impact assessment is required in order to develop an understanding of the potential cumulative impacts of development in Stanley in light of this new data. The site assessments for each site have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.



Biodiversity Flora and Fauna
H30
H31
H32
H33
H34
Overall Impact
Population
H30
H31
H32
H33
H34
Overall Impact
Human Health
H30
H31
H32
H33

H34
Overall Impact
Soil
H30
H31
H32
H33
H34
Overall Impact
Water
H30
H31
H32
H33
H34
Overall Impact
Air
H30
H31
H32
H33
H34
Overall Impact
Climatic Factors
H30
H31
H32
H33
H34
Overall Impact
Material Assets
H30
H31
H32
H33
H34
Overall Impact
Cultural Heritage
H30
H31
H32
H33
H34
Overall Impact
Landscape
H30

H31
H32
H33
H34
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Potential for impact on priority species and habitats. Impacts could be mitigated via retention of important trees, planting, hedgerows and landscaping to reinforce biodiversity value.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Scone accessible from the proposed sites, and extending access to employment opportunities.

Human Health

Potentially negative effects from flood risk and impact on open space. However, effects on the accessibility of public transport and access to – and potential for the provision of new – managed open spaces and facilities generally positive giving an overall neutral effect. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment and policy CF1B.

Soil

Development will result in the loss of prime agricultural land. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Risk of flooding affecting sites H30 and H31. Application of LDP policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment likely to be required for all sites.

Air

No existing air quality issues in Stanley. An increased number of houses are likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative.

Climatic Factors

There are services and facilities in the town centre which are accessible from the sites so reducing the need to travel, and Scone is well served by public transport. However there are potential flood risks

from development of the proposed sites. Overall impact therefore likely to be slightly adverse. Siting and design to take account of solar orientation, and sustainable design and construction techniques and energy efficiency measures to be incorporated into site design and layout.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services.

Cultural heritage

Minimal impact on the cultural heritage. Site H31 assessed as adverse due to proximity to Stanley Mills and potential effect on setting. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1.

Landscape

Overall impact is adverse due to development on greenfield land. Overall masterplan for Stanley and design could require a landscape framework to ensure development fits in sensitively with surrounding landscape.

6.4.8 Cumulative Assessment: Aberfeldy

Key Environmental Issues for Aberfeldy

The SEA of LDP 1 assessed the key sensitivities and development pressures within Aberfeldy. This highlighted that the key issues for Aberfeldy include surface waters and flooding, and topography. Much of the area was assessed as having development potential in that it was either free from or has limited strategic constraints although some of the sites proposed for development did adjoin sensitive environmental areas. This assessment has been updated through a Settlement Boundary Assessment for LDP2. Flood risk is slightly extended and the entire settlement boundary is adjacent to the Strath Tay Special Landscape Area.

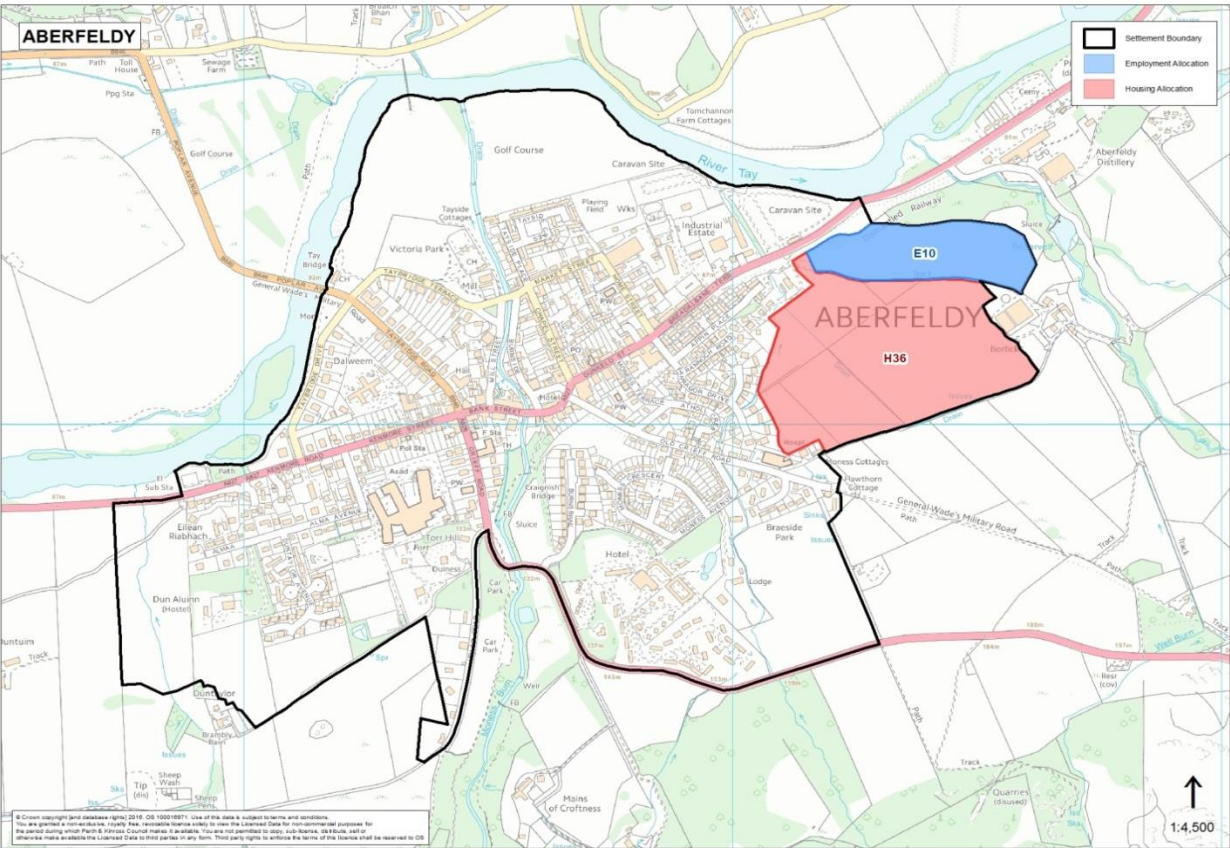
Potential for development exists to the east, south east, west and southwest of the settlement in particular. Preservation and enhancement of the distinctive landscape of the area is important in maintaining community well-being, biodiversity, and supporting the local economy (tourism in particular). No high risk constraints are identified although site design is a crucial issue to ensure that proposed development does not obstruct existing views from the north and south. Some development is also proposed in a minor flood risk area (below 3km catchment) highlighting the need for any development to comply with the flooding guidance in SPP.

Housing and Employment Land Requirement

The Main Issues Report identified a shortfall in the housing land supply to meet the housing land requirement set by the Strategic Development Plan. Following the publication of TAYplan2 there is no longer a shortfall in supply which needs to be addressed and no further action is therefore required.

The potential need for additional employment land in the Highland area amounts to approximately 5ha. Even with the proposed removal of the site at Inver, the existing adopted LDP designations at Aberfeldy and north of Dunkeld are sufficient to meet this identified employment land requirement. No additional land allocations are therefore proposed in Aberfeldy.

In Aberfeldy the existing allocations at E10 and H36 Borlick will continue. The allocation in LDP1 at H37 South of Kenmore Road will be removed as this site is now under construction.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Aberfeldy there are two allocations that will be carried forward from the previous SEA. The site assessments for which can be found in Appendix E. In order to develop an understanding of the potential cumulative impacts of development in Aberfeldy the site assessments have been brought together to highlight any significant cumulative impact on the environment. This can be seen below.

Proposals
Biodiversity Flora and Fauna
E10

H36
Overall Impact
Population
E10
H36
Overall Impact
Human Health
E10
H36
Overall Impact
Soil
E10
H36
Overall Impact
Water
E10
H36
Overall Impact
Air
E10
H36
Overall Impact
Climatic Factors
E10
H36
Overall Impact
Material Assets
E10
H36
Overall Impact
Cultural Heritage
E10
H36
Overall Impact
Landscape
E10
H36
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Sites are within 2km of River Tay SAC. Potential impacts on SAC will require assessment. Potential for impact on priority species, habitats and botanical value of sites. Potential therefore for negative

cumulative impacts. Impacts could be mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Aberfeldy accessible from the proposed sites, and access to employment opportunities. No negative cumulative impacts identified.

Human Health

Potentially negative effects from flood risk at H36 and impact on amenity open space at both sites. However, effects on the accessibility of public transport and access to managed open spaces and facilities generally positive giving an overall neutral effect. Opportunities also exist for enhancement of the green network in conjunction with development. Effects can be mitigated through the application of LDP policies on Transport and Accessibility, and Flood Risk Assessment. Also through the application of policies on community facilities, sport and recreation, and the retention and enhancement of existing core paths and path networks.

Soil

No effects on prime agricultural land, contamination or soil stability but both proposals involve the development of greenfield land so overall the cumulative impact is adverse.

Water

Potential risk of flooding at H36. Application of LDP policies on the water environment and drainage will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required. Overall status of the water environment is good. Point source pollution from sewage disposal has been identified as a pressure on the River Tay and the provision of increased waste water treatment infrastructure as part of new development could help address this. Cumulative impact likely to be adverse due to flood risk at H36.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses and employment uses are, however, likely to lead to more vehicle use and therefore higher emission levels so cumulative impact on air quality likely to be negative. Both sites are on or near bus routes which will help mitigate adverse impacts.

Climatic Factors

There are services and facilities in the town centre which are accessible from the sites reducing the need to travel and capacity exists within the road network. However both sites have a north facing aspect and there is a potential risk of flooding at H36. Cumulative impact is therefore likely to be

adverse. Application of LDP policies on the water environment and drainage will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required.

Material Assets

Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services.

Cultural heritage

There are some listed buildings in the vicinity of both sites but these generally have an existing buffer and so the potential impacts likely to be only slightly adverse. There may also be the potential for some impact on locally important archaeological features. The northern boundary of E10 is adjacent to ancient woodland. Any adverse impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

Both sites are adjacent to Strath Tay Special Landscape Area. Potential adverse impacts on the SLA can be mitigated by the application of LDP policies on Managing Future Landscape Change to ensure high quality design and maintain the character of the settlement. Specific developer requirements will require the provision of a landscape framework to ensure that development responds appropriately to the landscape.

6.4.9 Cumulative Assessment: Dunkeld/Birnam

Key Environmental Issues for Dunkeld and Birnam

The SEA of LDP 1 assessed the key sensitivities and development pressures within Dunkeld and Birnam. This highlighted that the key issues for Dunkeld and Birnam include protected sites and species, the historic environment, and ancient woodland. This assessment has been updated through a Settlement Boundary Assessment for LDP2. The flood risk has extended and the majority of Dunkeld (and beyond to the west) is within the Dunkeld Battlefield designation.

The SEA highlighted that this a constrained area with only 37% of the land assessed free from or with limited constraints. 63% of the area has a high sensitivity to development. Much of the land along the River Tay corridor has either limited development potential or development should be avoided due to the overlapping of a number of strategic sensitivities including: the presence of the River Tay SAC, surface waters, riparian areas, The Hermitage, Dunkeld House and Murthly garden and designed landscapes, listed buildings, areas at risk from fluvial flooding, ancient and semi-natural woodland inventory sites and category 3.1 prime quality agricultural land. Preservation and enhancement of the

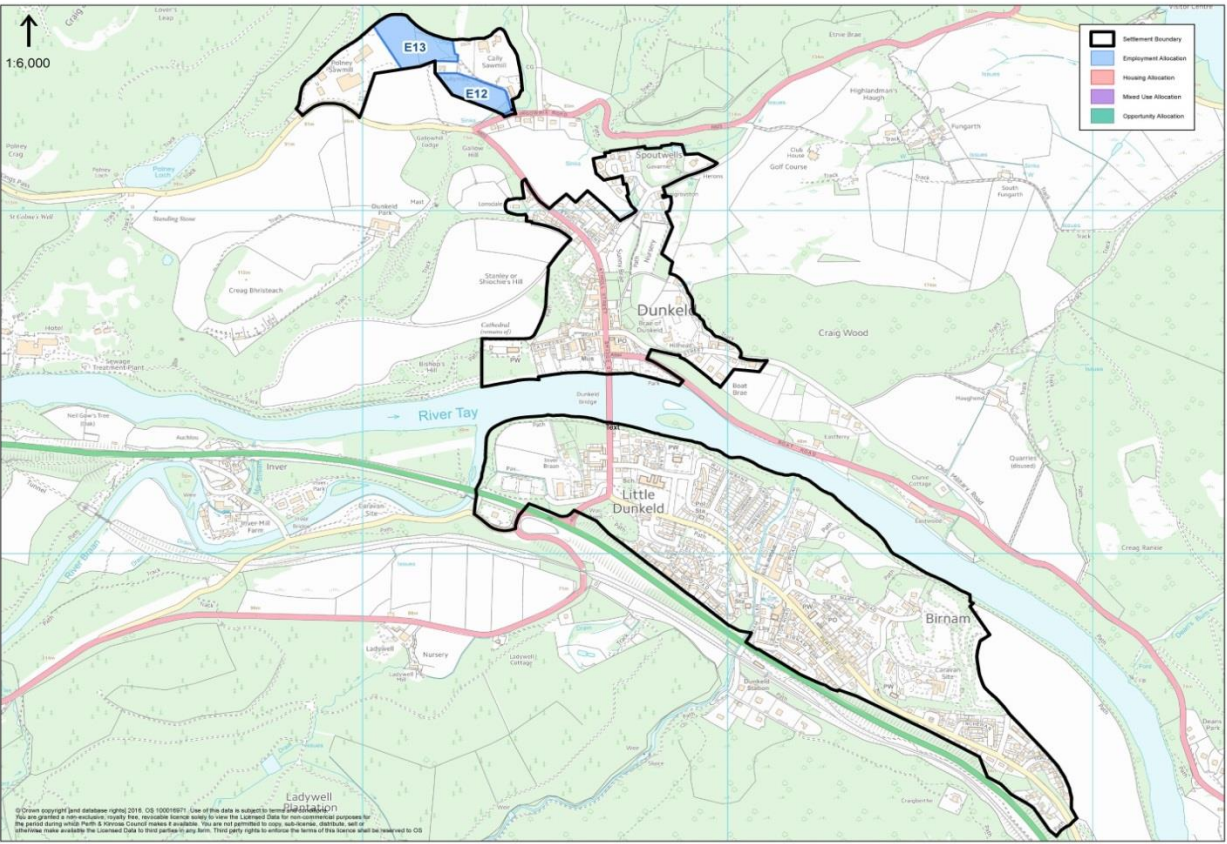
distinctive landscape of the area is important in maintaining community well-being, biodiversity and supporting the local economy (tourism in particular).

Housing and Employment Land Requirement

The Main Issues Report identified a shortfall in the housing land supply to meet the housing land requirement set by the Strategic Development Plan. Following the publication of TAYplan2 there is no longer a shortfall in supply which needs to be addressed and no further action is therefore required.

The potential need for additional employment land in the Highland area amounts to approximately 5ha. Even with the proposed removal of the site at Inver, the existing adopted LDP designations at Aberfeldy and north of Dunkeld are sufficient to meet this identified employment land requirement. No additional land allocations are therefore proposed in Dunkeld and Birnam.

In Dunkeld and Birnam the existing allocations at E12 and E13 Tullymillly will continue. No amendment is proposed to the settlement boundary.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Dunkeld and Birnam there are two allocations that will be carried forward from the previous SEA. The site assessments for these can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Dunkeld and Birnam the site assessments have been

brought together to highlight any significant cumulative impact on the environment. This can be seen below.

Proposals
Biodiversity Flora and Fauna
E12
E13
Overall Impact
Population
E12
E13
Overall Impact
Human Health
E12
E13
Overall Impact
Soil
E12
E13
Overall Impact
Water
E12
E13
Overall Impact
Air
E12
E13
Overall Impact
Climatic Factors
E12
E13
Overall Impact
Material Assets
E12
E13
Overall Impact
Cultural Heritage
E12
E13
Overall Impact
Landscape
E12
E13
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Watercourses are likely to link to the River Tay SAC and there may be potential for impact on priority species, habitats and botanical value of sites. Potential impacts on SAC will require assessment. Ancient and semi-natural woodland is a significant feature of this area and are cited as a special quality or the River TAY NSA at Dunkeld; their protection is important for biodiversity reasons. Impacts could be mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value.

Population

Although not immediately adjacent to the built up area the development of these sites will increase the economic contribution made by the sawmill and other uses at Tullymilny and encourage future opportunities for sustainable economic growth in Dunkeld and Birnam by reducing the need to travel further afield for employment. Cumulative impacts therefore likely to be positive.

Human Health

The majority of the existing population is within easy walking distance of key services in the area as would be much of the land to the north west of Dunkeld. The existing indicative green network around Dunkeld and Birnam is strong with potential to extend woodland areas and improve linkages between the two settlements. However there are potentially negative effects from flood risk and the likely generation of noise and dust from the sawmill and additional development of such uses may affect human health. Cumulative impacts therefore likely to be slightly adverse.

Soil

No effects on prime agricultural land and no known soil stability issues but there may be contamination from the former adjacent employment uses. Potential therefore for a positive cumulative impact as development could help clean up any contamination.

Water

Areas at risk of medium probability flooding. The overall status of surface and ground water bodies in the area is good. A range of pressures are identified on the area's waterbodies including poor output from septic tanks and run off from agricultural land. Additional development has the potential to further impact on water quality if it is not accompanied by appropriate waste water treatment infrastructure. Potential therefore for adverse cumulative impact. Application of LDP policies on the water environment and drainage will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. Intensification of the employment uses in this area, however, could lead to increased vehicular use and / or emissions from industrial processes and therefore higher emission

levels so cumulative impact on air quality likely to be negative. All sites are on or near bus routes which will help mitigate negative impacts.

Climatic Factors

There are services and facilities in nearby Dunkeld which are accessible from the sites reducing the need to travel. Capacity exists within the road network, and the sites have a southern aspect. However there is potential flood risk, contamination and impact on air quality. Overall cumulative impact therefore likely to be slightly adverse.

Material Assets

Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Capacity constraints at WWTWs so overall impact assessed as potentially adverse.

Cultural Heritage

Dunkeld Battlefield to the south. Not immediately adjoining either site so significant adverse impacts unlikely. However both sites share a boundary with the Dunkeld House designed landscape and associated listed buildings so potential for some adverse impact on setting and further encroachment of the settlement into the designed landscape. Additional development to the North West could be in close proximity to the Conservation Area boundary. Any adverse impact on the historic environment will be avoided wherever possible through production of a Design Statement to ensure development is in keeping with the local landscape and to protect the integrity of the sensitive location.

Landscape

Sites are within the River Tay (Dunkeld) National Scenic Area and form part of the setting of Dunkeld. Sites are within the Lower Highland Glens landscape character area and the development of this sloping area, which allows views to adjacent woodland, could adversely affect the key characteristic of this landscape character area. Potential therefore for significant adverse cumulative impact on the landscape. Potential adverse impacts on the NSA can be mitigated by the application of LDP policies on environment and conservation to ensure development is only permitted where it will not adversely affect the integrity of the area.

6.4.10 Cumulative Assessment: Pitlochry

Key Environmental Issues for Pitlochry

The SEA of LDP 1 assessed the key sensitivities and development pressures within Pitlochry. This highlighted that the key issues for Pitlochry include protected sites and species, surface waters, the historic environment, woodland and topography constraints. This assessment has been updated through a Settlement Boundary Assessment for LDP2. Flood risk area is slightly extended and the Ben Vrackie Special Landscape Area adjoins the northern boundary of the settlement.

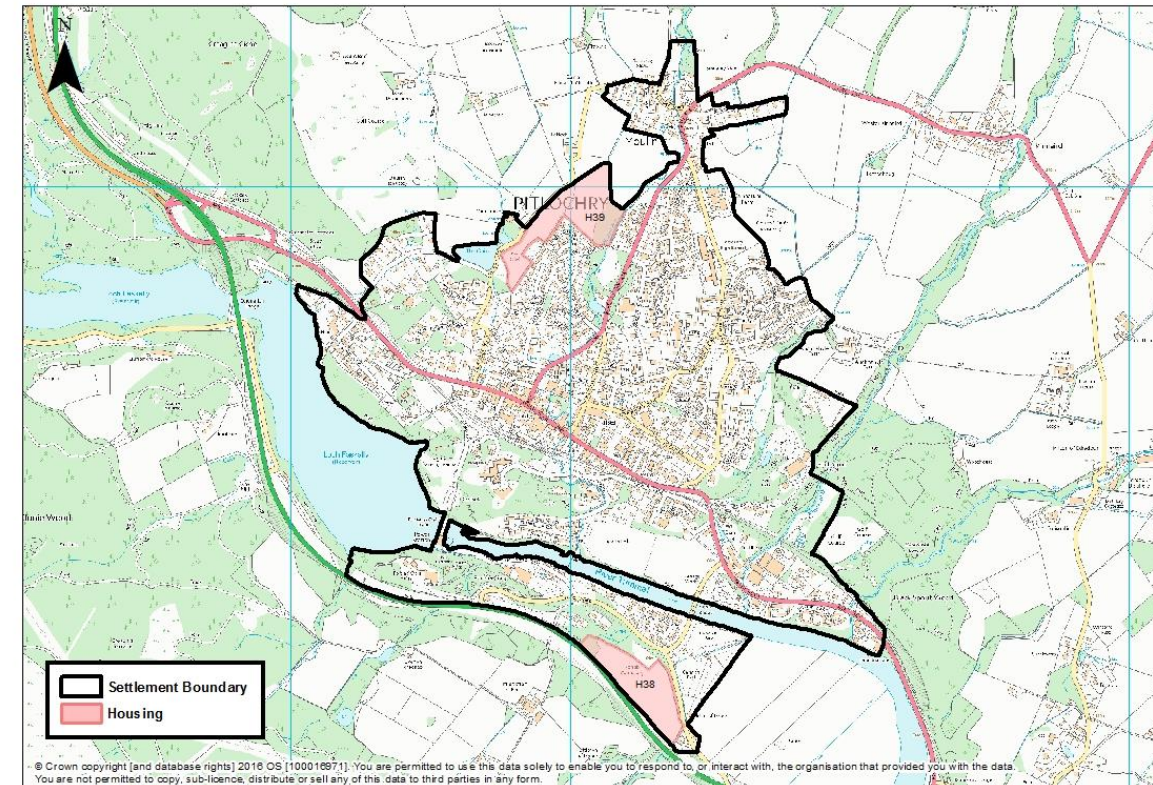
Much of the area is assessed as having development potential in that it is either free from or has limited strategic constraints. Potential for expansion is identified to the north, north east, south west and south towards the A9. However, there are high risk constraints which could affect the sites proposed for development including the risk of fluvial flooding and impact on the historic environment. Preservation and enhancement of the distinctive landscape of this area is important in maintaining community well-being, biodiversity and supporting the local economy (tourism in particular).

Housing and Employment Land Requirement

The Main Issues Report identified a shortfall in the housing land supply to meet the housing land requirement set by the Strategic Development Plan. Following the publication of TAYplan2 there is no longer a shortfall in supply which needs to be addressed and no further action is therefore required.

In Pitlochry the existing sites at H38 Middleton of Fonab and H39 Robertson Crescent will be extended in order to help improve the viability and deliverability of these sites. Some changes will be made to the existing land allocations in the area south of the railway to more fully reflect their current land use and potential. This may allow some scope for windfall housing development.

The potential need for additional employment land in the Highland area amounts to approximately 5ha. Even with the proposed removal of the site at Inver, the existing adopted LDP designations at Aberfeldy and north of Dunkeld are sufficient to meet this identified employment land requirement. No employment land allocations are therefore proposed in Pitlochry.



Inset map of changes to existing allocations



A key requirement of SEA is to consider the cumulative impact of development within an area. In Pitlochry there are two allocations that will be carried forward from the previous SEA. The site assessments for these can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Pitlochry, and highlight any significant cumulative impact on the environment, the site assessments for the proposed extensions to the allocated sites have been brought together with an assessment of the potential impact of reviewing the existing employment and open space allocations to the south of the railway. This can be seen below.

Proposals
Biodiversity Flora and Fauna
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Population
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Human Health
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Soil
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Water
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Air
H38 extended
H39 extended
Review of existing allocations

south of the railway
Overall Impact
Climatic Factors
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Material Assets
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Cultural Heritage
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact
Landscape
H38 extended
H39 extended
Review of existing allocations south of the railway
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Potential impacts on SAC will require assessment. Also potential for impact on priority species and habitats, including riparian areas. Adverse impact of native woodland loss from the extension to H38. Significant and defined public benefit would require to be demonstrated and compensatory planting provided for any woodland loss in line with Scottish Government Control of Woodland Removal policy. The review of existing allocations south of the railway will extend the area covered by the open space designation which will help retain and protect habitat. Potential for some mitigation of impacts via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value. Overall cumulative impact likely to be neutral.

Population

Cumulative impacts generally positive based on access to and provision of a choice of housing opportunities and the range of services and facilities within Pitlochry although these are less accessible from H38. Updating of the existing employment land allocation south of the railway may result in

opportunities for additional small scale housing development which would be well located for access to the town centre. No negative cumulative impacts identified.

Human Health

Potentially negative effects from flood risk on both of the allocated sites and some of the land south of the railway. Potential for impacts on open space. Effects on the accessibility of public transport and access to managed open spaces and facilities generally positive. The existing green network is good but there are opportunities to enhance it to the north, and improve connectivity between ancient woodland sites and back into the town centre through development at H38 and at any potential windfall sites south of the railway. However, there is a potential noise issue from the A9 at H38 and the woodland area which forms the extension to H38 was identified in the previous assessment as forming a buffer to the employment land allocation to the west. Overall cumulative impact therefore likely to be adverse. Effects can be mitigated through the application of LDP policies on transport and accessibility and Flood Risk Assessment. Also through the application of policies on community facilities, sport and recreation and the retention and enhancement of existing core paths and path networks.

Soil

No effects on prime agricultural land and no known soil stability issues. Potential contamination issue at H38 from the cemetery and both extensions to allocated sites involve the development of greenfield land. Much of the land south of the railway is also greenfield and so the impact of any windfall development would also be adverse. Overall cumulative impact likely to be adverse.

Water

Overall status of the water environment is good apart. Point source pollution from sewage disposal is a pressure on the River Tay. The provision of increased sewage treatment through new development could impact positively on water quality. Potential risk of both surface and river flooding. Application of LDP policies on the water environment and drainage will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required. No change is proposed to the existing open space designation at the areas at highest risk of flooding south of the railway. There may be a slightly higher risk of flooding by including the extension to H39 due to the risk from the watercourse to the east of this area although this is unlikely to result in a significantly adverse cumulative impact.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. The extension to H39 is to allow access rather than increase density on the site. The change in allocations south of the railway may result in small areas available for windfall housing development. Any increase in the number of houses is likely to lead to more car use and therefore higher emission levels so cumulative impact on air quality likely to be negative.

Climatic Factors

There are services and facilities in the town centre which are accessible from the sites reducing the need to travel, and capacity exists within the road network. However there is a mix of site orientations

and also potential flood risk. Overall cumulative impact therefore likely to be slightly adverse. Flood risk could possibly be mitigated through appropriate site layout and / or Flood Risk Assessment.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services, and the potential to increase and enhance existing green networks. The extension of H38 could result in loss of woodland which would need to be mitigated through a requirement for compensatory planting. The extension of H38 will also present an opportunity for an extension to cemetery provision as part of the overall scheme for the site. The extension of H39 will help facilitate the delivery of the site as it will enable access into the wider site which may otherwise be difficult due to topography. Cumulative impact therefore likely to be positive.

Cultural Heritage

There are no designations the sites themselves and neither extension area is considered likely to increase the risk of impact on the historic environment. However, there is the risk of impact on the setting of the Moulin Conservation Area at H39, and on listed buildings and archaeological features at H38 and south of the railway. Cumulative impact on the historic environment could be an issue. Important therefore that any adverse impact on the historic environment is avoided wherever possible through appropriate scheme location and design.

Landscape

The extension to H39 is within the Ben Vrackie Special Landscape Area although this only forms a small part of the whole site. The extension area will be restricted to access only; houses will not be permitted to be built on the extension area as they would be more widely visible than on the rest of the site and would increase the risk of coalescence with Moulin. Potential adverse impacts on the SLA can be mitigated by the application of LDP policies on Managing Landscape Change to ensure high quality design and maintain the character of the settlement. No landscape designations at H38 although development on this site would be highly visible for a short duration on the A9. The mature woodland to the north would help reduce impact of development and the site could be screened although care would have to be taken not to screen northward views toward Ben Vrackie. Much of the land south of the railway is within woodland setting which would help screen any additional small scale development.

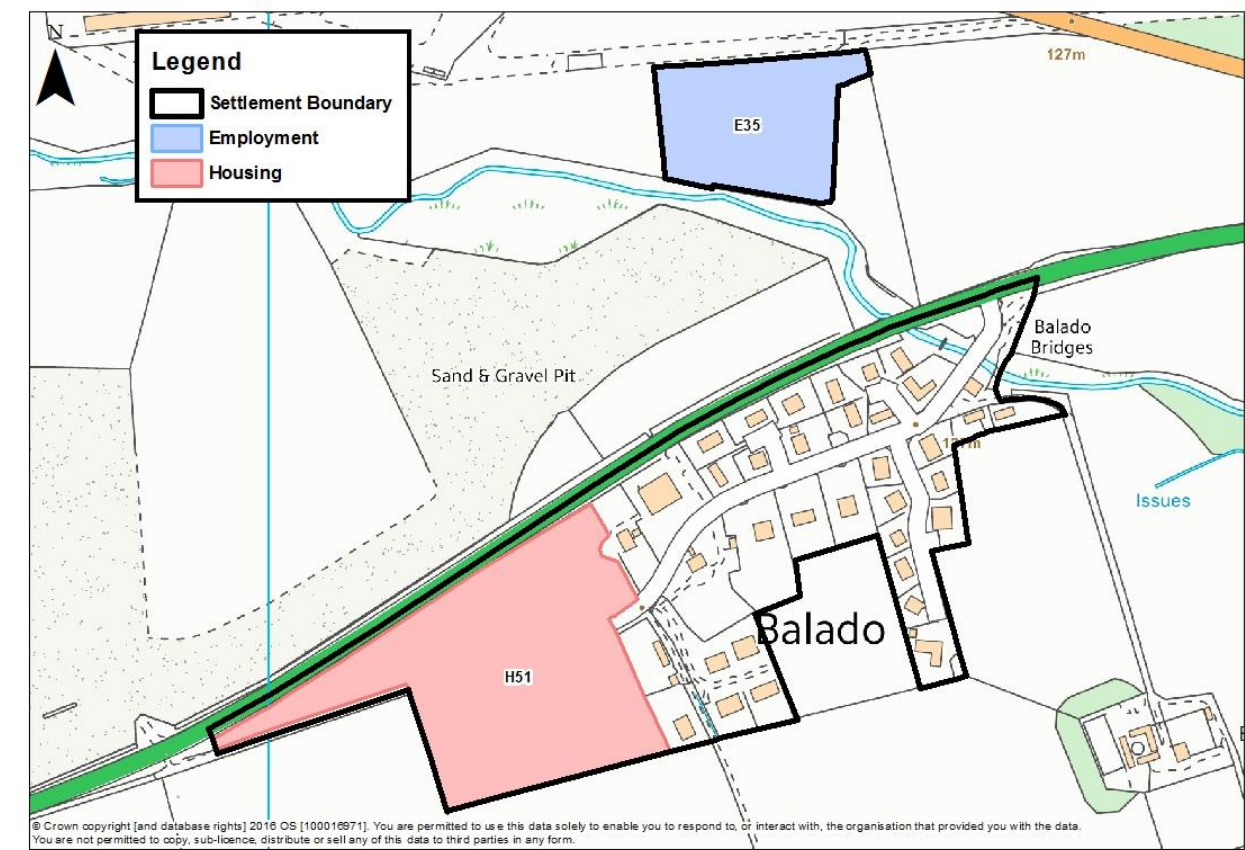
6.4.11 Cumulative Assessment: Balado

Key Environmental Issues for Balado

The SEA of LDP 1 assessed the key sensitivities and development pressures within Kinross and Milnathort and this included Balado and Hattonburn. This highlighted that the key issues for this area include surface waters and flooding, prime agricultural land and biodiversity, in particular key bird populations. This highlighted that much of the area was assessed as having development potential in that it was either free from or had limited strategic constraints. Sites lie within the Loch Leven Valley catchment so there is a possible impact on this that will be mitigated through: Construction Method Statement to be provided where the development site will affect a watercourse; the methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on Loch Leven SPA; and the SUDS for development proposals should include sufficient attenuation to protect those watercourses which flow into Loch Leven from erosion during periods of heavy rainfall, along with application of Policy EP7: Drainage within the Loch Leven Catchment.

Housing and Employment Land Requirement

The Proposed Plan for the LDP proposes to retain the allocations H51 and E35 from the current LDP.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Balado there are 2 allocations that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Balado the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Proposed LDP
Biodiversity Flora and Fauna
E35
H51
Overall Impact
Population
E35
H51
Overall Impact
Human Health
E35
H51
Overall Impact
Soil
E35
H51
Overall Impact
Water
E35
H51
Overall Impact
Air
E35
H51
Overall Impact
Climatic Factors
E35
H51
Overall Impact
Material Assets
E35
H51
Overall Impact
Cultural Heritage
E35
H51
Overall Impact
Landscape

E35
H51
Overall Impact

Conclusions

Biodiversity Flora and Fauna

It is envisaged that the new development would incorporate formal and informal green spaces and recreational areas.

The sites lie within the Loch Leven Valley catchment so there is a possible impact on this that will be mitigated through:

Construction Method Statement to be provided where the development site will affect a watercourse.

Methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on Loch Leven SPA.

The SUDS for development proposals should include sufficient attenuation to protect those watercourses which flow into Loch Leven from erosion during periods of heavy rainfall.

Existing policy measures within the LDP which will provide an additional safeguard against any impact include: Policy NE1A: International Nature Conservation Sites, Policy EP3A: Water Quality, EP3B: Foul Drainage Policy, EP3C: Surface Water Drainage, Policy EP7: Drainage within the Loch Leven Catchment Area, Loch Leven SPA and Ramsar Site Advice for planning applicants for phosphorous and foul drainage in the catchment Supplementary Guidance.

Population

Impacts generally slightly negative for H51 based on limited range of services and facilities within Balado accessible from the proposed sites; however there is possible provision of additional employment opportunities through E35.

Human Health

Application of Policy CF1B will ensure appropriate provision of informal and formal open space alongside any development proposals. Impact of noise from the A977 on H51 could have a negative impact and will need to be mitigated by noise attenuation measures along the A977.

Soil

The employment site is a brownfield site and the radar housing should be considered for reuse, whilst neither H51 or E35 affect prime agricultural land or peat soils meaning this strategy could have a slightly positive impact on soils.

Water

Part of both E35 and H51 lie within the 1:200 year fluvial flood risk area, therefore a basic FRA and DIA are required at planning application stage to define area at risk and appropriate detailed design layout and levels.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. Sites are on or near bus stops.

Climatic Factors

Impacts generally negative based on limited range of services and facilities within Balado accessible from the proposed sites increasing the need for travel. However H51 is south-facing which provides opportunities to make best use of solar gain through the detailed layout and siting of the new development.

Material Assets

Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Proportional developer contributions will be sought towards primary education provision. There are no significant constraints to development.

Cultural heritage

A very small part of H51 is covered by non-designated archaeology and on E35 consideration should be given to archaeological assessment and the potential for retaining the golf ball.

Landscape

H51and E35 are both highly visible site from the A977, so on E35 consideration should be given to woodland planting associated to the watercourse and there is a need to consider whether the golf ball can be kept , and on H51 a landscape plan and proposals for implementation are required.

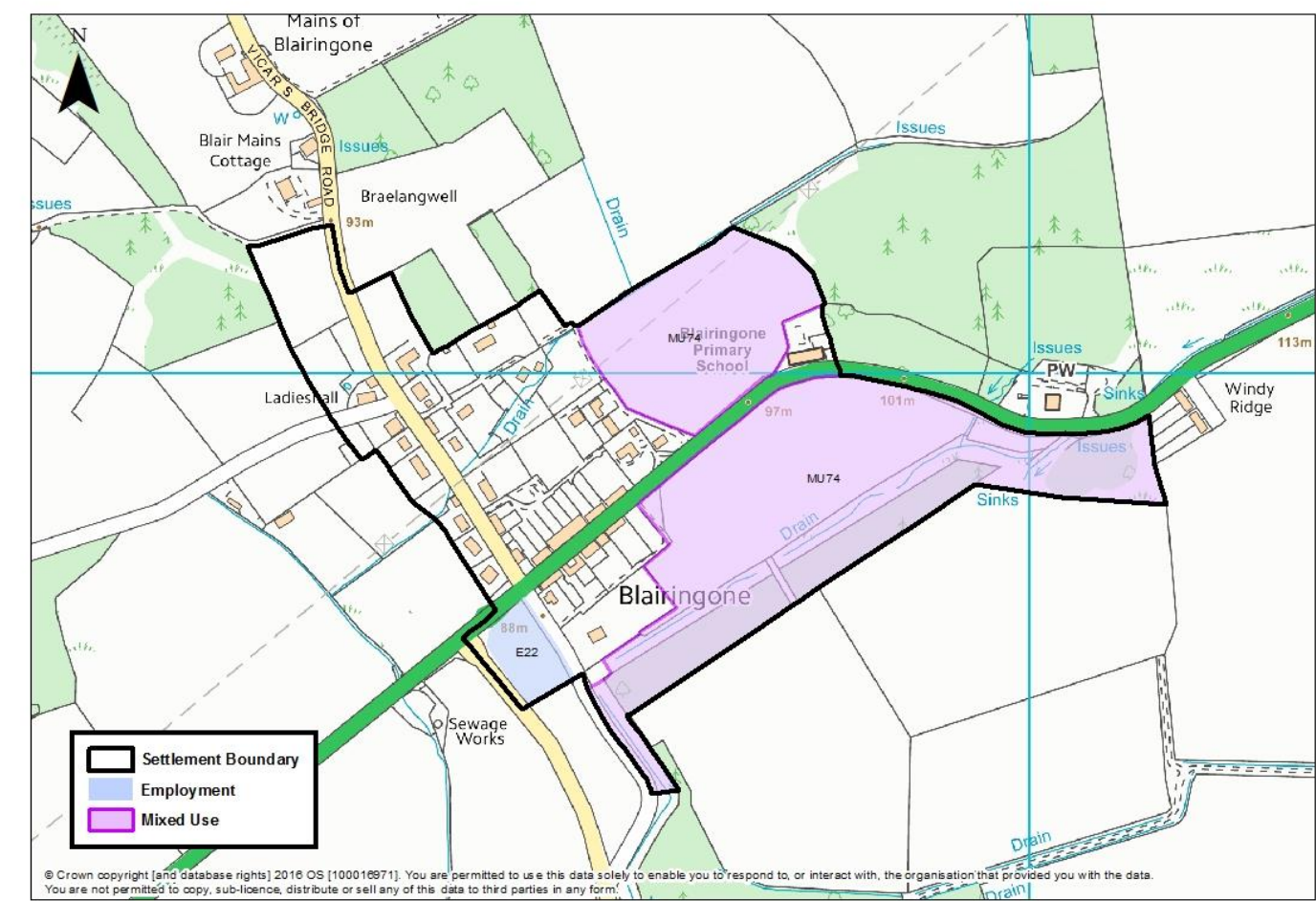
6.4.12 Cumulative Assessment: Blairingone

Key Environmental Issues for Blairingone

The SEA of LDP 1 assessed the key sensitivities and development pressures within Blairingone. This highlighted that much of the area was assessed as having development potential in that it was either free from or has limited strategic constraints and this highlighted that 97% of the land (and this is the land that is likely to be considered for development being adjacent or close to the existing settlement) is either free of or has 1-2 sensitivities present and the remaining 3% (land further outwith the settled area) represents areas where there are 3-4 sensitivities.

Housing and Employment Land Requirement

The Proposed Plan has decided for Blairingone that the scale of development should retain the scale (30 homes) in line with the existing LDP but on the wider site that gained a favourable response from the public and key agencies in the additional sites consultation February 2017.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Blairingone there are 2 allocations that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E. In order to develop an understanding of the

potential cumulative impacts of development in Blairingone the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below in the table.

Proposed Plan
Biodiversity Flora and Fauna
MU74
E22
Overall Impact
Population
MU74
E22
Overall Impact
Human Health
MU74
E22
Overall Impact
Soil
MU74
E22
Overall Impact
Water
MU74
E22
Overall Impact
Air
MU74
E22
Overall Impact
Climatic Factors
MU74
E22
Overall Impact
Material Assets
MU74
E22
Overall Impact
Cultural Heritage
MU74
E22
Overall Impact
Landscape
MU74
E22
Overall Impact

Conclusions

Biodiversity Flora and Fauna

It is envisaged that the new development would incorporate formal and informal green spaces and recreational areas.

Existing measures within the LDP will provide an additional safeguard against any impact of this policy include: Policy NE1A: International Nature Conservation Sites, Policy EP3A: Water Quality, EP3B: Foul Drainage Policy, EP3C: Surface Water Drainage.

Population

Impacts generally slightly negative for H74 based on limited range of services and facilities within Blairingone accessible from the proposed sites; however there is possible provision of additional employment opportunities through E22.

Option 2 could have a significantly negative impact given the scale of development proposed based on the limited range of services and facilities within Blairingone. There is mitigation proposed in the proposal through possible benefits of a village hall and store however it is unlikely this level of development could support this.

Human Health

Application of Policy CF1B ensures appropriate provision of informal and formal open space alongside any development proposals. There will be no built development in the area affected by the pylons on H74.

Soil

On H74 the land was previously used for mining and although an assessment was carried out for this site an updated ground conditions survey will be required. Otherwise though the sites do not have peat content or affect prime agricultural land.

Water

There are no SEPA flood risk map areas that would affect either of the sites.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. Sites are on or near bus stops.

Climatic Factors

Impacts generally negative based on limited range of services and facilities within Blairingone accessible from the proposed sites increasing the need for travel. However H74 is south-facing which provides opportunities to make best use of solar gain through the detailed layout and siting of the new development.

Material Assets

Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Development here could support the primary education provision here as the primary school roll is small and well under its capacity. There are no significant constraints to development.

Cultural heritage

0.19ha of E22 is covered by non-designated archaeology so may require archaeological investigation.

Landscape

A landscape framework is required for E22 to help visually contain the site.

The David Tyldesley and Associates Settlement Strategy Landscape Capacity Study identifies the land to the south is prominent from the A977 descending from the church. An LVIA should be required informing proposals. The scale of this proposal could also have an impact on the character of the village.

6.4.13 Cumulative Assessment: Kinross

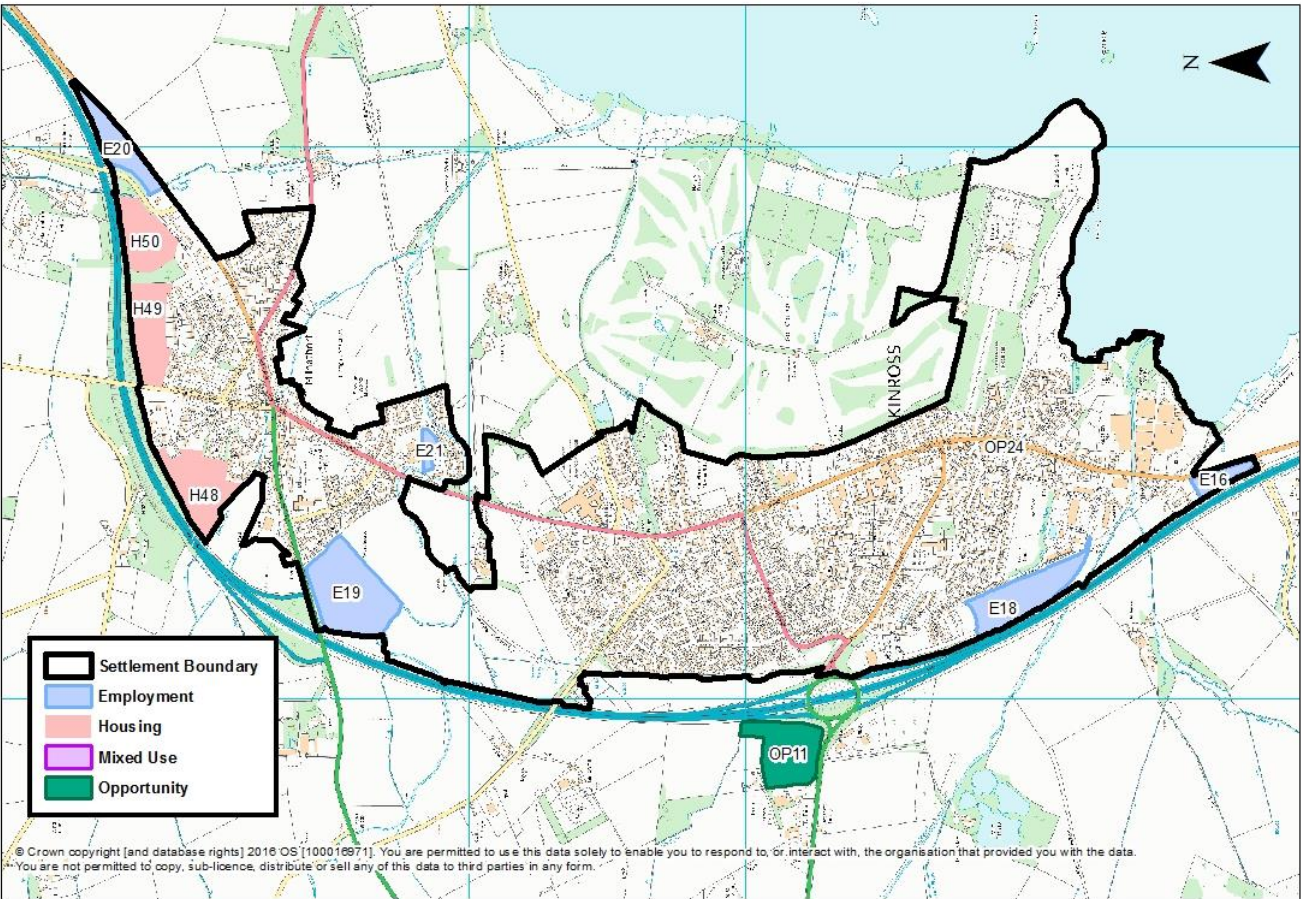
Key Environmental Issues for Kinross

The SEA of LDP 1 assessed the key sensitivities and development pressures within Kinross. This highlighted that the key issues for Milnathort and Kinross include surface waters and flooding, agricultural land and biodiversity, in particular key bird populations. Much of the area was assessed as having development potential in that it was either free from or has limited strategic constraints. E16 to the south of the settlement is the only allocation that lies close to sensitive area lying close to Loch Leven. Sites all lie within the Loch Leven Valley catchment so there is a possible impact on this that will be mitigated through: Construction Method Statement to be provided where the development site will affect a watercourse; the methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on Loch Leven SPA; and the SUDS for development proposals should include sufficient attenuation to protect those watercourses which flow into Loch Leven from erosion during periods of heavy rainfall, along with application of Policy EP7: Drainage within the Loch Leven Catchment.

Housing and Employment Land Requirement

The Proposed Plan identifies that there is no need to identify land to accommodate additional homes in the years to 2028 over and above what is already allocated in the current LDP. The Proposed Plan for Kinross is therefore for no change from the current LDP. OP15 as a 3.5 hectare site for a Primary School is allocated in the current Local Development Plan. This site is no longer required by the Council for a new Primary school with a preference to replace the existing Kinross Primary school (to cope with additional demands) within its existing site.

Preferred Option: To continue with existing allocations in the adopted plan (OP24 Kinross Town Hall, E18 Station Road South, and E16 South Kinross, but remove site OP15) and adjust the settlement envelope accordingly.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Kinross there are 8 allocations that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Kinross the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Proposed LDP
Biodiversity Flora and Fauna
OP24
E16
E18
Overall Impact
Population
OP24
E16
E18
Overall Impact
Human Health

OP24
E16
E18
Overall Impact
Soil
OP24
E16
E18
Overall Impact
Water
OP24
E16
E18
Overall Impact
Air
OP24
E16
E18
Overall Impact
Climatic Factors
OP24
E16
E18
Overall Impact
Material Assets
OP24
E16
E18
Overall Impact
Cultural Heritage
OP24
E16
E18
Overall Impact
Landscape
OP24
E16
E18

Overall Impact

Conclusions

Preferred Option

Biodiversity Flora and Fauna

It is envisaged that the new development would incorporate formal and informal green spaces and recreational areas.

The sites lie within the Loch Leven Valley catchment so there is a possible impact on this that will be mitigated through:

Construction Method Statement to be provided where the development site will affect a watercourse.

Methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on Loch Leven SPA.

The SUDS for development proposals should include sufficient attenuation to protect those watercourses which flow into Loch Leven from erosion during periods of heavy rainfall.

Existing policy measures within the LDP will provide an additional safeguard against any impact include: Policy NE1A: International Nature Conservation Sites, Policy EP3A: Water Quality, EP3B: Foul Drainage Policy, EP3C: Surface Water Drainage, Policy EP7: Drainage within the Loch Leven Catchment Area, Loch Leven SPA and Ramsar Site Advice for planning applicants

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Kinross accessible from the proposed sites, access to and possible provision of additional employment opportunities

Human Health

Application of Policy CF1B ensures appropriate provision of informal and formal open space alongside any development proposals. Possible noise impact from the motorway but noise impact assessment and noise attenuation measures will be required adjacent to the motorway.

Soil

There is an effect on prime agricultural land and loss of greenfield land with allocations outwith the existing settlement however Op24 will reuse existing derelict buildings.

Water

Where appropriate detailed FRA/DIA is required at planning application stage to define area at risk and appropriate detailed design layout, whilst a 6m maintenance buffer strip from watercourses is also required.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites are on or near bus stops.

Climatic Factors

There are services and facilities in the town centre and at the north end of Kinross at the Loch Leven Community campus where the High School, library and sports and leisure facilities are located. Due to the spread of facilities allocations are within easy active travel distance of one centre rather than both, however there are good public transport links to them and capacity exists within the road network. Sites layout and design should make most of southerly aspects, whilst planting and noise attenuation measures will also provide some shelter from prevailing winds.

Material Assets

Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Proportional developer contributions will be sought towards primary education provision. There are no significant constraints to development though.

Cultural heritage

On E16, E18 noise attenuation measures should avoid obscuring views to the castle. Kinross Town hall OP24 also offers potential for reuse of a listed building and there is a specific developer requirement for a sympathetic scheme for the restoration and reuse of the listed buildings.

Landscape

PM1 Placemaking policy will ensure proposals have a high standard of layout and design whilst site specific requirements for planting should help improve lessen impact of the M9 and improve setting for development. Appropriate landscaping and woodland planting will also be required on E18. Whilst development proposed adjacent to the motorway requires a landscape framework and should avoid obscuring views of Loch Leven, the Lomond Hills or the Ochil Hills.

6.4.14 Cumulative Assessment: Milnathort

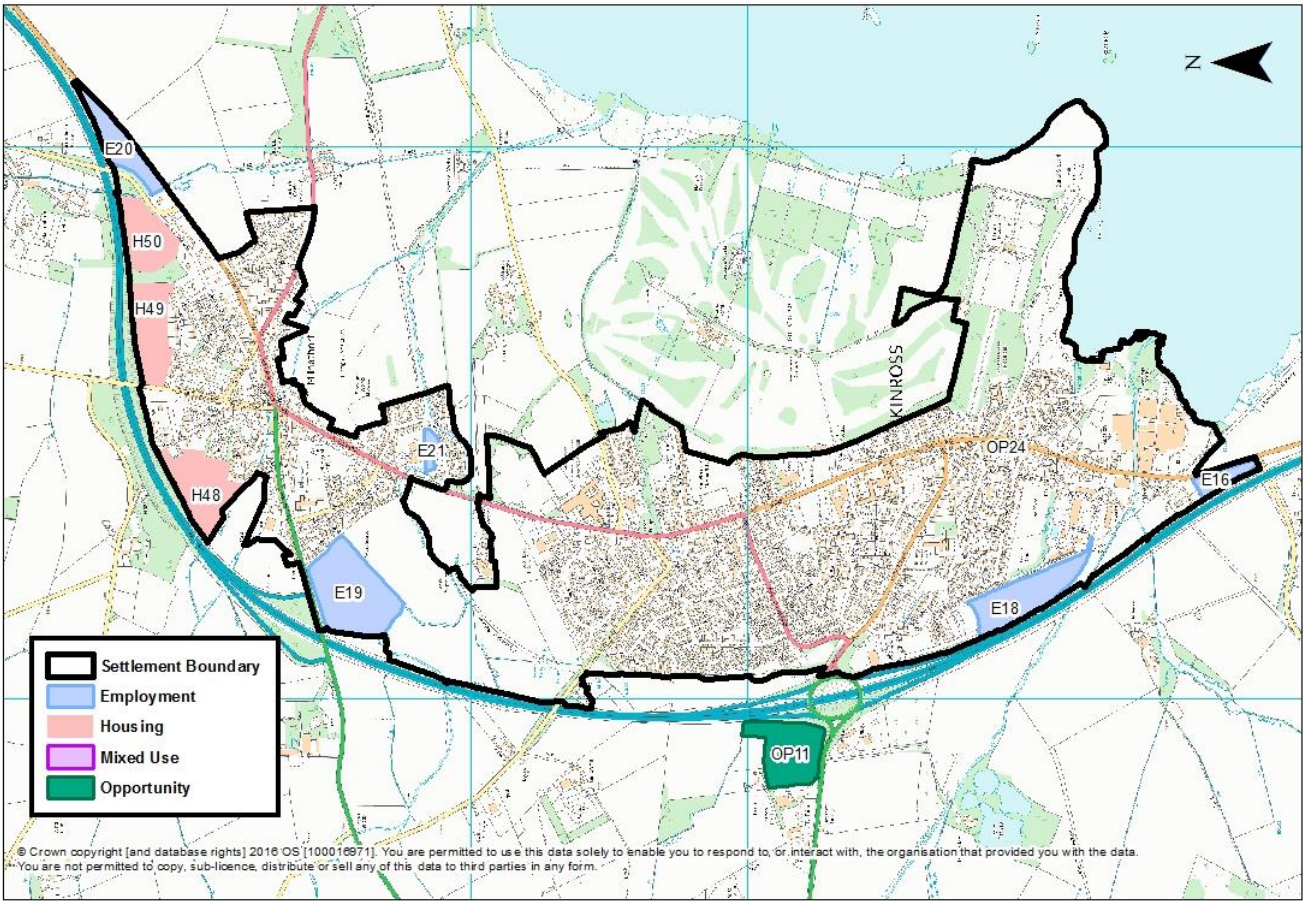
Key Environmental Issues for Milnathort

The SEA of LDP 1 assessed the key sensitivities and development pressures within Milnathort. This highlighted that the key issues for Milnathort and Kinross include surface waters and flooding, prime agricultural land and biodiversity, in particular key bird populations. Much of the area was assessed as having development potential in that it was either free from or has limited strategic constraints. Sites lie within the Loch Leven Valley catchment so there is a possible impact on this that will be mitigated through: Construction Method Statement to be provided where the development site will affect a watercourse; the methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on Loch Leven SPA; and the SUDS for development proposals should include sufficient attenuation to protect those watercourses which flow into Loch Leven from erosion during periods of heavy rainfall, along with application of Policy EP7: Drainage within the Loch Leven Catchment.

Housing and Employment Land Requirement

The Proposed Plan identifies that there is no need to identify land to accommodate additional homes in the years to 2028 over and above what is already allocated in the current LDP. In the case of E19 and Op16 the planning permission on this site has expired, and there are new owners. At the time the 2013 planning application was recommended by the case officer for refusal, as it was considered not to be in accordance with the development plan. It was approved against the officer's recommendation because Members considered it to be consistent with the strategy of the Proposed Plan LDP. Once consented, the 2013 proposal for the site was to be sold to help fund the relocation of the Forth Wines Limited business to a new site elsewhere in Kinross. It was suggested that this proposal would allow the business to remain in Kinross retaining the staff that live locally. Inverarity Morton who have taken over Forth Wines have indicated that they are not looking to use this site to fund a relocation of premises elsewhere in Kinross. Therefore the reason to allow cross funding residential development within Op16 is no longer applicable.

The Proposed Plan therefore presents the following: keeping existing allocations H48 Pitdownie, H49 Pace Hill, and H50 Old Perth Road (which has PP), E20 old Perth Road, E21 Auld Mart Road, whilst Op16 Stirling Road is merged into a wider Op16 and E19 Stirling Road employment allocation with another amendment from the existing LDP to remove the eastern triangle area that lies within functional flood plain.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Milnathort there are 7 allocations that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E In order to develop an understanding of the potential cumulative impacts of development in Milnathort the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Proposed LDP	
Biodiversity Flora and Fauna	
H48	
H49	
H50	
E20	
E21	
Op16+E19	
Overall Impact	
Population	
H48	
H49	
H50	
E20	

E21
OP16 + E19
Overall Impact
Human Health
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact
Soil
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact
Water
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact
Air
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact
Climatic Factors
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact
Material Assets
H48

H49
H50
E20
E21
OP16 +E19
Overall Impact
Cultural Heritage
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact
Landscape
H48
H49
H50
E20
E21
OP16 +E19
Overall Impact

Conclusions

Preferred Option

Biodiversity Flora and Fauna

It is envisaged that the new development would incorporate formal and informal green spaces and recreational areas. The sites lie within the Loch Leven Valley catchment so there is a possible impact on this that will be mitigated through:

Construction Method Statement to be provided where the development site will affect a watercourse.

Methodology should provide measures to protect the watercourse from the impact of pollution and sediment so as to ensure no adverse effects on Loch Leven SPA.

The SUDS for development proposals should include sufficient attenuation to protect those watercourses which flow into Loch Leven from erosion during periods of heavy rainfall.

Existing measures within the LDP will provide an additional safeguard against any impact of this policy include: Policy NE1A: International Nature Conservation Sites, Policy EP3A: Water Quality, EP3B: Foul Drainage Policy, EP3C: Surface Water Drainage, Policy EP7: Drainage within the Loch Leven Catchment Area, Loch Leven SPA and Ramsar Site Advice for planning applicants for phosphorous and foul drainage in the catchment Supplementary Guidance.

Water margin enhancement is required on H49.

Also provision of screen planting required on H48, 49, 50, and a landscaping framework on Op16 will help mitigate impacts.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Milnathort accessible from the proposed sites, access to and possible provision of additional employment opportunities.

Human Health

Application of Policy CF1B ensures appropriate provision of informal and formal open space alongside any development proposals. Possible noise impact from the motorway but noise impact assessment and noise attenuation measures will be required adjacent to the motorway.

Soils

There is an effect on prime agricultural land and loss of greenfield land with allocations outwith the existing settlement. Good soils should be reused elsewhere in the locality. There is a potential contamination issue on H48 which will require a scheme to deal with contamination to include nature, extent and types, and measures to treat/remove.

Water

Reduced area of E20 affected by SEPA medium flood risk now just an area towards the western edge of the site. Within Op16 there are no areas affected by SEPA medium river flood risk as the eastern area (triangular part) here that is within the functional flood plain has been removed from the LDP. On E19 there is a requirement to investigate restoration of the existing culvert whilst a 6m maintenance buffer strip from watercourses is also required. Elsewhere where appropriate detailed FRA is required at planning application stage to define area at risk and appropriate detailed design layout.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites are on or near bus stops.

Climatic Factors

There are services and facilities in the town centre which are accessible from all the sites reducing the need to travel and capacity exists within the road network. Sites layout and design should make most of southerly aspects, whilst planting and noise attenuation measures will also provide some shelter from prevailing winds.

Material Assets

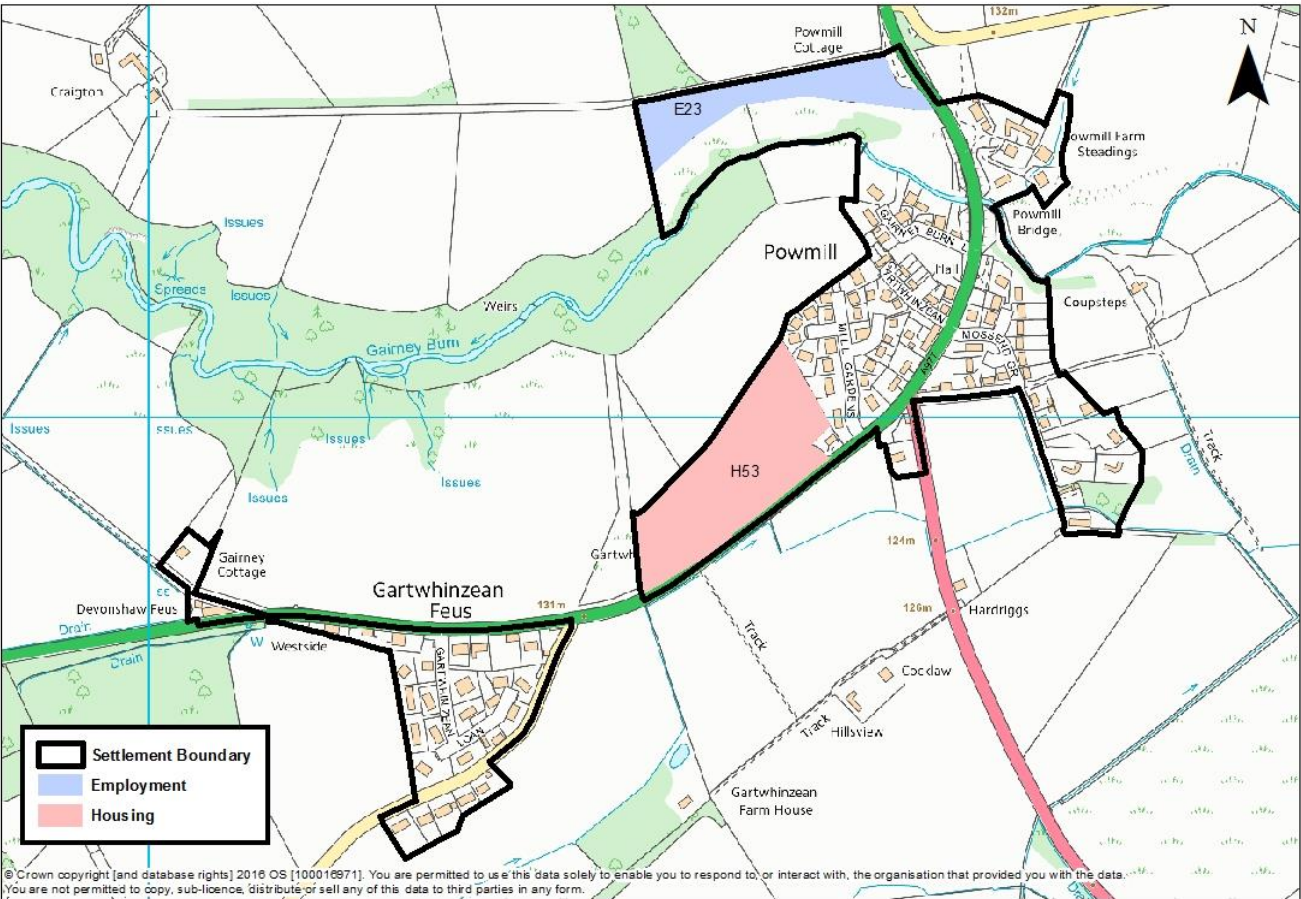
Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Proportional developer contributions will be sought towards primary education provision as the primary school is nearing capacity. There are no significant constraints to development though.

Cultural heritage

E20 requires archaeological investigation, and the noise attenuation measures should be well designed and avoid obscuring views of the castle. Of significance is the setting of the B Listed Orwell Parish Church and H48 and H49 scheme design and layout needs to be sensitive to this feature.

Landscape

PM1 Placemaking policy will ensure proposals have a high standard of layout and design whilst site specific requirements for planting should help improve the setting of and lessen impact of the M9. On E20 noise attenuation measures should avoid obscuring views of Loch Leven, the castle, the Loch Lomond Hills or the Ochil Hills.



6.4.15 Cumulative Assessment: Powmill

Key Environmental Issues for Powmill

The SEA of LDP 1 assessed the key sensitivities and development pressures within Kinross and Milnathort but not within the non-tiered settlements such as Powmill. Powmill lies outwith the Loch Leven Valley catchment so the key environmental considerations are flood risk, and landscape related.

Housing and Employment Land Requirement

The Proposed Plan identifies that there is no need to identify land to accommodate additional homes in the years to 2028 over and above what is already allocated in the current LDP. The Proposed Plan for Powmill is therefore for no change from the current LDP. E23 is a 1.5 hectare site for employment uses and H53 is a 3.2 hectare site for housing and both are allocated in the current Local Development Plan.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Powmill there are 2 allocations that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Kinross the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Proposed LDP
Biodiversity Flora and Fauna
E23
H53
Overall Impact
Population
E23
H53
Overall Impact
Human Health
E23
H53
Overall Impact
Soil

E23
H53
Overall Impact
Water
E23
H53
Overall Impact
Air
E23
H53
Overall Impact
Climatic Factors
E23
H53
Overall Impact
Material Assets
E23
H53
Overall Impact
Cultural Heritage
E23
H53
Overall Impact
Landscape
E23
H53
Overall Impact

Conclusions

Preferred Option

Biodiversity Flora and Fauna

It is envisaged that the new development would incorporate formal and informal green spaces and recreational areas.

Population

Impacts generally neutral based on positive of access to and provision of a choice of housing opportunities, but limited range of services and facilities accessible from the proposed sites. E23 has potential to provide additional employment opportunities. The current spare capacity of Fossoway primary is limited so developer contributions will be sought towards primary education provision.

Human Health

Application of Policy CF1B ensures appropriate provision of informal and formal open space alongside any development proposals.

Soil

There is an effect on loss of greenfield land with allocations outwith the existing settlement.

Water

Where appropriate detailed FRA/DIA is required at planning application stage to define area at risk and appropriate detailed design layout, whilst a 6m maintenance buffer strip from watercourses is also required.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites are near bus stops.

Climatic Factors

There are limited facilities in Powmill with the milk bar and a small shop. Sites layout and design should make most of southerly aspects, whilst planting and noise attenuation measures will also provide some shelter from prevailing winds.

Material Assets

Includes a wide range of issues but overall impacts likely to be neutral. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping retain and enhance employment in the area. Proportional developer contributions will be sought towards primary education provision. There are no significant constraints to development though.

Cultural heritage

There are no significant cultural heritage impacts envisaged.

Landscape

There are no significant landscape impacts envisaged. H53 is a brownfield site so its development will be positive. It is an important site for the village and its prominence means it will require careful design/layout and a landscape framework to help integrate it.

PM1 Placemaking policy will ensure proposals have a high standard of layout and design. Appropriate landscaping will also be required.

6.4.15 Cumulative Assessment: Auchterarder

Key Environmental Issues for Auchterarder

The SEA of LDP 1 assessed the key sensitivities and development pressures within Auchterarder. This highlighted that the key issues for Auchterarder include surface water; prime agricultural land; ancient and semi-natural woodland; protected sites; and elevation and slope. This assessment has been updated through a settlement boundary assessment for LDP2. Flood risk data has been updated showing low risk of flooding from the Ruthven Water to the east of the settlement over a wider area than before; and the settlement lies on the northern fringe of the Ochil Hills Special Landscape Area.

Much of the area is assessed as having development potential, notably to the north and east of the settlement. The land to the west has limited development potential because of proximity to the Gleneagles garden and designed landscape and Ancient Woodland Inventory sites – some of this land adjoins areas more sensitive to development and therefore development here should be avoided. Some potential exists to the south up to the A9 but this becomes limited or constrained due to potential risk of flooding from the Ruthven Water.

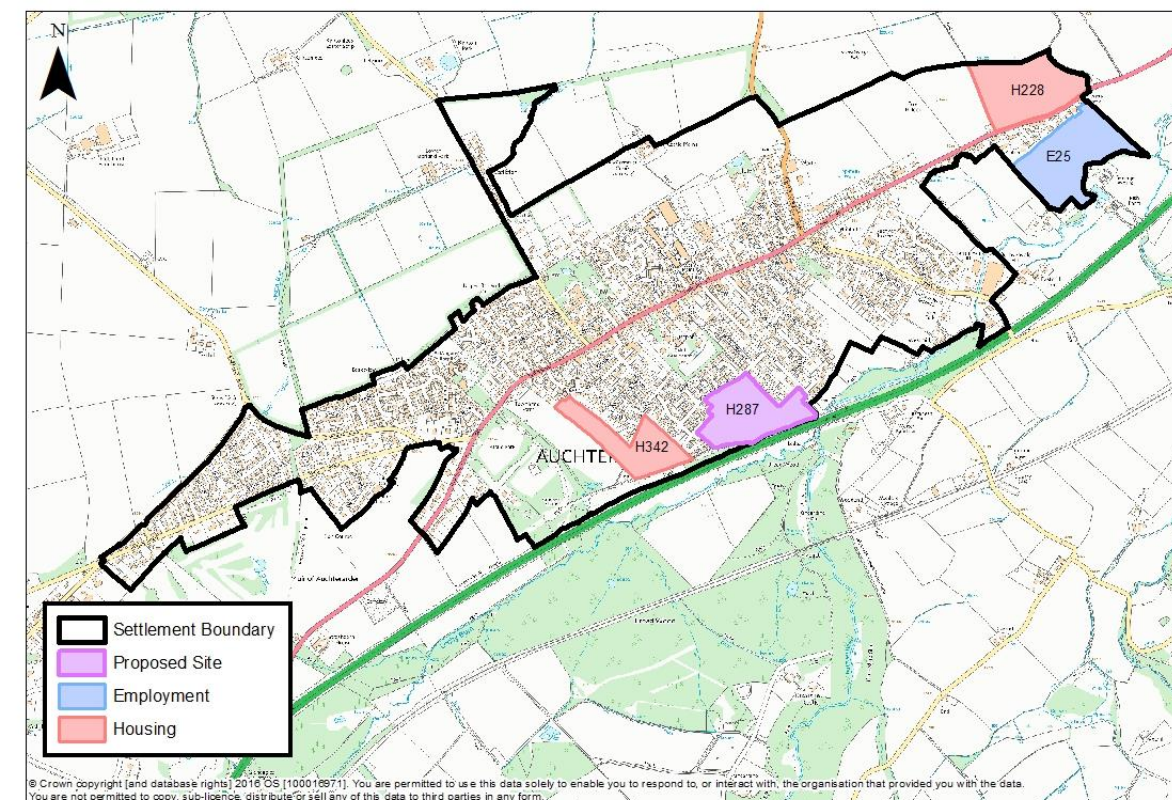
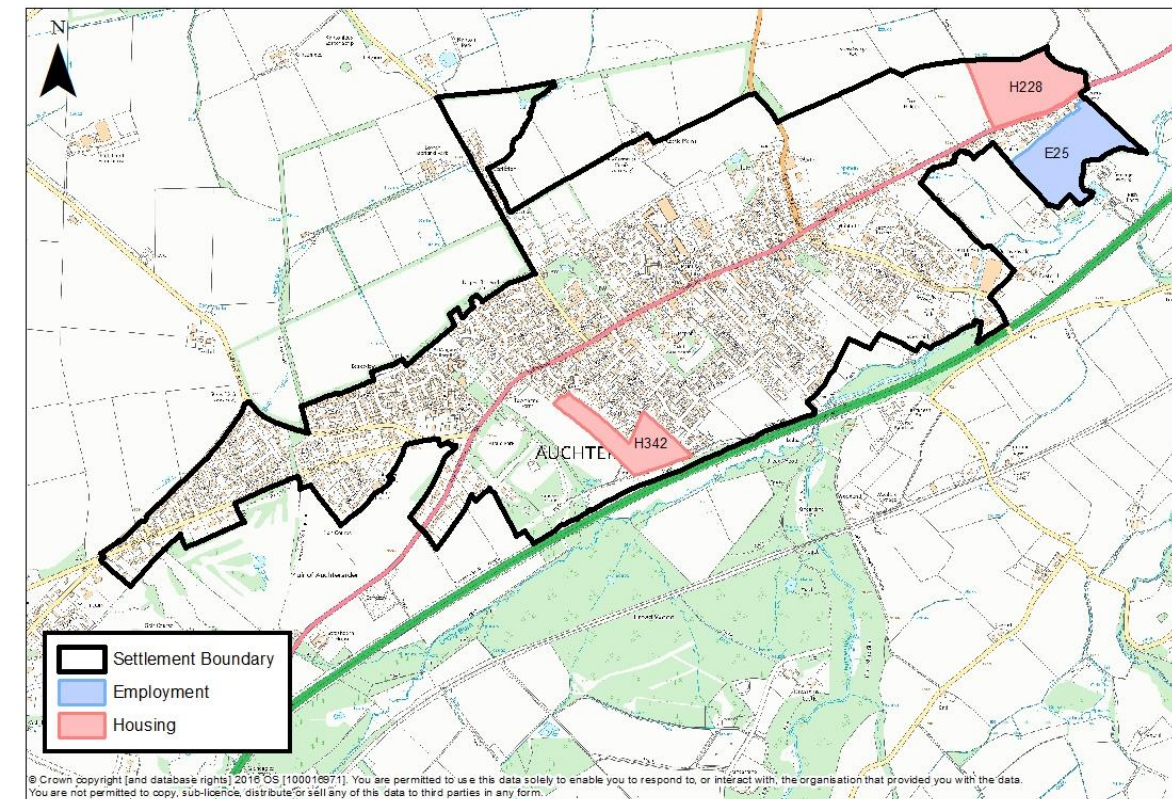
Preservation and enhancement of the distinctive landscape of the area is important in maintaining community well-being, biodiversity and supporting the local economy (tourism in particular).

Housing and Employment Land Requirement

The Main Issues Report identified that the sites already allocated for development in the Adopted LDP can be expected to meet the housing land requirement set by the Strategic Development Plan. Following approval of TAYplan, there is a shortfall in supply and action is required to identify additional housing land in the Strathearn Housing Market Area so that LDP2 remains consistent with TAYplan.

In Auchterarder, the preferred option is to identify housing sites at Townhead and North West Kirkton that are already allocated for development through the Auchterarder Framework Agreement and are wholly inside the settlement boundary, although this will not be sufficient on its own to address the shortfall. This has been considered as a reasonable alternative to the existing sites (from the 2014 adopted LDP). The remaining shortfall is best addressed in Crieff, which is the only other tiered settlement in the Strathearn housing market area.

The need for employment land in the Strathearn area is approximately 20 Ha. The adopted LDP allocations in Crieff; Auchterarder; Aberuthven; and Cultybraggan Camp near Comrie are sufficient to meet this identified employment land requirement. No new employment land allocations are therefore proposed in Auchterarder.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Auchterarder there are three allocations that will be carried forward from the previous SEA, the site assessments for which can be found in appendix E. New information relating to flooding, cultural heritage and landscape designations has become available since the adoption of LDP1. As such a new cumulative impact assessment is required in order to develop an understanding of the potential cumulative impacts of development in Auchterarder in light of this new data. The site assessments for each site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This has then been compared against the alternative option for Auchterarder to allow for a comparative analysis of the cumulative impacts. This can be seen below:

Alternative 1 (existing sites - adopted 2014 LDP)	Alternative 2 (includes H287)
Biodiversity Flora and Fauna	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Population	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Human Health	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Soil	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Water	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Air	
H342	H342
E25	E25

H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Climatic Factors	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Material Assets	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Cultural Heritage	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact
Landscape	
H342	H342
E25	E25
H228	H228
	H287 South of Kincardine Road
Overall Impact	Overall Impact

Conclusions

Alternative 1 (preferred option, existing sites from adopted 2014 LDP)

Biodiversity Flora and Fauna

The majority of land with potential for development in Auchterarder is agricultural or greenfield land. Potential for impact on protected species could be mitigated by provision of new planting of locally native tree species in landscape schemes, and creation of habitat for protected species, as well as design of wildlife corridors as part of transport network of paths within and between sites. Improvements to green network around the town would also have positive impacts.

Population

Cumulative impact is positive because there would be an increase to the range and choice of housing and employment opportunities in the town. No negative cumulative impacts identified.

Human Health

There will be some loss of greenfield land and open space although this is difficult to avoid in Auchterarder. Potential for improvement to the existing green network linking the sites to the town centre since the distances involved are walkable. Opportunities to enhance the green network and increase access to open space will lead to positive impacts on human health.

Soil

Loss of agricultural land is one of the main constraints to development around Auchterarder but this is difficult to avoid since all sites involve development of greenfield land. Overall cumulative impact is adverse.

Water

Overall status of the water environment is good. The main areas of flood risk are avoided. Application of LDP policies on the water environment and drainage will reduce negative impacts.

Air

No existing air quality issues in Auchterarder. The increase in the number of houses has already been assessed and is likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative.

Climatic Factors

Auchterarder town centre has a good range of facilities and services that are accessible from the sites proposed, and Auchterarder is served by public transport. Development of sites potentially at risk of flooding is avoided.

Material Assets

Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services, and the potential to increase and enhance existing green networks. Development could also bring enhancements to the green network around the town.

Cultural heritage

Sites have been selected to avoid adverse impact on scheduled monuments and archaeological sites. It is important that any adverse impact on the historic environment is avoided wherever possible through appropriate scheme location and design to ensure appropriate settings and views are maintained.

Landscape

In landscape terms, development to the north of the settlement at Castleton/Castle Mains is not regarded as appropriate. It is considered to be down slope beyond the shoulder of the bowl within which Auchterarder sits and would extend the town out into Strathearn, and due to the absence of a boundary to the north there would be no natural stop line preventing development extending further down the slope. The land to the south of settlement could be developed provided an appropriate buffer (visual and noise) is maintained to the A9 trunk road.

Alternative 2 (with site H287 south of Kincardine Road)

Biodiversity Flora and Fauna

The majority of land with potential for development in Auchterarder is agricultural or greenfield land. Potential for impact on protected species could be mitigated by provision of new planting of locally native tree species in landscape schemes, and creation of habitat for protected species, as well as design of wildlife corridors as part of transport network of paths within and between sites. Improvements to green network around the town would also have positive impacts.

Population

Cumulative impact is positive because there would be an increase to the range and choice of housing and employment opportunities in the town. No negative cumulative impacts identified.

Human Health

There will be some loss of greenfield land and open space although this is difficult to avoid in Auchterarder. Potential for improvement to the existing green network linking the sites to the town centre since the distances involved are walkable. Opportunities to enhance the green network and increase access to open space will lead to positive impacts on human health. *Care should be taken to avoid adverse noise impact from the A9 trunk road, south of the settlement.*

Soil

Loss of agricultural land is one of the main constraints to development around Auchterarder but this is difficult to avoid since all sites involve development of greenfield land. Overall cumulative impact is adverse.

Water

Overall status of the water environment is good. The main areas of flood risk are avoided. Application of LDP policies on the water environment and drainage will reduce negative impacts.

Air

No existing air quality issues in Auchterarder. The increase in the number of houses has already been assessed and, *with the development of another site proposed*, is likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative.

Climatic Factors

Auchterarder town centre has a good range of facilities and services that are accessible from the sites proposed, and Auchterarder is served by public transport. Development of sites potentially at risk of flooding is avoided.

Material Assets

Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services, and the potential to increase and enhance existing green networks. *The development proposed at H287 could reduce the area reserved for green space however there is a part of the site that must be kept as open space.* Development could also bring enhancements to the green network around the town.

Cultural heritage

Sites have been selected to avoid adverse impact on scheduled monuments and archaeological sites. It is important that any adverse impact on the historic environment is avoided wherever possible through appropriate scheme location and design to ensure appropriate settings and views are maintained.

Landscape

In landscape terms, development to the north of the settlement beyond Castleton/Castle Mains is not regarded as appropriate. It is considered to be down slope beyond the shoulder of the bowl within which Auchterarder sits and would extend the town out into Strathearn, and due to the absence of a boundary to the north there would be no natural stop line preventing development extending further down the slope. The land to the south of settlement could be developed provided an appropriate buffer (visual and noise) is maintained to the A9 trunk road.

6.4.16 Cumulative Assessment: Crieff

Key Environmental Issues for Crieff

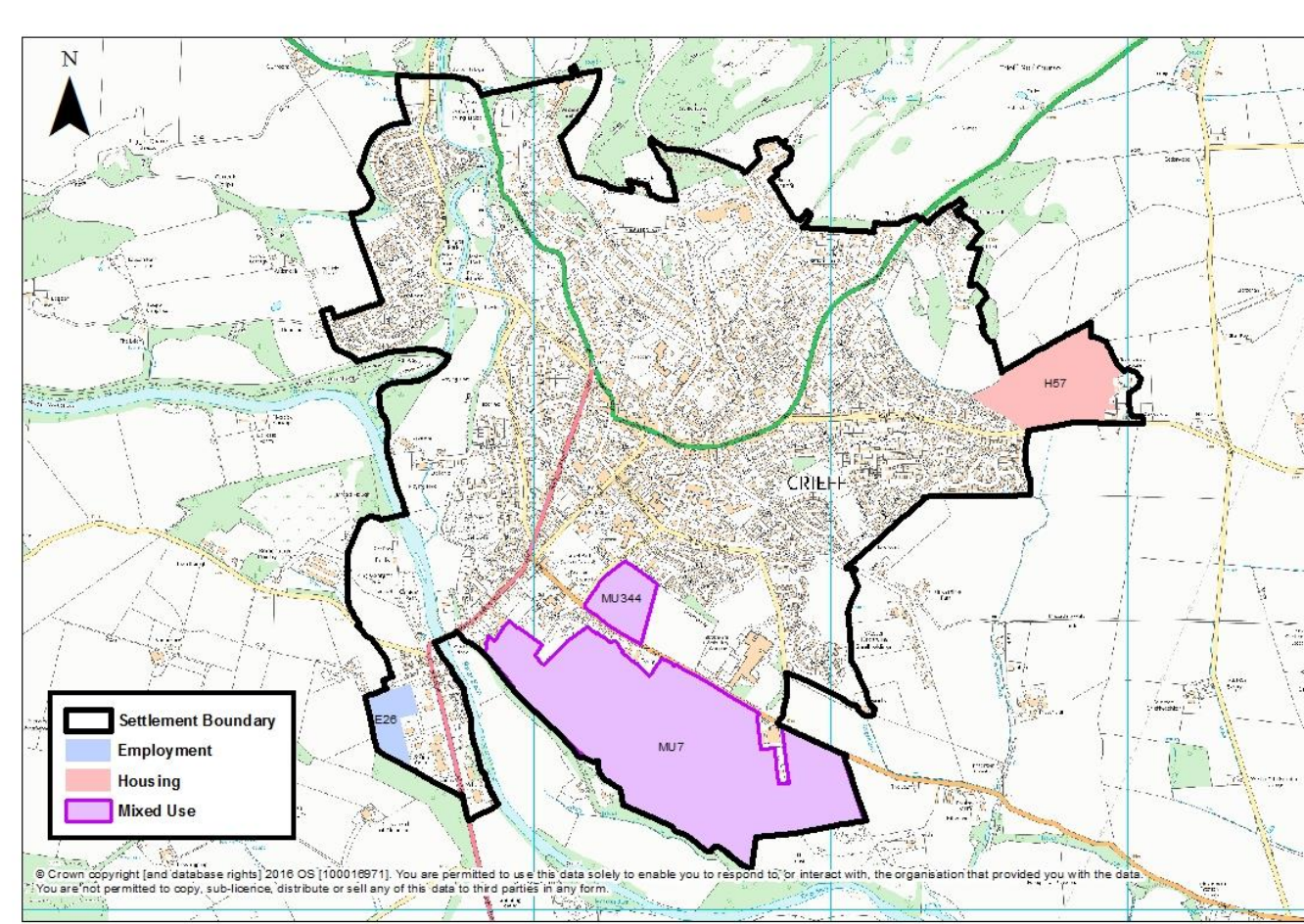
The SEA of LDP 1 assessed the key sensitivities and development pressures within Crieff. This highlighted that the key issues for Crieff include cultural heritage, prime agricultural land, ancient woodland and flood risk. This assessment has been updated through a settlement boundary assessment for LDP2. Flood risk data has been updated and reassessed without significant change, and the settlement lies entirely within the Upper Strathearn Special Landscape Area.

Much of the area is assessed as having development potential however the potential for expansion of the settlement to the north and east is constrained by topography and ancient woodland, while sensitivities to the south include prime agricultural land, ancient woodland, scheduled monuments and flood risk from the River Earn. Drummond Castle garden and designed landscape and areas of ancient woodland are located to the south and west, which limits or constrains development. To the west strips along the banks of the River Earn and Turret Burn are sensitive to development however potential does exist further to the west. Preservation and enhancement of the distinctive landscape of this area is important in maintaining community well-being, biodiversity and supporting the local economy (tourism in particular).

Housing and Employment Land Requirement

The Main Issues Report identified that the sites already allocated for development in the Adopted LDP can be expected to meet the housing land requirement set by the Strategic Development Plan. Following approval of TAYplan, there is a shortfall in supply and action is required to identify additional housing land in the Strathearn Housing Market Area so that LDP2 remains consistent with TAYplan.

In Crieff the preferred option is an increase to the density on the MU7 Broich Road site, although this will not be sufficient on its own to address the shortfall. Since there is already another large allocated site in Crieff it is recognised that the remaining shortfall is best addressed in Auchterarder, which is the only other tiered settlement in the Strathearn housing market area.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Crieff there are three allocations that will be carried forward from the previous SEA, and one new allocation, the site assessments for which can be found in appendix E. New information relating to flooding, cultural heritage and landscape designations has become available since the adoption of LDP1. As such a new cumulative impact assessment is required in order to develop an understanding of the potential cumulative impacts of development in Crieff in light of this new data. The site assessments for each site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Preferred Option
Biodiversity Flora and Fauna
MU7 increased density
E26
H57
MU334
Overall Impact
Population
MU7 increased density
E26
H57

MU334
Overall Impact
Human Health
MU7 increased density
E26
H57
MU334
Overall Impact
Soil
MU7 increased density
E26
H57
MU334
Overall Impact
Water
MU7 increased density
E26
H57
MU334
Overall Impact
Air
MU7 increased density
E26
H57
MU334
Overall Impact
Climatic Factors
MU7 increased density
E26
H57
MU334
Overall Impact
Material Assets
MU7 increased density
E26
H57
MU334
Overall Impact
Cultural Heritage
MU7 increased density
E26
H57
MU334
Overall Impact
Landscape
MU7 increased density

E26
H57
MU334
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Potential for impact on protected species could be mitigated by provision of new planting of locally native tree species in landscape schemes, and creation of habitat for protected species, as well as design of wildlife corridors as part of transport network of paths within and between sites.

Population

Cumulative impact is positive because there would be an increase to the range and choice of housing and employment opportunities in the town. No negative cumulative impacts identified.

Human Health

There will be some loss of greenfield land and open space although this is difficult to avoid in Crieff. Potential for improvement to the existing green network linking the sites to the town centre.

Soil

No effect on prime agricultural land since there is no extension to any of the sites. No known soil stability issues. All sites involve development of greenfield land. Overall cumulative impact is adverse.

Water

Overall status of the water environment is good. The main areas of flood risk are avoided. Application of LDP policies on the water environment and drainage will reduce negative impacts. There may be a slightly higher risk of surface water flooding at H57 but this could be addressed through design and mitigated through appropriate site layout and flood risk assessment.

Air

There is an Air Quality Management Area in Crieff town centre and the increase in density to site MU7 is likely to lead to more car use and therefore higher emission levels so cumulative impact on air quality likely to be negative.

Climatic Factors

There are services and facilities in the town centre which are accessible from the sites reducing the need to travel, and capacity exists within the road network. However there is a growing concentration

of out-of-centre facilities at Broich Road, such as Community Campus, primary school and permission for retail development. These facilities are easily accessible from MU7 but are remote from H57.

Material Assets

Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services, and the potential to increase and enhance existing green networks. The increased density proposed at MU7 could reduce the area reserved for green space however there is a significant part of the site that cannot be developed due to scheduled monument.

Cultural heritage

Sites are remote from the conservation area designated in the town centre however archaeology is likely to be present in the area and is definitely protected from development in the case of MU7. Cumulative impact on the historic environment could be an issue, especially the setting of the cursus. It is important that any adverse impact on the historic environment is avoided wherever possible through appropriate scheme location and design.

Landscape

Crieff is surrounded by the Upper Strathearn Special Landscape Area and it is difficult for the town to expand onto greenfield sites on its periphery without having an increased adverse impact on the SLA. Potential adverse impacts on the SLA can be partly-mitigated by the application of LDP policies on Managing Landscape Change to ensure high quality design and maintain the character of the settlement.

6.4.17 Cumulative Assessment: Alyth

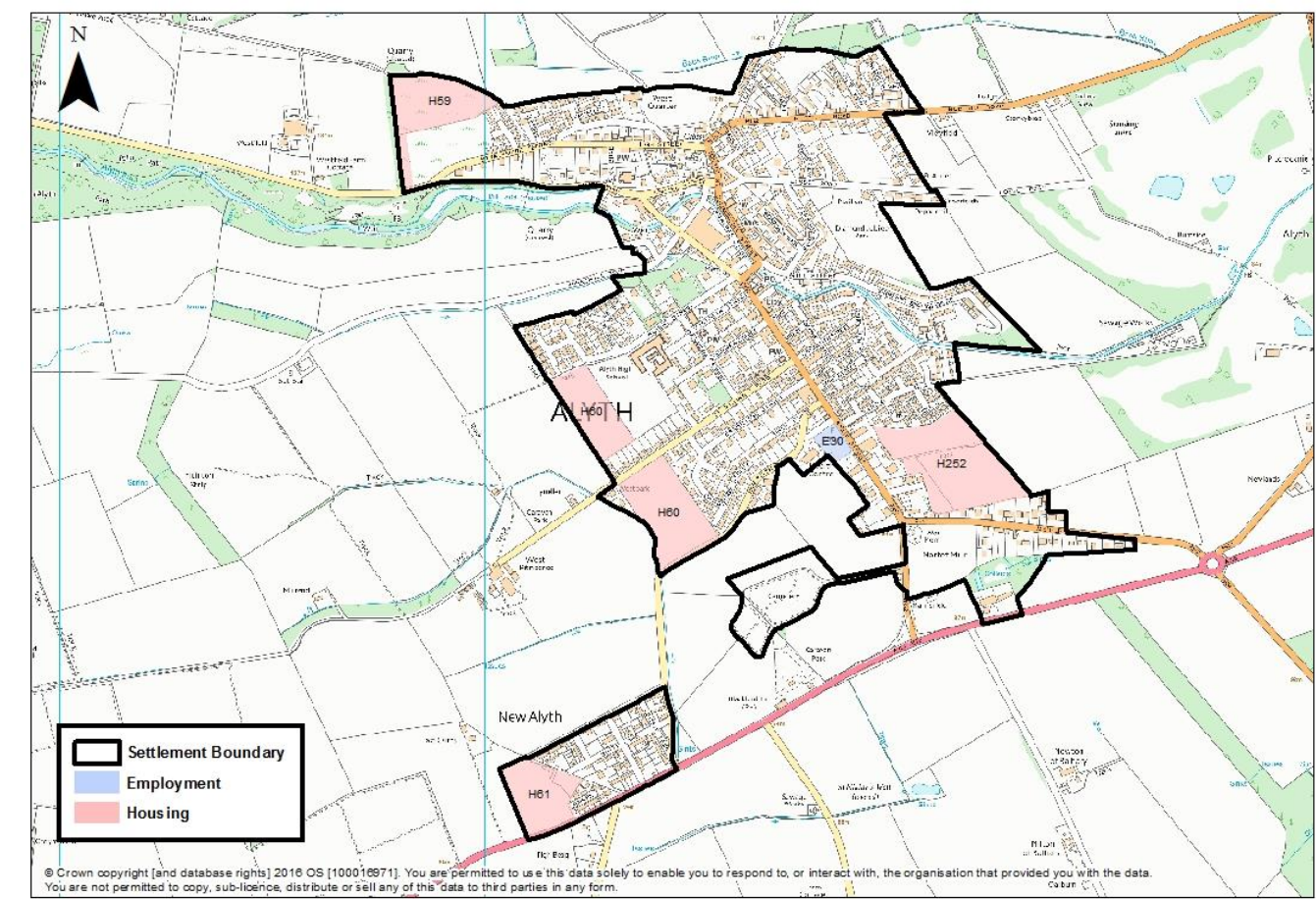
Key Environmental Issues for Alyth and New Alyth

The SEA of LDP 1 assessed the key sensitivities and development pressures within Alyth. This highlighted that the key issues for this area include surface waters, riparian areas and agricultural land. The vast majority of the area (95%) is suitable for development. Land in the southern and eastern sectors of the settlement is prime agricultural land and there are a number of ancient woodland inventory sites and listed buildings within this area too. Land to the north is mostly free from sensitivities but there are some ancient and semi-natural woodland inventory sites, a listed building and a SAM. The eastern sectors include listed buildings, ancient and semi-natural woodland inventory sites, the Alyth Burn (River Tay SAC) with its associated riparian and indicative flood risk areas, and the Den of Alyth SSSI.

Housing and Employment Land Requirement

The Main Issues Report identified a shortfall in the housing land supply to meet the housing land requirement set by the Strategic Development Plan. The Proposed Plan identifies additional sites, one of which is in Alyth, to meet this shortfall.

The potential need for additional employment land in Strathmore and the Glens amounts to 20ha and the existing adopted LDP allocations are sufficient to meet this requirement. No additional employment land allocations are proposed in Alyth.



The proposed strategy for Strathmore and the Glens is to direct the majority of development towards Blairgowrie and Rattray given its status as a tier 2 settlement and enhanced service provisions. Within Alyth and New Alyth, it is proposed to continue with current allocations with the identification of a further site at Annfield Place.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Alyth and New Alyth there four allocations which will be carried forward from the previous SEA, the site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Alyth and New Alyth the site assessment for the proposed site and the sites allocated though LDP1 have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Preferred Option
Additional Site Option
Biodiversity Flora and Fauna
H59
H60
E30
Annfield Place
H61
Overall Impact
Population
H59
H60
E30
Annfield Place
H61
Overall Impact
Human Health
H59
H60
E30
Annfield Place
H61
Overall Impact
Soil
H59
H60
E30
Annfield Place
H61
Overall Impact
Water
H59
H60
E30
Annfield Place
H61
Overall Impact
Air
H59
H60
E30
Annfield Place
H61
Overall Impact
Climatic Factors
H59

H60
E30
Annfield Place
H61
Overall Impact
Material Assets
H59
H60
E30
Annfield Place
H61
Overall Impact
Cultural Heritage
H59
H60
E30
Annfield Place
H61
Overall Impact
Landscape
H59
H60
E30
Annfield Place
H61
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Whole settlement within River Tay Catchment with Alyth Burn running through town therefore potential adverse impact on priority species, habitats and botanical sites. Potential impacts on SAC will require assessment. Impacts could be mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value. Existing site H59 within close proximity to Den of Alyth (SSSI) where site specific requirements request connections to green infrastructure and biodiversity to be enhanced.

Population

Positive impacts based on access to and provision of a choice of housing, range of services and facilities within Alyth accessible from the proposed sites.

Human Health

A balance of positive and adverse impacts - adverse flooding issues but development would contribute to open space and improved services. Effects can be mitigated through the application of LDP policies on transport and Flood Risk Assessment. Also through the application of policies on community facilities and the retention and enhancement of existing core paths and networks.

Soil

Majority of sites involve developing on greenfield land therefore produces an overall adverse impact. Minor part of new proposed site at Annfield Place is grade 3.1 prime agricultural land. Good quality soils could be removed and used in other parts of Perth and Kinross.

Water

Parts of Alyth are undevelopable due to flooding from Alyth Burn. Annfield Place has a large northern section of site identified to be at high risk from river flooding. All sites are located within the River Tay catchment. Application of LDP flooding policies will reduce negative impacts and due to the recent Alyth flooding event, most sites are likely to require Drainage and Flood Risk Assessments as a mitigation measure.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites are on or near bus routes.

Climatic Factors

Most development sites within close proximity to town centre and services so journeys should not be long distance and accessible by sustainable modes of transport. However increased journeys and more commuters within the area will contribute to an overall adverse impact on the climate. However new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise solar orientation.

Material Assets

Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies on Climate Change and Management of Waste should be applied to new development to mitigate adverse impacts.

Cultural heritage

Overall neutral impact on cultural heritage as most sites not impeding on historic environment. Annfield Place has archaeology interest to the north east of site boundary and Alyth Railway Station.

close to north west edge of site. Careful consideration to design and layout would mitigate impact of historic environment, with the application of Historic Environment policies.

Landscape

Adverse overall impact on landscape as sites are largely greenfield. If access was to be taken from Airlie Street to the new Annfield Place site, derelict buildings blocking the access could be made to look better. Site specific developer requirements will require a landscape framework to ensure that development fits in sensitively with the surrounding landscape.

6.4.18 Cumulative Assessment: Blairgowrie & Rattray

Key Environmental Issues for Blairgowrie and Rattray

The SEA of LDP 1 assessed the key sensitivities and development pressures within Blairgowrie and Rattray. This highlighted that the key issues for this area include surface water areas, flooding and agricultural land. Potential exists for future expansion to the north, south, west and south east of Blairgowrie, where in most cases the land is either free of or has limited constraints. In Rattray, development potential becomes limited or fully constrained travelling both further north and south towards the river, due to listed buildings and potential risk from flooding from the River Etricht (River Tay SAC), Lornty Burn to the north and a SSSI and an RSPB Important Bird Area to the south.

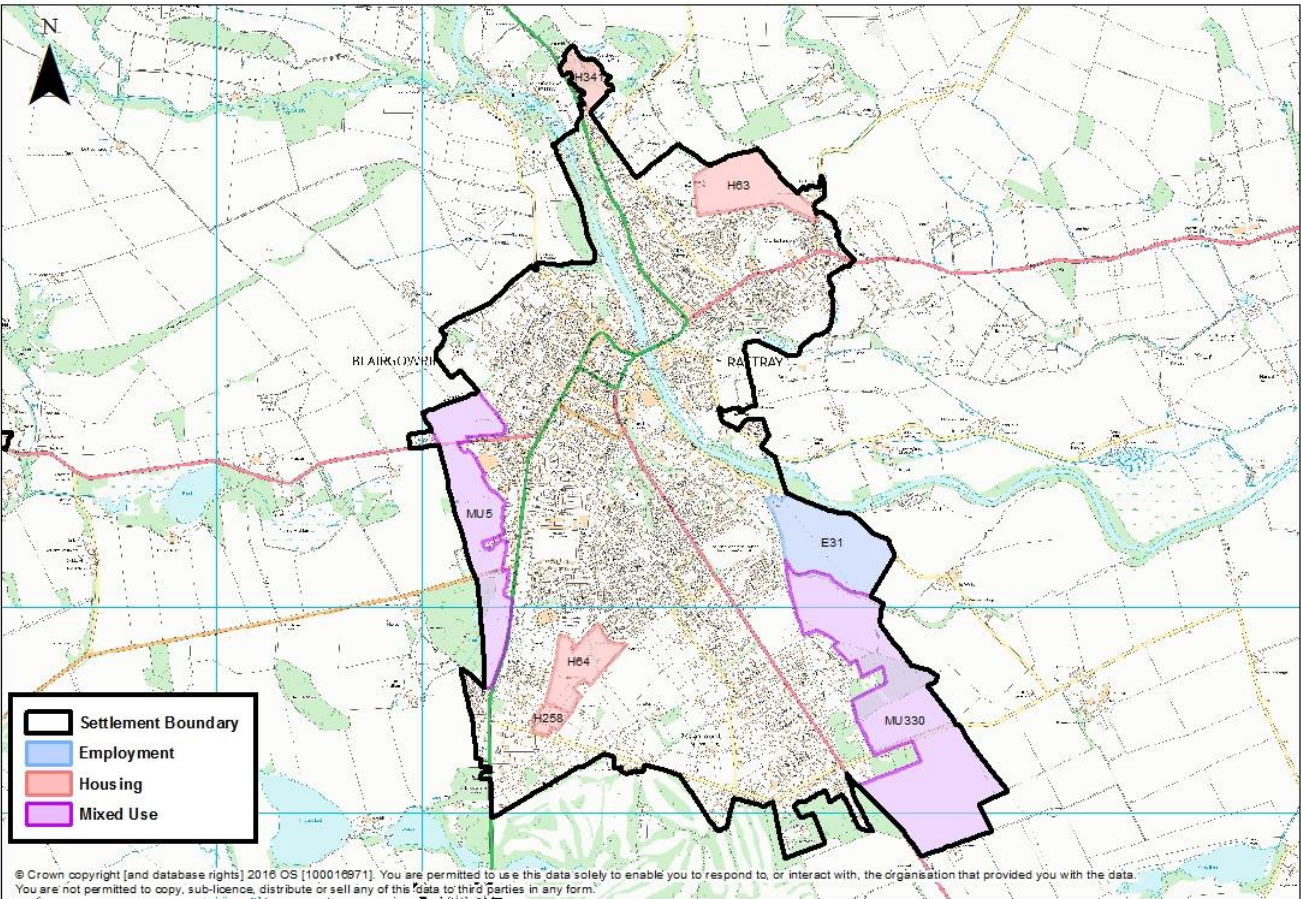
Housing and Employment Land Requirement

The Main Issues Report identified a shortfall in the housing land supply to meet the housing land requirement set by the Strategic Development Plan. The Proposed Plan identifies additional sites, including 3 new or expanded sites in Blairgowrie and Rattray, to meet this shortfall.

The potential need for additional employment land in Strathmore and the Glens amounts to 20ha and the existing adopted LDP allocations are sufficient to meet this requirement. No additional employment land allocations are proposed in Blairgowrie and Rattray although more mixed use sites will be encouraged.

Given that Blairgowrie and Rattray is the only tier 2 settlement within Strathmore and the Glens area, and the largest town in Perth and Kinross, the majority of new development sites in the area are within this tier 2 settlement – most notably the large strategic site to the south- east of the town.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Blairgowrie and Rattray there are a number of allocations that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Blairgowrie and Rattray the site assessments for each proposed site have been brought together with sites allocated though LDP1 to ensure there is no significant cumulative impact on the environment. This can be seen below.



Preferred Option
Biodiversity Flora and Fauna
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Population
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact

Human Health
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Soil
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Water
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Air
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Climatic Factors
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion

(incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Material Assets
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Cultural Heritage
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact
Landscape
E31
MU5
H63
H64
MU330 Blairgowrie Eastern Expansion (incorporating H62)
Golf Course Road
Westfields of Rattray
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Some sites connected to River Tay SAC via watercourses and within River Tay Catchment, also potential for impact on priority species, habitats and botanical value of sites. Potential impacts on SAC will require assessment. Impacts could be mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Blairgowrie and Rattray accessible from the proposed sites, and access to employment opportunities. Greater positive cumulative impacts with this option due to a larger strategic expansion site providing more varied housing.

Human Health

A balance of positive and adverse impacts; adverse flooding issues but positive contribution to open space and improved services. Effects can be mitigated through the application of LDP transport policies and Flood Risk Assessment. Also through the application of open space policy and the retention and enhancement of existing core paths and networks.

Soil

Majority of sites involve developing on greenfield land therefore produces and overall adverse impact. Good quality soils could be removed and used in other parts of Perth and Kinross.

Water

Due to all sites being located within the River Tay Catchment, potential adverse impact on water environment. Some sites have risk of either/ both surface and river flooding. Application of water environment policies will reduce negative impacts and some are likely to require Drainage and Flood Risk Assessments as a mitigation measure.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites are on or near bus routes.

Climatic Factors

Most development sites within close proximity to town centre and services so journeys should not be long distance and accessible by sustainable modes of transport. Westfields of Rattray further from the centre and so is likely to result in more travel by car. Increased journeys and more commuters within the area will contribute to an overall adverse impact on the climate. However new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise solar orientation.

Material Assets

Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies on Climate Change and Management of Waste should be applied to new development to mitigate adverse impacts.

Cultural heritage

Overall significantly adverse impact on cultural assets due to the location of Scheduled Monuments and presence of archaeology, particularly within the Blairgowrie Eastern expansion site and E31. Careful consideration to design and layout would mitigate impact of historic environment, with the application of Historic Environment policies.

Landscape

Overall impact for the preferred option is likely to have more of an adverse effect than the alternative option due to the inclusion of the eastern expansion site, which is visually prominent on approach to Blairgowrie from Coupar Angus Road, on the southern edge of settlement. The brownfield site at Westfield of Rattray has a positive impact as the redevelopment of derelict buildings will improve the landscape setting and visual amenity on approach from the north. Site specific developer requirements will require a landscape framework to ensure that development fits in sensitively with the surrounding landscape.

6.4.19 Cumulative Assessment: Coupar Angus

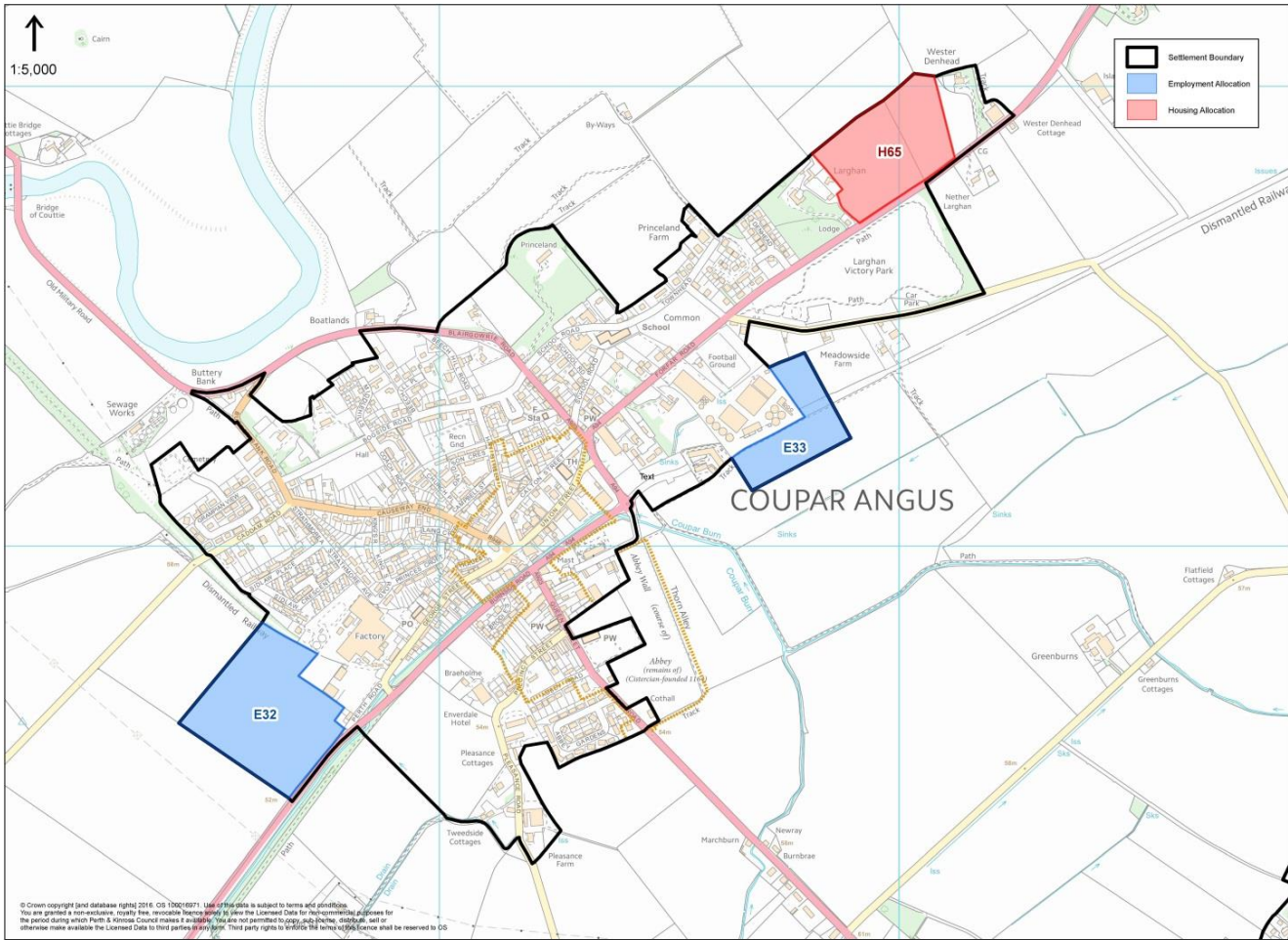
Key Environmental Issues for Coupar Angus

The SEA of LDP 1 assessed the key sensitivities and development pressures within Coupar Angus. This highlighted that the key issues for the area include prime agricultural land, flooding and surface water areas. Development becomes limited or fully constrained along the various waterbodies to the north, south and south west due to the range of overlapping sensitivities present in these locations, including: parts of River Tay SAC, surface waters, riparian areas, areas at risk from fluvial flooding, prime quality agricultural land, ancient woodland inventory sites, a scheduled monument and listed buildings.

Housing and Employment Land Requirement

The Main Issues Report identified a shortfall in the housing land supply to meet the housing land requirement set by the Strategic Development Plan. The Proposed Plan identifies additional sites in Blairgowrie and Alyth to meet this shortfall. There are no proposals for additional housing land allocations in Coupar Angus.

The potential need for additional employment land in Strathmore and the Glens amounts to 20ha and the existing adopted LDP allocations are sufficient to meet this requirement. No additional land allocations are proposed in Coupar Angus.



A key requirement of SEA is to consider the cumulative impact of development within an area. In Coupar Angus there are 3 allocations that will be carried forward from the previous SEA, the site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Coupar Angus the site assessments have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Preferred Option
Biodiversity, Flora and Fauna
E32
E33
H65
Overall Impact
Population
E32
E33
H65
Overall Impact
Human Health

E32
E33
H65
Overall Impact
Soil
E32
E33
H65
Overall Impact
Water
E32
E33
H65
Overall Impact
Air
E32
E33
H65
Overall Impact
Climatic Factors
E32
E33
H65
Overall Impact
Material Assets
E32
E33
H65
Overall Impact
Cultural Heritage
E32
E33
H65
Overall Impact
Landscape
E32
E33
H65
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Whole settlement within River Tay Catchment; therefore potential adverse impact on priority species, habitats and botanical sites. Potential impacts on SAC will require assessment. Impacts could be

mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value.

Population

Positive impacts based on access to and provision of a choice of housing and employment opportunities, range of services and facilities within Coupar Angus accessible from the proposed sites.

Human Health

A balance of positive and adverse impacts - adverse flooding issues but development would contribute to open space and improved services. Effects can be mitigated through the application of LDP transport policies and Flood Risk Assessment. Also through the application of open space policy and the retention and enhancement of existing core paths and networks.

Soil

Sites involve developing on greenfield land therefore produces and overall adverse impact. The majority of this is prime agricultural land and the cumulative effect of the incremental loss of this resource could be significant for the region. Good quality soils could be removed and used in other parts of Perth and Kinross

Water

Parts of Coupar Angus are undevelopable due to flooding from Coupar Burn. All development sites are outwith these areas although the wider area is constrained for further development. All sites are located within the River Tay catchment. Application of policy on the water environment will reduce negative impacts and sites may require Drainage and Flood Risk Assessments as a mitigation measure.

Air

No existing air quality issues and no indication that additional development will result in air quality objectives being breached. An increased number of houses is however, likely to lead to more car use and therefore higher emission levels so overall impact on air quality likely to be negative. All sites within proximity to bus routes.

Climatic Factors

Most development sites within close proximity to town centre and services so journeys should not be long distance and accessible by sustainable modes of transport. However increased journeys and more commuters within the area will contribute to an overall adverse impact on the climate. However new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise solar orientation.

Material Assets

Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies on Climate Change and Management of Waste should be applied to new development to mitigate adverse impacts.

Cultural heritage

Minimal impact on the cultural heritage. Site H65 could impact on a listed building and a number of locally important archaeological features. Careful consideration to design and layout would mitigate impact of historic environment, with the application of Historic Environment policies.

Landscape

Adverse overall impact on landscape as sites are largely greenfield. Site specific developer requirements could require a landscape framework to ensure that development fits in sensitively with the surrounding landscape.

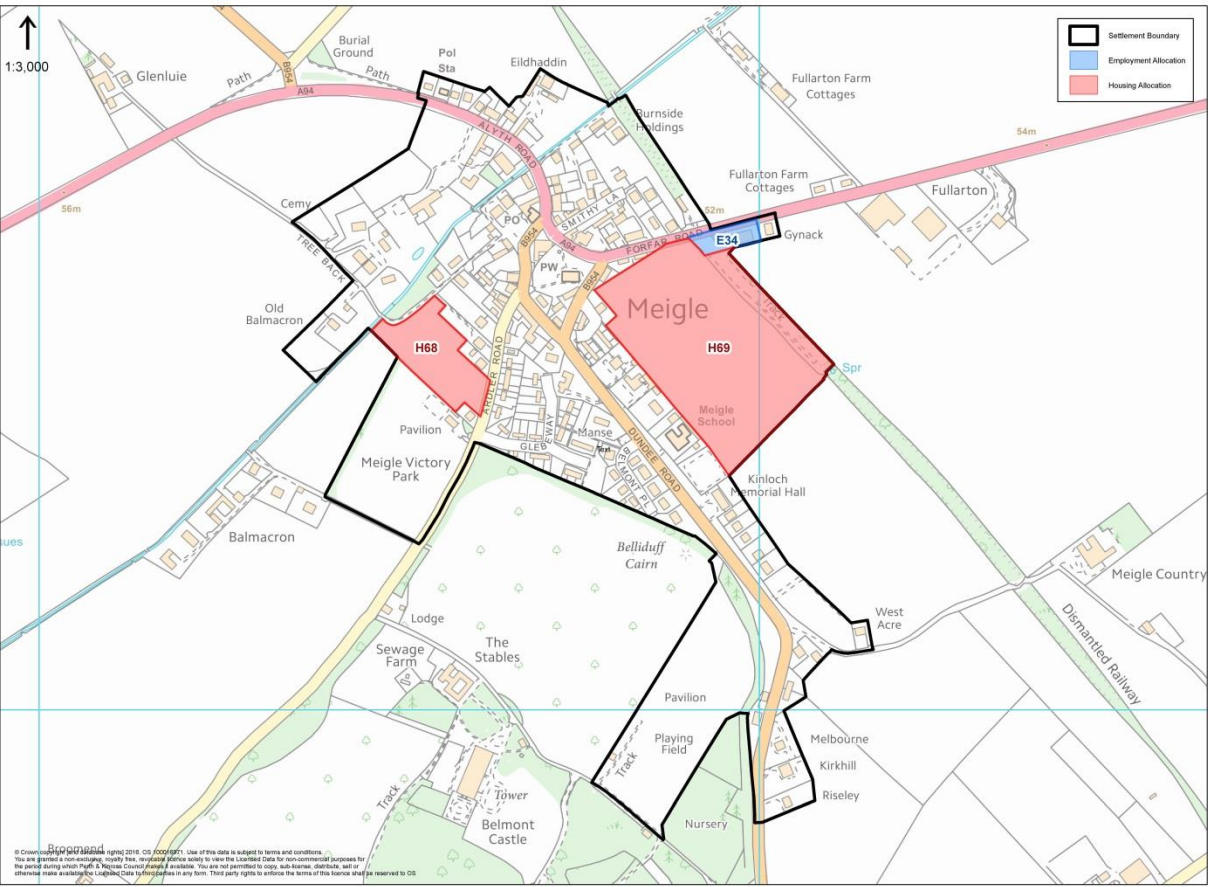
6.4.20 Cumulative Assessment: Meigle

Key Environmental Issues for Meigle

The SEA of LDP 1 assessed the key sensitivities and development pressures within Meigle. The key environmental issues here include possible habitat fragmentation, loss of prime agricultural land and impact of development on the surrounding landscape.

Housing and Employment Land Requirement

The Proposed Plan identifies that there is no need for additional housing land to be allocated in Meigle above that which is already allocated in the current LDP. There are no proposals to change either of the housing land allocations in Meigle (minus E34 as it is in active use), however employment allocation (ref: E34) is now currently in active use and will no longer be allocated as an employment site. No additional land allocations are proposed in Meigle.



*The map shows site E34 purely for reference purposes, it has not been included in the cumulative assessment, as it is now in active use.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Meigle there are 2 allocations (H68/H69) that will be carried forward from the previous SEA. The site assessments for which can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Meigle the site assessments for each proposed site (including sites allocated though LDP1) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below.

Preferred Option
Biodiversity, Flora and Fauna
H68
H69
Overall Impact
Population
H68
H69
Overall Impact
Human Health

H68
H69
Overall Impact
Soil
H68
H69
Overall Impact
Water
H68
H69
Overall Impact
Air
H68
H69
Overall Impact
Climatic Factors
H68
H69
Overall Impact
Material Assets
H68
H69
Overall Impact
Cultural Heritage
H68
H69
Overall Impact
Landscape
H68
H69
Overall Impact

Conclusions

Biodiversity Flora and Fauna

Protected species identified in proximity to sites. Impacts could be mitigated via retention of important trees, planting, hedgerows and landscaping to reinforce biodiversity value.

Population

Impact generally positive in providing access to and provision of a choice of housing opportunities, range of services and facilities within Meigle.

Human Health

Risk of flooding to minor part of site H68. However, effects on the accessibility of public transport and access to – and potential for the provision of new – managed open spaces and facilities generally positive giving an overall neutral effect. Effects can be mitigated through the application of LDP transport policies and Flood Risk Assessment and open space policy.

Soil

Loss of prime agricultural land on site H69. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Risk of flooding affecting site H68. Application of LDP water environment policy will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment likely to be required for this site.

Air

No existing air quality issues in Meigle. An increased number of houses/increased capacity of primary school is likely to lead to more vehicle use and therefore higher emission levels so overall impact on air quality likely to be slightly negative. Mitigation through sustainable construction and transport methods, and implementation of sustainable travel plan for primary school.

Climatic Factors

There are various services and facilities in Meigle which are accessible from the sites so reducing the need to travel. However there are potential flood risks from development of site H68. Siting and design to take account of solar orientation; sustainable design and construction techniques to be utilised; and energy efficiency measures to be incorporated into design and layout.

Material Assets

Includes a wide range of issues. Although development of the proposed sites will impact on existing material assets these impacts in some cases may be negative e.g. increased traffic levels, but in other cases could be positive e.g. helping support and retain existing services. Overall impact neutral.

Cultural heritage

Some cultural heritage evident in village although not directly impacted by allocated sites. Careful consideration to design and layout would mitigate impact of historic environment, with the application of historic environment policy.

Landscape

Overall impact is slightly adverse due to development on greenfield land. For both housing sites, a landscape framework would help to ensure development fits in sensitively with surrounding landscape.

6.5 ASSESSMENT OF SETTLEMENT BOUNDARIES

Policy 4 of the Proposed Plan considers settlement boundaries. The assessment of this policy in section 6.6 considers the general impact of settlement boundaries and highlights any potential significant environmental impact as a result of the implementation of this policy. Settlement boundaries are provided for all the settlements listed in the Proposed LDP.

The previous assessment of settlement boundaries that was undertaken for LDP1 provides a comprehensive analysis of each settlement as well as the surrounding area (a 2km buffer around each settlement was assessed). This assessment has informed the review of settlement boundaries for LDP2. To progress this assessment we considered the impact of any new data on the existing assessments and highlighted whether or not this will result in significant environmental impacts. The results of this study are provided in Table 13.

For the majority of the settlements there were no reasonable alternative to the boundaries within the existing LDP. These boundaries were established through the last LDP and with a short period of time since the adoption of LDP1 it would be unlikely that there would be a need for these boundaries to be reconsidered at this stage. Maintaining the boundaries from the last LDP is one, and in some cases the only, alternative considered through this assessment.

In this case a reasonable boundary amendment could be considered as either the allocation of a new site (this site will have undergone an SEA site assessment and as a result of the site assessment it has been considered a reasonable alternative) or where the expansion has not been considered as a site and is the inclusion of white land within the settlement boundary. All submissions that were smaller than 0.5ha have been considered as settlement boundary amendments rather than sites due to their scale. Where this is the case this is highlighted as an alternative settlement boundary.

The table below highlights both the impact of new data on the existing assessment and the settlement where alternatives to the preferred boundary have been assessed.

Table 13: Settlement Boundary Assessment

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
PERTH AREA			
Perth	<p>The new SEPA flood mapping shows new areas affected by river flood risk especially associated to the River Almond at Huntingtowerfield, Inveralmond and Ruthvenfield, and to the Scouring and Craigie burns. Huntingtowerfield, Inveralmond and Ruthvenfield areas lie within the built up area and will be protected by an appropriate flood protection scheme, with the River Almond scheme currently being delivered. Therefore these changes do not suggest a change to the settlement boundary, and the flood risk policy will provide an appropriate context to consider proposals.</p> <p>The new SEPA flood mapping shows some areas could be affected by surface water issues particularly, but the flooding and surface water drainage policies provide appropriate steer/mitigation on this issue.</p> <p>The Sidlaw Hills Special Landscape Area generally abuts the settlement boundary apart from Rhynd road where it tightly wraps the existing settlement here. The Landscape policy provides appropriate protection to this feature.</p> <p>The Tippermuir battlefield lies within the settlement boundary and the Perth West allocation. There is appropriate guidance in the Perth West requirements and in the battlefield policy.</p> <p>There are no peat soils within the Perth settlement boundary.</p>	Yes CFS Perth 5(Rhynd Road), Perth 6, Perth 7	<p>Option B.</p> <p>Resist the following settlement boundary changes:</p> <p>Perth 5 is a small scale proposal more appropriately assessed against existing LDP policies. The area is a part of highly prominent steeply sloping hillside which rises up from the river to a ribbon of 1940's style houses which extend along the north side of the Rhynd Road. The area is prominent from the Friarton Bridge, the railway, the sailing club and the river as well as from the road network at Walnut Grove and from Kinnoull Hill. The area is identified as Green Belt. Policy 3 of TAYplan indicates that preservation of the setting of Perth is one of the purposes of the Green Belt and this development of this area will damage the integrity of the green belt and adversely affect the setting of the city. The site is very open and any development will be prominent particularly when viewed from the minor road which passes the site and runs around the hill. This group has not been defined as a settlement in the existing Plan and they do not have potential for further development. To exclude these small building groups from the green belt would devalue the overall effectiveness of the Green Belt Policy (NE5).</p> <p>Support the following settlement boundary changes:</p> <p>Perth 6: The DMRB stage 2 assessment for the CTRL has investigated the potential operational impact of a park and ride in the vicinity of the proposed CTRL/A9 grade separated junction considering different potential locations from an operational impact and an access and visibility perspective, and a preferred option chosen which is closest to the junction. This option requires an extension to the Berthapark boundary to accommodate the Roads and Transport allocation for the park and ride facility. This site lies on a north facing slope whilst most of Berthapark lies on south facing slopes. There are potential landscape and visual impacts from extending further northwards. We recommend allocating this site for the park and ride and agree with SNH that there should be a requirement for new native woodland planting toward the open rural landscape to the north, east and west, and in views from the A9 and CTRL to minimise the landscape the visual impact of the development.</p> <p>Perth 7: Proposals to extend the green belt boundary further west have merit particularly when combined with a longer term framework planting to the north of West Lamberkine wood (when you consider the robustness of the boundary which could be established by this. Also one of the strategic access points is within the greenbelt so there would potentially be a significant impact on the existing greenbelt if this was approved to facilitate development within the settlement boundary of the existing LDP.</p> <p>The ancient inventory woodland of West Lamberkine Wood is shown on the forestry plan for felling and replanting post 2032. Up to this period there will be thinning and it could potentially be opened up to amenity use, with advanced</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
			<p>planting along boundaries and key views, to ensure a robust and more useable woodland structure is retained/created. The larch and birch plantations in particular would be well suited to amenity use. The potential exists to refine and extend the forestry around Lamberkine wood which is shown for post 2032 felling/replanting, reflecting comments made through the charrette process by SNH and others.</p> <p>Include Almondbank within Perth City boundary as with Almond Valley H70 gaining planning permission in principle this will form part of Perth. Also correct the settlement boundary omission which allowed an area of Huntingtowerfield to be white land but not included within the settlement boundary of Almondbank or Perth.</p> <p>Include land at Huntingtower currently outwith the settlement boundary due to the Reporter's decision for LDP1 within the settlement boundary (and protect this as public open space).</p> <p>Remove area of forestry north of Bertha Park which should logically be included within the greenbelt rather than included within the settlement boundary as open space.</p>
Aberargie	There are no significant impacts on this boundary as a result of data change. The updated flooding data shows widespread areas of medium probability river flooding in the area around the River Farg, both within the settlement and the surrounding area which could result in significant environmental impacts in terms of flooding. However any negative impacts will be mitigated through policies within the Proposed Plan. The Ochil Hill Special Landscape area lies immediately south of the settlement boundary however policies within the proposed plan will protect the SLA. There is no significant impact on this area as a result of new historic designations or new peat soils data.	<p>Yes. It is suggested that the boundary to the south of the settlement to be amended in line with an approved planning application (16/02025/IPL).</p> <p>The amendment to the settlement boundary includes an area of land that is within the Ochil hills SLA and is identified as a medium probability flooding area. However due to the scale of the extension it is unlikely that any impact will be significant.</p>	<p>In terms of environmental impact the preferred alternative is to maintain the existing boundary as impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>However it should be noted that due to the scale of the extension the proposed impacts are unlikely to be significant and that any negative impacts could be mitigated against through the use of appropriate policies.</p>
Abernethy	There are no significant impacts on this boundary as a result of data change. The updated flooding data shows widespread areas of medium probability river flooding in the area around the Ballo Burn, both within the settlement and the surrounding area which could result in significant environmental impacts in terms of flooding. However any negative impacts will be mitigated through policies within the Proposed Plan. There are several listed buildings within Abernethy so development could potentially have a negative impact on these buildings; however there are appropriate policies within the Proposed Plan to ensure the protection of listed building which should mitigate any significant environmental impacts. The Ochil Hill Special Landscape area lies immediately south of the settlement boundary however policies within the proposed plan will protect the SLA.	<p>Yes, an amendment was made to include an area of land to the south of Abernethy. This area is within the Ochil Hills SLA. The area is currently used as an agricultural field and there could be a negative impact on the SLA if this area were to be incorporated into</p>	<p>In terms of environmental impact the preferred alternative is to maintain the existing boundary as impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>However it should be noted that due to the scale of the extension the proposed impacts are unlikely to be significant and that any negative impacts could be mitigated against through the use of appropriate policies</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	There are no peat soils within or immediately out with Abernethy.	the settlement boundary. However due to the scale of the extension it is unlikely that any impact will be significant.	
Pitcairngreen	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Cromwell Park	There are no significant impacts on this boundary as a result of data change. The updated flooding data shows widespread areas of surface water and river flooding throughout the settlement and the surrounding area which could result in significant environmental impacts in terms of flooding. However any negative impacts will be mitigated through policies within the Proposed Plan. There is no significant impact on this area as a result of new historic or landscape designations or new peat soils data.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Balbeggie	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	Yes, 2 housing sites were proposed but Balbeggie already has an allocated site (H13) to the south for 100 units and a further significant expansion to the north is likely to have a detrimental impact on the village.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Baledgarno	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows areas of river flooding throughout the settlement. However, any negative impacts will be mitigated through policies within the Proposed Plan. The settlement is in the Sidlaw Hills SLA and has a number of listed buildings within the boundary. These designations are also protected through policies within the Proposed Plan.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Bankfoot	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows areas of river flooding throughout the settlement. However, any negative impacts will be mitigated through policies within the Proposed Plan. There is no significant impact on this area as a result of new landscape or historic designations.	Yes, a number of new housing sites were proposed but none of these sites were considered appropriate for development at this time due to flooding issues, landscape impact and gradient of slopes. The settlement is outwith Spatial Strategy and so unlikely to be brought forward as contrary to TAYplan.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Binn Farm	There is one significant impact on this boundary as a result of data changes: the Ochil Hills SLA includes the whole site and the extension suggested. While the site is in the Ochil Hills SLA, the impact of the suggested uses can be mitigated. There is no carbon rich soil at the site; updated flood data shows no significant change and there is no change to historic designations.	Yes, an extension is suggested to the existing settlement boundary for an eco-innovation park. The site and extension is in a rural location, and a number of	Impacts arising from data changes are not considered to necessitate an alteration to the existing boundary. An alternative boundary has been proposed to incorporate a larger area for employment land. The preferred alternative is to carry forward the existing settlement boundary to reflect the employment land allocation for waste

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
		<p>uses are proposed including waste management, recycling and recovery; horticultural food production; renewable energy; clean technology businesses; environmental education and training; and advanced sustainable drainage systems.</p> <p>It is suggested that the impacts from these proposed uses could be mitigated through application of policies including landscape, water environment and biodiversity. In addition, there would be significant employment opportunities and positive economic and environmental impacts.</p>	management and associated uses.
Bridge of Earn and Oudenarde	There are few significant impacts on this boundary as a result of data changes, however it is felt that these could be mitigate through the use of polices within the proposed plan. The updated flooding data shows widespread areas of surface water flooding throughout the settlement and the surrounding area which could result in significant environmental impacts in terms of flooding. However any negative impacts will be mitigated through polices within the Proposed Plan. The Ochil Hill Special Landscape area and the Sidlaw Hills Special Landscape area lie immediately south of the settlement boundary however, polices within the proposed plan will protect the SLAs. There is no significant impact on this area as a result of new historic designations or new peat soils data.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Burrelton/Woodside	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data there is medium risk of flooding within the settlement. However, any negative impacts will be mitigated through polices within the Proposed Plan. There is no significant impact on this area as a result of new landscape or historic designations.	Yes, a number of new housing sites were proposed but none of these sites were considered appropriate for development at this time as the settlement is outwith the Spatial Strategy and so unlikely to be brought forward as contrary to TAYplan.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Clathymore	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Cottown/Chapelhill	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental	Yes, a number of new housing sites were proposed	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	but none of these sites were considered appropriate for development at this time as the settlement is outwith the Spatial Strategy and so unlikely to be brought forward as contrary to TAYplan.	part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Dalcrue	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data there is medium risk of flooding within the settlement. However, any negative impacts will be mitigated through policies within the Proposed Plan. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Dunning	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no new significant environmental impact in terms of flooding. However, there are areas of medium probability flooding along the Dunning Burn, which were identified through the LDP1 assessment. The whole of the village and the surrounding area is identified as being within the Ochil Hill Special Landscape however policies within the proposed plan will protect the SLA. There are several listed buildings within Dunning so development could potentially have a negative impact on these buildings; however there are appropriate policies within the Proposed Plan to ensure the protection of listed building which should mitigate any significant environmental impacts.	<p>Yes, an extension was proposed to the existing allocation H20 (alternative B). The land within the extension is within the Ochil Hills Special Landscape area. Due to the scale of the extension there is potential for there to be significant negative impact on the landscape, both in term of the impact on the SLA and on the setting of the existing village.</p> <p>It is suggested that these impacts could be mitigated against by ensuring a landscape Framework is provided as a developer requirement for this site.</p> <p>A second alternative (alternative C) was suggested by officers which involved amending the northern boundary to follow the core path. There is unlikely to be any significant environmental impacts as a result of this boundary alteration.</p>	In terms of environmental impact the preferred alternative is to maintain the existing boundary and include alternative C as impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and the proposed amendment could result in negative environmental impacts.
Errol	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no new significant environmental impact in terms of flooding. The village is adjacent to Errol Park which is	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	listed and a design landscape. There are a number of listed buildings within the development boundary. These are protected by Proposed Plan policies, however.		settlement boundary from LDP1.
Errol Airfield/Grange	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows areas of river flooding throughout the settlement. However, any negative impacts will be mitigated through policies within the Proposed Plan. There is no significant impact on this area as a result of new landscape or historic designations.	Yes, a number of new housing sites were proposed but none of these sites were considered appropriate for development at this time as the settlement is outwith the Spatial Strategy and so unlikely to be brought forward as contrary to TAYplan.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. However, a boundary change is the preferred option to reduce the developable area. Should the area that currently has planning permission be developed, the settlement boundary can be readjusted to reflect the extension to the settlement. If the site is not developed, the boundary will retain a more controlled area for development that reflects TAYplan's policy to restrict further housing in the Carse of Gowrie.
Forgandenny	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there are small pockets of surface water flooding (high, medium, and low probability) within the settlement but it is not considered to cause a significant environmental impact. The Ochil Hill Special Landscape area lies immediately south of the settlement boundary however, policies within the proposed plan will protect the SLA. There are several listed buildings within Forgandenny so development could potentially have a negative impact on these buildings; however there are appropriate policies within the Proposed Plan to ensure the protection of listed building which should mitigate any significant environmental impacts.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Forteviot	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. The Ochil Hill Special Landscape area lies immediately south of the settlement boundary however policies within the proposed plan will protect the SLA and there is no further growth planned within Forteviot and so any impacts on the SLA will not be significant. There are several listed buildings within Forteviot so development could potentially have a negative impact on these buildings; however there are appropriate policies within the Proposed Plan to ensure the protection of listed building which should mitigate any significant environmental impacts.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Glenfarg	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there are small pockets of surface water flooding (high, medium, and low probability) within the settlement but it is not considered to cause a significant environmental impact. The Ochil Hill Special Landscape area lies immediately north of the settlement boundary however policies within the proposed plan will protect the SLA. There is no significant impact on this area as a result of new historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Guildtown	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	Yes, 2 housing sites were proposed but Guildtown already has development near completion within the development boundary.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Inchture	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There are surface water issues but these are mitigated through Proposed Plan policies. There is no significant impact on this area as a result of new landscape or historic designations. The settlement is adjacent to the Sidlaw Hill Special Landscape Area and there new development must ensure it does not impact on	Yes a small additional site was proposed as an alternative at the MIR stage but this is not required due to an increased density proposal at the existing	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	the landscape setting. This is mitigated through other Proposed Plan policies.	housing site H24 in Inchture.	
Invergowrie	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no impact on this area as a result of new landscape designations. There are several listed buildings within Invergowrie so development could potentially have a negative impact on these buildings; however there are appropriate policies within the Proposed Plan to ensure the protection of listed building which should mitigate any significant environmental impacts.	Yes an extension to the existing Employment site at Invergowrie has been proposed. The site assessment to this proposal has not highlighted any significant environmental impact and therefore the proposal is being taken forward as part of the Proposed Plan.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. An alternative boundary has been proposed and is being taken forward to incorporate a larger area for employment land. The preferred alternative is therefore to carry forward the revised settlement boundary to reflect the additional employment land allocation.
Kinfauns	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows no change to the flooding issues in this area. As it is adjacent to the River Tay, this area is prone to flooding. This issue is mitigated by policies within the Proposed Plan. The whole boundary is within the Sidlaw Hills SLA and this is also protected by Proposed Plan policy.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Kinnaird	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. The settlement is within the Sidlaw Hills SLA and has several listed buildings within it. These are protected by Proposed Plan policies, however.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Kinrossie	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations. There are several listed buildings within the boundary but these will be protected by Proposed Plan policies.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Longforgan	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no impact on this area as a result of new landscape designations. There are a number of listed buildings within the settlement boundary however there are appropriate policies within the Proposed Plan which should mitigate any significant environmental impacts.	Yes two sites were proposed in the MIR. Nonetheless, due to due to an increased density proposal at the existing housing site H24 in Inchture, the requirement for additional housing numbers in this area has been significantly reduced.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The preferred option and consequent change to boundary is not being taken forward now based on new planning application information. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Luncarty	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations. There are several listed buildings within the boundary but these will be protected by Proposed Plan policies.	Yes an additional site was proposed to the north of the settlement but due to Luncarty having an extensive allocation to the south in the adopted LDP, any new allocations were not considered appropriate at this time.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Alternative boundaries were proposed as part of housing allocations but these have not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Methven	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no impact on this area as a result of new landscape designations. There are several listed buildings within Methven so development could	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	potentially have a negative impact on these buildings; however there are appropriate policies within the Proposed Plan to ensure the protection of listed building which should mitigate any significant environmental impacts.		
Perth Airport	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows no change to the flooding issues in this area. The boundary is adjacent to the Sidlaw Hills SLA and this is also protected by Proposed Plan policy.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. An alternative boundary was proposed as part of a housing allocation but this has not been taken forward. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Rait	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows no change to the flooding issues in this area. There is flood risk within the central area of the settlement. These issues should be mitigated through Proposed Plan policies. The whole boundary is within the Sidlaw Hills SLA and this is also protected by Proposed Plan policy. There are several listed buildings which are also protected by Proposed Plan policies.	Yes, two sites have been proposed requiring boundary changes. Neither of these sites were considered appropriate for development at this time as the settlement is outwith the Spatial Strategy and so unlikely to be brought forward as contrary to TAYplan.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The preferred option and consequent change to boundary is not being taken forward now based on new planning application information. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Scone	There are no significant impacts on this boundary as a result of data change. An area within the centre of Scone is identified as having carbon rich soils. The updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations. There are several listed buildings within the boundary but these will be protected by Proposed Plan policies.	Yes a minor change was proposed as the preferred option in the MIR to facilitate access to the H29 site at the north of Scone. The impact of this on ancient woodland was considered significant and therefore is no longer being put forward in the Proposed Plan. A larger area was put forward to the south of Scone but this was not considered appropriate in terms of landscape impact.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The preferred option and consequent change to boundary is not being taken forward now based on response to the MIR. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
St Madoes/Glencarse	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows no change to the flooding issues in this area.	No	There are no significant impacts on this boundary as a result of data change. The updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.
Stanley	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows no change to the flooding issues in this area.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Tibbermore	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows that there is no significant environmental impact in terms of flooding. There is no impact on this area as a result of new landscape designations. The whole of the settlement of Tibbermore lies within the Tippermuir Battlefield site which would result in an impact on the historic environment; however there are appropriate policies within the Proposed Plan to ensure the protection of	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	historic battlefield which should mitigate any significant environmental impacts.		
Wolfhill	There are no significant impacts on this boundary as a result of data change. There are no peat soils; the updated flooding data shows no change to the flooding issues in this area.	Yes an area was submitted through the MIR to change the settlement boundary. This site was not considered appropriate for development at this time as the settlement is outwith the Spatial Strategy and so unlikely to be brought forward as contrary to TAYplan.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The preferred option is therefore to carry forward the existing settlement boundary from LDP1.
HIGHLAND AREA			
Aberfeldy	No peat soils. Updated flood mapping shows the area at risk of river flooding is slightly extended within the existing settlement boundary and outwith the boundary to the north-east and south. Various small areas at risk of surface water flooding adjacent or close to the boundary, primarily to the south. Entire settlement boundary adjacent to the Strath Tay SPA. Listed buildings outwith the boundary to the north-east and adjacent to the boundary to the north-west.	Yes. A site was proposed at pre-MIR stage at Amulree Road. Consulted upon as an alternative option through the MIR. This is a visually prominent greenfield site within the Strath Tay SLA. Risk of surface water flooding from the burn running along the western boundary. Same burn links to the River Tay SAC.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The site proposed at MIR stage is wholly within the SPA. There are already two allocated sites in Aberfeldy and it is doubtful as to whether adding a third site would result in additional houses being built. The site is not proposed for inclusion as an allocation in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate it. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Dunkeld and Birnam	No peat soils. Updated flood mapping shows an extended area at risk of river flooding all along the northern, western and eastern boundaries of Birnam, both within and adjacent to the boundary. At Dunkeld the area at risk of river flooding is also extended at the southern and western boundaries. No additional landscape designations. With the exception of the north-eastern and south-eastern corners, the whole of Dunkeld is within the Dunkeld Battlefield designation. The designation extends well beyond the existing settlement boundary to the west and north-west.	<p>Yes. An area to the north of Dunkeld was consulted upon through the MIR as a potential settlement expansion. At MIR stage another alternative boundary was proposed to the north of Dunkeld. A minor amendment is proposed to include two properties which are currently outwith the settlement boundary.</p> <p>The expansion area consulted upon in the MIR is a culturally sensitive area; it falls within the Dunkeld Battlefield designation, is adjacent to the Conservation Area, and is in close proximity to the Dunkeld House Garden & Designed</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The MIR considered amending the settlement boundary to allow some small scale residential development to the north providing adverse impacts can be mitigated but acknowledged that the site is unlikely to be effective as a large scale allocation. However, including this area within the settlement boundary as white land would suggest that it has scope for development. This could potentially generate significant adverse impacts on both the landscape and on the historic environment, in particular the battlefield designation. The preferred alternative is therefore not to include this area within the settlement boundary.</p> <p>The further northern expansion area was proposed as a boundary alteration rather than as a site. Extending the settlement boundary could imply that there is some scope for additional development which is unlikely to be the case without adversely affecting the ancient woodland and potentially affecting the landscape and historic environment. The preferred alternative is therefore not to include this area within the settlement boundary.</p> <p>The two properties are located to the north of Dunkeld and are immediately adjacent to other properties which are included within the settlement boundary. These two properties appear to have been omitted in error. No adverse impacts are envisaged from a minor amendment to the boundary in this location given that the buildings are already there.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
		<p>Landscape. It is within the River Tay (Dunkeld) NSA and forms part of the setting of the settlement. Watercourses on the site are likely to link to the River Tay SAC.</p> <p>The further northern expansion area is also within the River Tay (Dunkeld) National Scenic Area. The ancient woodland which covers approximately two thirds of the site forms part of the setting of the settlement. The woodland is likely to be of significant biodiversity value. It is within 2km of the River Tay SAC. Approximately one third is within the Dunkeld Battlefield designation.</p> <p>The area proposed for a minor amendment to include two properties is within the Dunkeld Battlefield designation and the River Tay (Dunkeld) National Scenic Area.</p>	<p>The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1 with a minor amendment to include these two properties at Dunkeld.</p>
Pitlochry	<p>No peat soils. Updated flood mapping shows that that area at risk from river flooding is slightly extended in the south of Pitlochry, either side of the River Tummel and the southern section of the Moulin Burn. Small areas at risk of surface water flooding within and adjacent to the settlement boundary. Ben Vrackie SPA adjacent to the northern boundary. Various listed buildings within the settlement boundary. Balnakeilly House listed building covers a sizeable area and is adjacent to the northernmost edge at Moulin.</p>	<p>Yes. An extension to the existing allocated site H39 was consulted upon through the MIR.</p> <p>The extension is within the Ben Vrackie SPA. The Moulin Burn runs along the eastern boundary and links the site to River Tummel which is part of the River Tay SAC. There is some risk of flooding from the same source.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The extension is relatively small scale and is solely to allow access into the site. No housing will be permitted to be built on this part of the site. Impact on the SPA is therefore likely to be limited and will be outweighed by the benefits of enabling the residential development to come forward.</p> <p>The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1 with an amendment to include an extension to the existing allocation at H39.</p>
Acharn	<p>No peat soils. Updated flood mapping shows that the majority of the settlement, together with large areas adjacent to the north, west and south, is at risk of river flooding. Whole settlement is within the Loch Tay SPA. Several listed buildings within the settlement.</p>	<p>Yes. A small site proposed at pre-MIR stage to include land adjacent to the existing employment area. Too small</p>	<p>Flood risk affects most of the settlement and it is within the SPA. However, the impacts arising from these data changes are not considered to necessitate an alteration to the existing settlement boundary. The site is proposed as an extension to the existing small employment area. The settlement boundary</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
		<p>to be assessed as a site.</p> <p>Boundaries of the site at risk of river flooding. Trees along the eastern boundary in the Native Woodland Survey of Scotland. Red squirrel recorded within the site. Within 2km of the River Tay SAC. Wholly within the Loch Tay SPA.</p>	<p>already includes several undeveloped areas which could potentially accommodate some employment development. Furthermore, Plan policies allow for development adjoining the settlement boundary where it accords with the Rural Businesses policy so the site could potentially be developed without requiring a change to the boundary. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Ballinluig	No peat soils. Updated flood mapping shows little change; the open space area is still at risk of flooding.	<p>Yes. A change to the settlement boundary was proposed at MIR stage to include the House of Bruar Warehouse. Not assessed as a site as planning consent had already been implemented.</p> <p>No flood risk on the site itself but large area at risk from river flooding to the south. Approximately one third of the northern part of the site at risk from surface flooding. Within 2km of the River Tay SAC. Western boundary within the Network Rail ownership buffer. Outwith 400m buffer to a bus stop.</p>	<p>There are no significant impacts arising from data changes which would necessitate an alteration to the existing settlement boundary. The warehouse is not immediately adjacent to the existing settlement boundary for Ballinluig but is separated from it by the A9 and the junction with the A827. Given that the planning consent for this site has been implemented there is no need to include this area within the settlement, nor would it result in a logical boundary. Any proposals for further employment uses in this area could be assessed under existing Plan policies. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Balnaguard	No peat soils. Updated flooding mapping shows that much of the southern half of the settlement is still at risk of flooding. Wholly within the Strath Tay SPA.	No	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Butterstone	No peat soils. Updated flood mapping shows that the eastern boundary is still affected by flood risk.	No	<p>There are no significant impacts arising from data changes which would necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Camserney	No peat soils. Updated flood mapping shows that while the settlement itself is still largely unaffected by flood risk, there is flood risk outwith the settlement to the south. Wholly within the Loch Tay SPA. Small number of listed buildings within the settlement boundary.	<p>Yes. Site proposed at pre-MIR stage to include land to the south-east of the settlement. Too small to be assessed as a site.</p> <p>No flood risk on this site. Within 2km of the River Tay SAC. Capacity issues at</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The settlement boundary at Camserney in LDP1 was drawn to offer the potential for additional residential and employment development. The boundary was amended during the Inquiry to include land to the north of the area now being proposed. The area now proposed is more visible and development here would be more likely to have an impact on views in from the main road. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
		Breadalbane Academy Primary. Wholly within the Strath Tay SPA.	
Coshievile	No peat soils. Updated flood mapping shows that the settlement is still unaffected by flood risk. Adjacent to the boundary of the Loch Tay SPA.	No	There are no significant impacts arising from data changes which would necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Croftinloan/Donavord/ East Haugh/Ballyoukan	No peat soils. Updated flood mapping shows that much of the southern boundary is now at risk from flooding.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Dull	No peat soils. Updated flood mapping shows that the settlement is still largely unaffected by flood risk. Wholly within the Loch Tay SPA. Small number of listed buildings within the settlement boundary.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Fearnan	No peat soils. Updated flood mapping shows that the settlement is still largely unaffected by flood risk. Wholly within the Loch Tay SPA.	Yes – proposal at pre-MIR stage to include land on the south side of the A827 which is within the same land ownership as ‘The Croft’. Too small to be assessed as a site. Outwith the flood risk area. Within 2km of the River Tay SAC. Wholly within the Loch Tay SPA. Site of archaeological interest.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The settlement boundary at Fearnan in LDP1 was drawn to offer the potential for additional development. The south side of the road is largely garden ground with a small number of buildings associated with the main houses on the north side of the road. This is the manner in which the settlement of Fearnan, and this side of Loch Tay, has developed. Amending the settlement boundary to include just part of this area would not result in a logical boundary; the only other option would be to include the entire strip of land between the A827 and the Loch within the boundary. However this could imply that there is scope for additional development which is unlikely to be the case without significantly adversely affecting the historic and established character of this area. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Fortingall	No peat soils. Updated flood mapping shows that more of the western half of the settlement is now at risk of flooding. Numerous listed buildings within the settlement.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Grandtully/Strathtay and Little Ballinluig	No peat soils. Updated flood mapping shows that Little Ballinluig is still largely unaffected by flood risk and part of the southern boundary of Strathtay is still at risk of flooding. In Grandtully the area at risk of flooding in the north has reduced. All settlements are wholly within the Strath Tay SPA.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundaries from LDP1.
Inver	No peat soils. Updated flood mapping shows that, with the exception of the north western corner, the whole settlement is at risk of flooding. Several listed buildings within the settlement.	Yes. Pre-MIR submission for the retention of the existing employment area which includes the allocation E14. SEPA, however, require the removal of site E14 from the Plan on the grounds that the entire site is at risk of flooding. This is reflected in the update to the LDP1 site assessment.	SEPA requires site E14 to be removed due to the flood risk which affects the whole site. Removing this site but leaving it as white land within the settlement boundary would suggest that it could have development potential. Site E14 forms a significant part of the settlement boundary around Inver. Without this site Inver becomes a small settlement which consists of housing, some existing employment use, and a caravan park. The preferred alternative is therefore to remove the settlement boundary for Inver altogether from the Proposed Plan on the basis that any future development coming forward can be assessed against Plan policies.
Kenmore	No peat soils. Updated flood mapping shows that the majority of the settlement is still	No	Impacts arising from data changes are not considered to necessitate an alteration

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	unaffected by flood risk. Wholly within the Loch Tay SPA. Numerous listed buildings within the settlement.		to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Kinloch Rannoch	No peat soils. Updated flood mapping shows that the area in the north at risk of flooding has lessened slightly. There remains a large flood risk area adjoining the settlement boundary to the south west.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Kinnaird	No peat soils. Updated flood mapping shows that a slightly larger area is at risk of flooding along the south eastern boundary. The Ben Vrackie SPA adjoins the northern boundary of the settlement. One listed building.	Yes. A minor amendment is proposed to bring the settlement boundary in line with the Ordnance Survey base map.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. The boundaries of four properties in Kinnaird lie slightly further north on the Ordnance Survey base map than the adopted LDP1. The Ordnance Survey mapping reflects the planning consent which was granted for these houses. No adverse impacts are envisaged from a minor amendment to the boundary in this location given that the houses are already there. The preferred alternative for Kinnaird is therefore to carry forward the existing settlement boundary from LDP1 with a minor amendment to reflect the Ordnance Survey base map along the northern boundary.
Logierait	No peat soils. Updated flood mapping shows that whilst the majority of the settlement is still at risk from river flooding, this has lessened slightly. Western half is within the Strath Tay SPA. Several listed buildings within or adjacent to the settlement.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Murthly and Gellyburn	No peat soils. Updated flood mapping shows that the majority of the settlement remains unaffected by flood risk. Small number of listed buildings within the settlement boundary.	Yes. An amendment was made at the Council meeting to include Gellyburn within the settlement boundary and to rename the settlement 'Murthly and Gellyburn'.	No impacts arising from data changes which are considered to necessitate an alteration to the existing settlement boundary. The small settlement of Gellyburn to the north west is considered to be part of the village of Murthly and it is therefore appropriate to include it within the settlement boundary. The preferred alternative is therefore to amend the existing settlement boundary from LDP1 to include the settlement of Gellyburn to the north west of Murthly.
Trochry	No peat soils. Updated flood mapping shows that a significantly larger part of the settlement is now at risk of flooding (approximately half).	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Tummel Bridge	No peat soils. Updated flood mapping shows that the flood risk which previously covered most of the settlement has reduced.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Weem and Boltachan	No peat soils. Updated flood mapping shows that the southernmost parts of both settlements are still at some risk of flooding. Both settlements are wholly within the Loch Tay SPA. Small number of listed buildings within the settlement boundary.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
KINROSS-SHIRE AREA			
Kinross/Milnathort 1	The new flood risk data shows that the triangular field within Op16 is affected by surface water flooding, and after a detailed FRA was carried out associated to the Lathro planning application, SEPA confirmed that corner of Op16 is in the functional flood plain. Land to the west of Kinross and Milnathort settlement lies within the Loch Leven and Lomond Hills Special Landscape Area. The Landscape policy in the LDP provides	No	Option A. The triangle of OP16 will remain in the settlement boundary but will be shown as within open space.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	appropriate protection for this designation.		
Kinross/Milnathort 2		(1) Land east of Kinross at the golf course, and (2) land at Kinross West between the motorway and Kinross and (3) land south of H48 in Milnathort, should all lie outwith the settlement boundary as this land falls into 1 of 2 categories, 1 land that is not considered to be public open space, or it is public open space but it lies outwith the logical extent of the settlement boundary.	Option A. Removing land from the settlement boundary that lies within the golf course and south of H48. This is land that lies outwith the natural settlement extent. This land would be protected from inappropriate development by policy framework particularly Housing in the Countryside. Removing land at Kinross West that would better protected from development by excluding from the settlement boundary, as it could be argued not to be public open space.
Kinross/Milnathort 3		Yes (change to exclude land currently allocated for a primary school Op15, that is no longer needed for that purpose)	Option A Exclude OP15 land allocated for a primary school from the settlement boundary as it is no longer required for a primary school.
Balado	SEPA medium river flood extents affect less land within the settlement boundary but this does not affect where the settlement boundary should lie.	No	An Elected Member amendment was approved at committee to remove land at Beaufield from the settlement boundary. The concern was that the development of land here would have a potential impact on the Loch Leven SPA. The site was therefore removed from the settlement boundary.
Blairingone	None	Yes	Option A To widen potential area but not scale for development the H74 site has been expanded to include land that was consulted on as part of the Additional Sites consultation.
Carnbo	SEPA medium river flood extents affect less land within the settlement boundary but this does not affect where the settlement boundary should lie.	No	No
Cleish	None	Yes, at CFS stage Cleish 1.	Option A No reasonable alternatives are available, the site proposed is outwith settlement boundary and is more appropriately assessed against Housing in the Countryside policy.
Crook of Devon	There are carbon rich soils to the immediate east of the settlement boundary within Crook Moss. A change to include an allocation here was resisted by officers but was approved by Members as an amendment The new SEPA flood mapping shows less area is affected by river flood risk from the Devon. However the changes do not suggest a change to the settlement boundary, and the flooding policy will provide an appropriate context to consider proposals. The new SEPA flood mapping shows some discrete areas could be affected by surface water issues particularly within Drum, but the flooding and surface water drainage	Yes, additional sites consultation on a revised CFS Crook of Devon 2 to exclude land south of the old railway line.	Option B There are already sufficient housing opportunities within Crook of Devon. This means that the justification for any additional site in a non-tiered settlement site has to be about delivering benefits. The revised Crook of Devon 2 was considered in the MIR and then in more detail in the additional 3 sites consultation in February/March 2017. The outcome of this consultation showed limited public support for the proposal. The community responded in a ratio of roughly 2 against to 1 for. Their concerns are similar to

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	policies provide appropriate steer/mitigation on this issue.		<p>officers but they also had concern about traffic impact and had concern that a roundabout would not reduce speeds or dissuade HGVs from using this route.</p> <p>There is officer concern that this level of development in a non-tiered settlement could be considered to be contrary to the TAYplan spatial strategy. For officers the main issues are its lack of conformity with the TAYplan strategy in terms of scale, and the landscape/settlement pattern impact of the proposal, impacting on the separation between Crook of Devon and Drum. There are also surface water impacts/challenges associated to the development of this site. The David Tyldesley and Associates Landscape Capacity Study identifies wetland and ground conditions being a physical constraint and the area as part of old moss which is an important landscape feature characteristic of the area. For the Council there are challenges and risks associated with many of the potential benefits (roundabout, improvements and transfer of land at Crook Moss, and public parking) because the proposal is unlikely to require them, and meet tests in circular 3/2012 Planning Obligations and Good neighbour Agreements. Therefore from an officer perspective the benefits potentially secured are unlikely to override the concerns and issues.</p> <p>A revised proposal within the same site allocation boundary but for a smaller amount of housing was submitted as an Elected Member amendment and was approved at committee.</p> <p>This amendment which was put forward by Members could offer different wider benefits to the village from the February 2017 proposal. It could additionally offer:</p> <ul style="list-style-type: none"> enhanced footway provision between the site and the school; and 50% affordable housing as opposed to the normal 25% <p>and the offer of the roundabout was replaced by contribution to A977 mitigation measures.</p> <p>This proposed allocation also requires a landscape framework which retains some visual separation between Crook of Devon and Drum to mitigate the impact on the character of the settlements and the landscape impact. Also other SEA requirements have been picked up and identified as developer requirements for the allocation.</p>
Drunzie	The new SEPA flood mapping shows some discrete areas could be affected by surface water issues, but the flooding and surface water drainage policies provide appropriate steer/mitigation on this issue.	No	No change.
Glenlomond	The settlement lies within the Loch Leven and Lomond Hills Special Landscape Area. The landscape policy will provide appropriate framework to consider proposals that could affect this designation.	No	No change.
Greenacres	The Loch Leven and Lomond Hills Special Landscape Area lies to the immediate east of the settlement boundary. The landscape policy will provide appropriate framework to consider proposals that could affect this designation. The new SEPA flood mapping shows some discrete areas could be affected by surface water issues, but the flooding and	No	No change.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	<p>surface water drainage policies provide appropriate steer/mitigation on this issue.</p> <p>A large area of the existing settlement has carbon rich soils, but this area may only have one small infill opportunity. The updated climate change, carbon reduction and sustainable construction provides appropriate steer and mitigation on this.</p>		
Hattonburn	The new SEPA flood mapping shows more significant areas to the north could be affected by river flood risk. However the changes do not suggest a change to the settlement boundary, and the flooding policy will provide an appropriate context to consider proposals. The new SEPA flood mapping also shows some areas could be affected by surface water issues, but the flooding and surface water drainage policies provide appropriate steer/mitigation on this issue.	No	No change.
Keltybridge and Maryburgh	The new SEPA flood mapping shows areas of Maryburgh are affected by river flood risk (associated to the watercourse that runs through the middles of the village) whilst different areas of Keltybridge are shown to be affected by river flood risk. However the changes do not suggest a change to the settlement boundary, and the flooding policy will provide an appropriate context to consider proposals.	Yes CFS Keltybridge2, and Maryburgh 1 were resisted	<p>Option A</p> <p>No change.</p> <p>Keltybridge 2 provides a separation between the farm buildings and the dwellings in Keltybridge, development here may not be compatible with the neighbouring working farm and affects the setting of the village. This land was identified as village setting in Kinross Area Local Plan 2004.</p> <p>Maryburgh 1 presents fewer issues but with sufficient infill opportunities are already available and extending the settlement is not considered appropriate at this time.</p>
Kinnesswood	The settlement lies within the Loch Leven and Lomond Hills Special Landscape Area. The Landscape policy in the LDP provides appropriate protection for this designation. The new SEPA flood mapping shows some discrete areas could be affected by surface water issues, but the flooding and surface water drainage policies provide appropriate steer/mitigation on this issue.	Yes CFS Kinnesswood 1 and Kinnesswood 2	<p>Option A</p> <p>No change.</p> <p>The Kinnesswood 1 proposal for inclusion of land at Bishop Terrace into the Kinnesswood boundary (with an agreement to transfer 6 hectares of hill ground to the community if the site is supported through the LDP) could provide an opportunity for the community to enhance the amenity and use of the wider hill ground that is being offered for transfer. It may allow for the development of a single house at Bishop Terrace as the land can be satisfactorily accessed and it is considered that a well-designed development would not substantially detract from the village setting. Any future development at this site requires improvements to the core path which runs to the south of the land. However this land is currently subject to a planning application and it is considered that it is best considered on its merits as a detailed proposal application rather than supported as a settlement boundary change independent of the detailed proposal.</p> <p>There was a suggestion that Kinnesswood 2 should be included within the settlement boundary and identified as public open space to protect it from development. It is considered that although it has some amenity it is not really public open space, and its inclusion as such within the settlement boundary</p>

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			would leave it more likely to be supported for development in the future. This proposal is therefore resisted.
Ochil Hill Hospital	<p>The settlement boundary lies within the Ochil Hills Special Landscape Area. The Landscape policy in the LDP provides appropriate protection for this designation.</p> <p>The new SEPA flood mapping shows a small discrete area to the northeast could be affected by surface water issues, but the flooding and surface water drainage policies provide appropriate steer/mitigation on this issue.</p>	No	No change.
Powmill	The new SEPA mapping shows small differences in the areas that could be affected by river flood risk, and this does not suggest a change to the settlement boundary. The flooding policy provides appropriate context to consider proposals.	No	No change.
Rumbling Bridge	The new SEPA mapping shows small differences in the areas that could be affected by river flood risk, and this does not suggest a change to the settlement boundary.	Yes, CFS Rumbling Bridge 1 (Option B) as a reduced proposal was considered through the additional sites consultation.	<p>Option A</p> <p>Rumbling Bridge 1 was resisted as it was considered contrary to the TAYplan spatial strategy. There are already sufficient housing opportunities available within Rumbling Bridge. This means that the justification for any additional site has to be about delivering benefits and it is considered that there are insufficient wider benefits to this proposal (it is considered unlikely that a shop would be interested in this location and no evidence of interest is provided).</p> <p>For LDP1 the Reporter concluded that, “a landscape capacity study highlighted that this open field (R3) near the gorge is an important feature of the landscape character of this part of the village. Its development for housing, even at a low density, would detract from the attractive rural character of the village, and is unnecessary having regard to the other opportunities for infill development within the settlement boundary.” These conclusions still remain relevant.</p> <p>A revised proposal was put forward through the additional sites consultation in February/March 2017 to try and mitigate the scale, landscape and settlement pattern issue of the initial proposal. It also proposed some potential community benefits in the form of public parking for the gorge, a play area, interpretation board and shelter and a footpath connection to the gorge footpath.</p> <p>The principal reasons for the public’s concern largely reflected officer concerns about the impact on the landscape and character of the village, along with the scale when considering other opportunities. However the public were also concerned about the traffic impact.</p> <p>It is considered although this is a much better proposal than Rumbling Bridge 1, the remaining issues/impacts associated with the revised proposal are not outweighed with the potential benefits and it should be resisted. For the Council there are also challenges and risks associated with many of the potential benefits (car park, play area, interpretation board and shelter) because the proposal is unlikely to require them, and meet tests in circular 3/2012.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
			An amendment was put forward by Members (Option A) to include land here within the settlement boundary as open space and this was approved at committee. Members wanted to reflect the open space and include it within the settlement boundary.
Scotlandwell	<p>The settlement lies within the Loch Leven and Lomond Hills Special Landscape Area. The Landscape policy in the LDP provides appropriate protection for this designation.</p> <p>Some land within the southern part of the area has carbon rich soils. The updated climate change, carbon reduction and sustainable construction provides appropriate steer and mitigation on this and the H54 allocation needs a developer requirement to flag up this issue.</p> <p>There is a very small area at the southwestern edge that the new SEPA mapping shows as being at risk for river flooding but it does not suggest a boundary change and the policy on flooding provides an appropriate context to consider proposals.</p>	No	No change.
Wester Balgedie	<p>The settlement lies within the Loch Leven and Lomond Hills Special Landscape Area. The Landscape policy in the LDP provides appropriate protection for this designation.</p> <p>There is a very small area at the north western edge that the new SEPA mapping shows as being at risk for river flooding but it does not suggest a boundary change and the policy on flooding provides an appropriate context to consider proposals.</p>	No	No change
STRATHEARN AREA			
Auchterarder	<p>No peat soils.</p> <p>Updated flood mapping shows a higher than previously assessed risk of flooding from the Ruthven Water east of Ruthvenvale Mill to Shinafoot. Although not assessed as being very likely to flood, the area at low risk of flooding is significant.</p> <p>Settlement is approx 300-500 M north and west of the Ochil Hills Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Yes, five changes to the settlement boundary were suggested, four of which were for housing sites, and one mixed use site.</p> <p>The housing sites have site assessments and are located at Gallowhill (Auchterarder 1, H226/H329); Ruthvenvale Mill and surrounding area, partly inside the settlement boundary and partly outside it (Auchterarder 4, H229); Castlemains North (Auchterarder 5, H230); and Kincardine Road, mainly inside the settlement boundary but an area around 0.85 Ha at the south of Cloan Drive lies outside the boundary (Auchterarder 7, H287).</p> <p>The mixed use site is at</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>One of the suggested sites should be carried forward for the following reason:</p> <p>The land at Kincardine Road (Auchterarder 7, H287) is the preferred alternative as the inclusion of this site as an allocation. It is already mainly inside the settlement boundary but an alteration to the boundary to include the field at the south of Cloan Drive would improve access to the site from the local road network, and would allow better more efficient use to be made of the larger allocation. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1 with an alteration to accommodate that part of H230 that is not already inside the settlement boundary.</p> <p>The other suggested boundary alterations should not be implemented and instead the existing settlement boundary from LDP1 should be carried forward at those locations for the following reasons:</p> <p>The sites suggested to the north of the settlement (Auchterarder 1,5; H226/H329, H230) are not proposed for inclusion in the Proposed Plan. In landscape terms, development here is not considered appropriate because it is down slope beyond the shoulder of the bowl within which Auchterarder sits and would extend the settlement out into Strathearn, and due to the absence of a hard boundary to the north there would be no natural stop line preventing development from extending further down the slope.</p>

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		Shinafoot (Auchterarder 6, MU231)	<p>The site at Ruthvenvale Mill (Auchterarder 4, H229) is not proposed for inclusion in the Proposed Plan. Part of the site is potentially at low risk of flooding from the Ruthven Water, and although unlikely, there is a significant area of the site that is potentially at risk.</p> <p>And finally, the mixed use site (Auchterarder 6, MU231) is not proposed for inclusion in the Proposed Plan. It is also potentially at low risk of flooding from the Ruthven Water. Additionally, the protection of riparian areas is particularly important due to the complex relationship between species movement, food sources, water quality and other ecological processes taking place. Development of this site would lead to adverse impacts on biodiversity, water resources (run-off), soil (destabilisation of river banks); climatic factors (reducing the capacity of the natural floodplain) and human health (deterioration of water quality).</p>
Crieff	<p>No peat soils.</p> <p>Updated flood mapping shows the risk of flooding from rivers remains significant along the west bank of the Earn at Bridgend, and along the length of the Turret Burn south of Dalvreck Bridge, but the updated data does not suggest a boundary change and the policy on flooding provides an appropriate context to consider proposals.</p> <p>The settlement lies entirely within the Upper Strathearn SLA.</p> <p>No changes to listed buildings.</p>	<p>Yes, boundary changes were suggested for six housing sites and one single house plot.</p> <p>The housing sites have site assessments and are located at Alichmore Lane (Crieff 2, H236); Laggan Road (Crieff 3, H237); Dollerie Terrace (Crieff 4, H238); Broich Road south of Skye Crescent (Crieff 5, H239); Wester Kincardine Holdings (Crieff & 6 Crieff 7, H240 & H241).</p> <p>The suggestion for a single house plot is at Callum's Hill at the corner of Pollock Terrace and Callum's Hill. The site suggested is alongside the A85 trunk road at the periphery of the settlement and forms part of the approach to the settlement from the east.</p> <p>This approach is characterised by trees lining the trunk road, although the suggested site is open and grassy with a boundary stone wall to the north. Nearby houses at Callum's Hill,</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>None of the six housing sites are proposed for inclusion as an allocation in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate them.</p> <p>The suggestion to amend the existing settlement boundary to accommodate a single house plot at Callum's Hill could result in negative environmental impacts</p> <p>The single house plot is a smaller scale suggestion but to discourage its development having an adverse impact on the setting of this attractive approach to the town, no change to the settlement boundary is proposed.</p> <p>The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>

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		<p>Pollock Terrace and Baird Terrace do not front directly onto the trunk road and those closest to the road are screened from it by hedges or trees.</p> <p>To prevent negative visual impact on this attractive approach to the town, it is recommended that this site remain outside the settlement boundary.</p>	
Aberuthven	<p>No peat soils.</p> <p>Updated flood mapping shows the risk of flooding from the Ruthven Water is similar in extent to previous years; inside the settlement boundary the risk is slightly less but outside the settlement boundary the risk remains nearly the same. Two new areas at risk of surface water flooding are land between Main Road and Park Place; and land just inside the settlement boundary along the east bank of the Ruthven Water opposite the sewage works.</p> <p>Settlement is approx 1.1 Km north and west of the Ochil Hills Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Boundary change to accommodate one new site was suggested at call for sites stage.</p> <p>Also suggestion to amend the employment site boundary to make it smaller, to better reflect the size of allocation that would be required during the plan period.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>Around 50% of the site and consequent boundary change suggested at Call for Sites stage would be at medium risk of flooding and it is therefore doubtful that it could be developed.</p> <p>The site is not proposed for inclusion as an allocation in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate it. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Blackford	<p>No peat soils.</p> <p>Updated flood mapping shows the risk of flooding in the village is much higher than previously indicated from the Allan Water, Burn of Ogilvie, Danny Burn and the unnamed burn running along land between Stirling Street and the A9 trunk road. Inside the settlement boundary, areas at Mill of Ogilvie, Highland Spring and at the recreation ground are indicated as being at risk. New areas at risk of surface water flooding are land along the north bank of the Allan Water between Highland Spring works, and Abercairney Place; and land between Stirling Street and Moray Street south of the primary school.</p> <p>Settlement is adjacent to the northern boundary of the Ochil Hills Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Boundary change to accommodate one new site was suggested at call for sites stage</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>None of the site and consequent boundary change suggested at Call for Sites stage would be at risk of flooding. However the site is not proposed for inclusion as an allocation in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate it. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Braco	<p>No peat soils.</p> <p>Parts of the south and east of the settlement at Gentlecroft, Greenhaugh Way and Commander's Grove have historically been at risk of flooding from the River Knaik and the Keir Burn. Updated flood mapping shows the built-up area at risk is reduced although much of the undeveloped land to the south of the settlement and along the watercourses is still at risk.</p>	No	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. It is therefore proposed to carry forward the existing settlement boundary from LDP1.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	<p>The settlement is approx 2 Km north and west of the Ochil Hills Special Landscape Area.</p> <p>No changes to listed buildings.</p>		
Comrie	<p>No peat soils.</p> <p>Comrie has experienced a history of flooding from the Water of Ruchill, the River Earn and the River Lednock. Recent flood protection work to reduce the risk of flooding from the Water of Ruchill to the Dalginross area has been completed to the 1 in 100 year return period however the risk to the settlement from the River Earn or the River Lednock, or the combined risk from all three rivers has not yet been addressed. The implementation of a full flood protection scheme is likely to be some time away and is not yet certain to take place.</p> <p>The settlement is just inside the western boundary of the Upper Strathearn Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Boundary changes to accommodate one new site at call for sites stage (at Dalginross), and one new site at Main Issues Report stage (east of the caravan park at Tomperran) were suggested.</p> <p>The Dalginross site suggestion is not at significant risk of flooding however updated flood data shows the majority of the suggested site adjacent to the caravan park is at risk of flooding.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The suggested sites are not proposed for inclusion as allocations in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate them. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Cultybraggan	<p>No peat soils.</p> <p>Cultybraggan Camp is adjacent to the Water of Ruchill and updated flood data shows most of the site is at low risk of flooding.</p> <p>The settlement is just inside the western boundary of the Upper Strathearn Special Landscape Area.</p> <p>No changes to listed buildings.</p>	No	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. It is therefore proposed to carry forward the existing settlement boundary from LDP1.</p>
Fowlis Wester	<p>No peat soils.</p> <p>Updated flood data shows a small area north of the properties in the west of the settlement that is at low risk of surface water flood.</p> <p>Not near any Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Boundary change to accommodate one new site was suggested at call for sites stage.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The site suggested at call for sites stage is not proposed for inclusion as an allocation in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate it. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
gWest	<p>No peat soils.</p> <p>Updated flood data shows no change to existing flood risk at Milton of Panholes adjacent to the Allan Water.</p> <p>Settlement is approx 800m north and west of the Ochil Hills Special Landscape Area</p> <p>No changes to listed buildings.</p>	No	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. It is therefore proposed to carry forward the existing settlement boundary from LDP1.</p>
Gilmerton	<p>No peat soils.</p>	<p>Boundary changes to accommodate two new sites</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	<p>Updated flood data shows no changes and the settlement remains not at risk of river flooding but there are isolated areas within the built-up area at risk from surface water flooding</p> <p>Settlement is on the eastern edge of the Upper Strathearn Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>were suggested at call for sites stage (one to the north of the settlement and one to the south).</p> <p>The north site suggestion is not at significant risk of flooding and updated flood data shows minimal risk of isolated patches of surface water flooding at the south site suggestion.</p>	<p>The sites suggested at call for sites stage are not proposed for inclusion as allocations in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate them. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Gleneagles	<p>No peat soils.</p> <p>Updated flood data shows no change, except to mark extents of managed artificial ponds and waterbodies</p> <p>Settlement is approx 700m north and west of the Ochil Hills Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Boundary changes to accommodate one new site at call for sites stage (east of Firhill), and one new site at Main Issues Report stage were suggested.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The sites suggested at call for sites stage are not proposed for inclusion as allocations in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate them. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>
Greenloaning	<p>No peat soils.</p> <p>Updated flood data shows small changes at the north of the settlement, where there is a reduced risk of flooding to some properties on Allandale Crescent from the Allan Water and the burn running across the Crescent. The existing risk of flooding along the length of the burn on the settlement's east boundary remains.</p> <p>Settlement is adjacent to the A9 trunk road, which forms the northern boundary of the Ochils Hills SLA.</p> <p>No changes to listed buildings.</p>	<p>No</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. It is therefore proposed to carry forward the existing settlement boundary from LDP1.</p>
Muthill	<p>No peat soils.</p> <p>Updated flood data shows no change to the already low risk of flooding in the settlement.</p> <p>The settlement lies immediately adjacent to the south boundary of the Upper Strathearn SLA.</p> <p>No changes to listed buildings.</p>	<p>Boundary changes to accommodate three new sites were suggested both at call for sites, and Main Issues Report stages.</p> <p>The sites have site assessments and are west of Ancaster Way (Muthill 1, H246); north of Station Road (Muthill 2, H247); and Dalliotfield (Muthill 3, H248).</p> <p>Two of the sites (west of Ancaster Way and at Dalliotfield) are on the periphery of the settlement</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The sites suggested at call for sites stage are not proposed for inclusion as allocations in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate them. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
		<p>and are immediately adjacent to the SLA. Both of these sites, if developed, would appear as linear extensions to the village.</p> <p>The third site north of Station Road, is partly inside and partly outside the existing settlement boundary, however there would be a significant adverse impact on the setting of the listed St James's Church.</p>	
St David's	<p>No peat soils.</p> <p>Updated flood data shows medium risk of isolated pockets of surface water flooding west and north of the settlement boundary but minimal risk inside the boundary.</p> <p>Not near any Special Landscape Area.</p> <p>No changes to listed buildings.</p>	<p>Two boundary changes were suggested to accommodate new sites. One site south and east of Southview at the fork in the road was suggested at Call for Sites stage (H249), while both sites were received as suggestions at Main Issues Report stage. The second site is a relatively large field group north of the existing settlement (H328).</p> <p>While not in a Special Landscape Area, the site to the north of the settlement would have a significantly adverse impact on the setting of the village and its character. It would bear little relationship to the existing pattern of development and would be more akin to new development in the open countryside than to a sympathetic village extension.</p> <p>The site to the south of the settlement would not enhance the unique layout and character of the village.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The sites suggested at Main Issues Report stage are not proposed for inclusion as allocations in the Proposed Plan and it is not therefore appropriate to amend the settlement boundary to accommodate them. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.</p>

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
STRATHMORE & GLENS AREA			
Alyth	No peat soils. Updated flood mapping shows that a larger area throughout the settlement, following the river, is at medium risk of river flooding, particularly at the western end of Springbank Road and the area surrounding the river here. White land within the settlement boundary at Airlie Street is also at high risk from surface water flooding. Outwith the settlement boundary, following the river to the east of the settlement, the updated flooding data shows a lesser extent risk of river flooding. Overall the risk of river flooding remains extensive throughout the centre of the settlement. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
New Alyth	No peat soils. Updated flood mapping shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Blairgowrie/Ratray	No peat soils. Updated flood mapping shows that the area of flood risk to the east of the settlement, stretching along the river from Welton Road into Ratray, has decreased slightly. Moving away from the area adjacent to the River Etricht, there are no other significant environmental impacts in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	<p>Yes – a site was proposed at pre-MIR stage at Westfields of Ratray, and it was suggested that existing sites at Welton Road were joined up to the proposed sites at Coupar Angus Road. These were consulted upon as alternative options through the MIR.</p> <p>Westfields of Ratray is a brownfield site. Red squirrel and viviparous lizard recorded close to the site. Small area at risk of flooding.</p> <p>The Eastern Expansion area could potentially have significant landscape impacts. The site is currently in agricultural use and provides a picturesque entry to Blairgowrie from Coupar Angus. Parts are at risk of surface water flooding and there are various archaeological features on the site. The local primary school is at capacity.</p>	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The inclusion of the site at Westfields of Ratray as an allocation would give the opportunity to develop the brownfield site which currently has a detrimental effect on the landscape when approaching Ratray from the north due to its state of disrepair.</p> <p>The Eastern Expansion area provides a necessary longer term strategic development site for Blairgowrie and will ensure long term certainty and growth for the town. Planning policies will be used to mitigate adverse impacts.</p> <p>The preferred alternative for Blairgowrie and Ratray is therefore to carry forward the existing settlement boundary from LDP1 with amendments to include the Westfield of Ratray site to the north, and the Eastern Expansion area to the south east.</p>
Coupar Angus	No peat soils. Updated flood mapping has altered the flood risk within and outwith the settlement boundary significantly. Older data covered a more expansive area for river flood risk to the south of the town centre, at Queen Street. However the updated flood data is more precise and less extensive. Towards Dundee Road, there is more area	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
	identified to be at medium risk of river flooding. This is also the case for the agricultural land to the west of Perth Road on approach to Coupar Angus. There is no significant impact on this area as a result of new landscape or historic designations.		
Ardler	No peat soils. Updated flood mapping shows less extensive river flooding probability surrounding the village. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Bridge of Cally	No peat soils. Updated flood mapping shows that there is no significant environmental impact in terms of flooding. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Caputh	No peat soils. Updated flood mapping shows less extensive river flooding probability on the southern part of the village and towards the River Tay. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Carsie	No peat soils. Updated flood mapping shows sporadic minor areas of medium risk surface water flooding throughout site. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Concraigie	No peat soils. Updated flood mapping continues to show no major flood risk within the settlement, and a minor area of medium flood risk to the north of the settlement following the river. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Craigie	No peat soils. Updated flood mapping shows small area of surface water flooding to the north east of settlement, on an area currently designated as open space. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Kettins	No peat soils. Updated flood mapping continues to show an area of medium risk flooding following and surrounding the Kettins Burn which runs through the heart of the village. There is no significant impact on this area as a result of new landscape or historic designations.	Yes. Two boundary changes proposed at MIR stage, one to the east and one to the west. Both would result in the loss of greenfield land surrounding the settlement. Half of the eastern area is at risk from river flooding. There are no significant environmental effects arising from the western area.	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. There are limited services and facilities in Kettins and the proposed boundary change to the east has the potential to create a sizeable extension to the settlement. Approximately half the area is at risk from flooding. Amending the settlement boundary to include the western area would cut across the corner of a field and would not result in a logical boundary. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Kinloch	No peat soils. Updated flood mapping shows minor areas of high risk surface water flooding surrounding the settlement boundary. There is no significant impact on this area as a result of new landscape or historic designations.	Yes there were 3 alternative areas submitted through the MIR to change the settlement boundary. These alternative sites were not considered appropriate for development at this time as the settlement is outwith the	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary. Three alternatives were proposed but are contrary to TAYplan spatial strategy. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.

Settlement Name	What is the impact of the changes to the data on this settlement boundary?	Is there a proposed change to this settlement boundary from LDP1?	What is the preferred alternative and why?
		Spatial Strategy and so the proposals are contrary to TAYplan.	
Kirkmichael	No peat soils. Updated flood mapping shows that medium risk of river flooding continues through the centre of the village, following River Ardle from north to south. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Meigle	No peat soils. Updated flood mapping shows the village continues to be at high risk of flooding following the tributary to the Dean Water. There is no significant impact on this area as a result of new landscape or historic designations.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.
Meikleour	No peat soils. Updated flood mapping shows no significant flood risk within or adjacent to the settlement. There is no significant impact on this area as a result of new landscape or historic designations, although a number of buildings in the settlement remain listed.	Yes. A boundary change was suggested at pre-MIR stage which would have resulted in a large extension to the existing settlement. The potential for adverse impact of this extension on the historic character and setting of the village was considered too great and the proposal was not supported. A smaller area has instead been identified.	<p>Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary.</p> <p>The settlement boundary at Meikleour is purposefully drawn tightly to limit future growth. The identification of this small area would allow an appropriate amount of additional development whilst protecting the character of the village.</p> <p>The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1 with a minor amendment to include a small extension on the eastern boundary of the village.</p>
Spittalfield	No peat soils. Updated flood mapping shows numerous small areas of medium flood risk through the settlement. Directly to the south of the settlement, the data continues to show a vast area of medium river flood risk. There is no significant impact on this area as a result of new landscape or historic designations; a number of buildings in the settlement remain listed.	No	Impacts arising from data changes are not considered to necessitate an alteration to the existing settlement boundary and no alternative boundaries have been suggested. The preferred alternative is therefore to carry forward the existing settlement boundary from LDP1.

6.6 POLICY ASSESSMENT

This section provides a summary of the findings from the analysis of potential LDP policies and potential significant environmental effects. In order to keep the analysis of policies structured and systematic, a matrix approach has been used both for the analysis process and in presenting the results. The methodology adopted resulted in the assessment of each of the Plan's policies against the 17 SEA objectives. The appraisal is based on a series of informed, professional judgements about the likely significant effects of policies and policy areas, using the best information available.

The following paragraphs provide a summary of the results for each of the Proposed Plan policy groups within the four themed chapters. The more detailed matrix summaries have been provided in Appendix D to this Addendum.

6.6.1 Placemaking Group – Policy Assessment

As the Developers Contributions policy will not in itself result in any physical development, but rather provides a statement of the approach the Council will follow in seeking financial contributions from developers linked to their proposals, it was considered that an assessment was not required because its implementation is unlikely to result in any significant effects.

In terms of the remaining policies within the Placemaking Group, overall it is expected that the implementation of the policy group will result in significant positive effects on the SEA Topics, either individually or in combination with other policies and guidance in the Plan; particularly in terms of the objectives which seeks to promote and ensure high standards of sustainable design and construction, maximising the sustainable use/re-use of material assets, directing development to sustainable locations, and protecting air quality and reducing greenhouse gases. Other positive effects have been identified for the policy group in relation to SEA objectives 2, 3 and 4, as well as in preserving townscape character (SEA Objective 17).

Uncertain or unpredictable effects were identified as a result of implementing the policies across various SEA objectives. For example, unknown effects have been identified within the policy group for SEA objectives 5 and 7 in relation to protecting soils and safeguarding the function of the floodplain. Any potential impacts will be largely dependent on the specific details of individual development proposals at the planning application(s) stage.

6.6.2 Economic Development Group – Policy Assessment

Overall a number of uncertain or unpredictable effects have been identified for this policy group, largely due to the fact that any potential impacts are likely to be dependent on the type, scale and location of individual development proposals arising as a result of the policies in this group. However, it is considered that by applying the Plan's policy framework to these proposals at the planning application(s) stage, it should be possible to avoid/minimise or mitigate against any potential significant

negative environmental effects identified on a case by case basis, and where relevant, develop appropriate enhancement measures to help deliver more positive outcomes.

Potential significant negative effects were noted for a number of the policies; namely: Rural Business/Diversification (objectives for the water environment and directing development to sustainable locations to reduce journey lengths and the need to travel) due to the likely requirement for private septic tanks possibly in areas which may already have a poor water environment, and increased journeys to access goods, facilities and services at the nearest main settlement; and, Caravan Sites Policy (SEA Objective to protect and enhance the area's landscapes) due to potential visual impact. However, by applying other policies and guidance in the Plan at the Development Management stage for individual development proposals, it should be possible to avoid/minimise or mitigate for any potential significant negative impacts; for example policies on drainage, transportation and accessibility, and managing change in the area's landscapes.

Finally, the potential for positive impacts (mostly in combination with other policies in the Plan) have been identified through the group assessment; in particular, the policy for Employment and Mixed Use Areas should lead to positive effects on a number of the SEA Topics by grouping employment and housing land uses together at the same location, and also by requiring development not to detract from the amenity of neighbouring areas, and good active travel and public transport links. In addition, positive effects are anticipated for the population and human health topics across the majority of the policies as they provide new and improved employment, recreation and leisure opportunities. Further positive effects are expected in respect of the material assets and sustainable design and construction objectives when the Economic Development Policy Group is implemented in conjunction with other policies.

6.6.3 Retail and Commercial Development Group – Policy Assessment

The overall aim of this policy group is to promote the locating of retail and commercial development within town centres and commercial centres. As most of the policies relate to Perth City Centre, potential significant negative effects have been identified on the waterbody status and air quality objectives due to the existing capacity issues at the Perth WWTW, problems associated with surface water run-off and air quality management in the area. However, by applying the Plan's Drainage, Air Quality Management Areas and Transportation and Accessibility policies it should be possible to address any likely significant negative effects arising from proposals under this policy at planning application(s) stage, and also to secure appropriate enhancement measures. Potential negative impacts are noted for all of policies in the group on the SEA Objective to minimise waste, as further waste generation is a likely consequence of increased retail and commercial activities. However, the Plan's Waste Management Infrastructure policy may help to alleviate some of the effects.

A number of uncertain/unpredictable effects have been noted in terms of objectives for biodiversity, flood risk, greenhouse gas emissions, Climate Change, the historic environment, landscape and townscape, as potential impacts will be largely dependent on the location, type, scale and in some instances design of individual proposals. Any such impacts would more appropriately be addressed at

the planning application(s) stage, applying the Plan's policy framework. In addition, the assessment also identified the potential to further strengthen the potential for positive effects as a result of this policy group on the uncertain/unpredictable issues through the content of Supplementary Guidance.

Finally, a number of positive impacts were identified for this policy group on the SEA Objectives which seek to direct development to sustainable locations; maximise the sustainable use/re-use of material assets; those relating to the population and human health topics, and also promoting and ensuring high standards of sustainable design and construction. Although, for the most part, positive effects will rely on the policies' implementation alongside other policies in the Plan, such as those on: Placemaking and, Transportation & Accessibility.

6.6.4 Community Facilities, Sport and Recreation Group – Policy Assessment

The overall environmental effects of implementing the Community Facilities, Sport and Recreation policy group are expected to be positive, particularly in relation to the population and human health and the sustainable use/re-use of material assets objectives. Other possible positive effects have been identified in relation to objectives for Climate Change mitigation and adaptation, landscape and townscape. However, in some instances the potential positive impacts arising out of the policy on Open Space Retention and Provision will be reliant on its implementation alongside other policies and guidance in the Plan. There is potential for adverse effects on biodiversity through increased access for recreational purposes, but such potential effects would be more appropriately considered at the planning application level using the Plan's policy framework in order to help avoid/minimise effects and also to develop appropriate mitigation and enhancement measures, where appropriate.

Apart from the likely significant positive effects on the population and human health and material assets SEA Topics, the Community Facilities policy is likely to have no significant effects on most of the remaining SEA Objectives due to the restrictive nature of the policy.

The Public Access policy (including Core Paths) forms part of this group; however, a separate SEA was undertaken of the Council's Core Path Plan, which concluded that core paths have significant positive benefits including the health, recreation and active travel opportunities for residents. This in turn reduces demand for vehicular travel, improves air quality through reduction in emissions and provides mitigation in relation to the effects of climate change.

6.6.5 Residential Development Group – Policy Assessment

The overall environmental impact of the policies in this group (including the new policy on housing mix) is expected to be positive, particularly in relation to meeting objectives for Sustainable Development (sustainable locations, design and construction), population and human health, and material assets. However, some of these identified possible positive impacts will be reliant on implementation of the policies in combination with other policies in the Plan; for example on Placemaking, Transportation and

Accessibility; Flooding; the Natural Environment; Noise Pollution, and Community Facilities, Sport and Recreation.

Some uncertain/unpredictable effects were noted in terms of the landscape and historic environment objectives, as potential impacts will be dependent on the location, scale, siting and design of new developments. The potential impact of new Gypsy/Travellers' sites on the objective for townscape has also been identified as unknown for the same reason. Again, to help avoid/minimise or mitigate for any potential impacts, these issues should be considered in more detail against the Plan's policy framework as part of the determination process for individual planning applications; in particular policies on Placemaking, the Historic Environment and managing future landscape change.

Policy 23 (Delivery of Development Sites) is not expected to give rise to any significant environmental effects as it will not in itself result in any physical development.

Some mixed effects have been identified for SEA objectives 3 and 4 in terms of Policy 24 as this policy has the potential for some development to come forward on unallocated sites which may give rise to negative impacts on quality of life and environmental quality, however this is expected to be mitigated through the application of relevant LDP policies to ensure any significant effects are suitably addressed. Policy 24 is also expected to give rise to potential negative effects on SEA Objectives 16 and 17 in relation to landscape and townscape, where unallocated sites are brought forward; however, again, this is expected to be mitigated through the application of Policies on Placemaking and Landscape at the application stage.

For a number of the objectives no likely significant impacts were recorded, largely because the policies in this group are either criteria based or provide a general statement of the Council's intent with regards to securing the provision of a range of residential accommodation to meet different housing needs across the area.

6.6.6 Historic Environment Group – Policy Assessment

Overall it is expected that the implementation of the Historic Environment policies in the LDP will have significant positive effects on the SEA topics, either independently or as a result of their delivery in combination with other policies and guidance in the Plan. However, significant positive impacts in some cases will be dependent on how the policy is implemented on a case by case basis through the Development Management process for individual planning applications.

A number of uncertain/unpredictable effects were noted for all of the policies within the Historic Environment group, as the type and extent of impacts may be largely dependent on the specific location and type of historic environment asset and the type of development proposed. Any significant negative effects arising will be most appropriately addressed as part of the planning application and through applying the relevant Historic Environment and Placemaking policies.

6.6.7 Energy, Heat & Electricity Group – Policy Assessment

Overall it is expected that the implementation of the three policies within this group will have positive effects on climate change mitigation and adaptation (SEA Objective 11), and promoting high standards of sustainable design and construction (SEA Objectives 14), either independently or as a result of their delivery in combination with other policies and guidance in the Plan. Mixed effects have been identified in relation to Air Quality (Objective 8) for Policies 31 and 32, as there is a potential for positive and negative environmental effects dependent upon the technology proposed. Any negative effects will be mitigated through the application of appropriate LDP policies e.g. Air Quality, at the planning application stage.

Likely significant negative impacts are noted in relation to the objectives for maximising the sustainable use/re-use of material assets, landscapes and townscapes as a result of implementing the Renewable and Low Carbon Energy Generation and Electricity Transmission Infrastructure policies for reasons of Greenfield land uptake and potential visual/landscape impacts. Potential negative impacts on the objectives for reducing journey lengths and the need to travel, and landscape have been identified in respect of the minerals supply policy, due to the likely increased levels of transportation associated with these sites and changes to the landscape as a result of workings. However, the policies criteria in combination with other policies in the Plan should help to mitigate for any adverse impacts arising at individual planning application(s) stage, and also allow for the development of appropriate enhancement measures, particularly for the future restoration and after use of minerals sites.

A number of uncertain/unpredictable effects were noted for all of the policies within this policy group, as the type and extent of impacts may be largely dependent on the specific location and type of the proposal. Any significant negative effects arising will be most appropriately addressed as part of the planning application and through applying the relevant LDP policies.

6.6.8 Waste Management Group – Policy Assessment

Overall, it is expected that the implementation of the waste management policies in combination with noise and transportation policies will give rise to positive environmental effects in relation to quality of life, protecting soils, sustainable development, reducing greenhouse gases, climate change adaptation and mitigation, and promoting high standards of sustainable design construction (SEA Objectives 3, 5, 9-11, 14) due to the policies promoting sustainable waste management practices. The waste management policies are also expected to result in significant positive effects in terms of minimising waste (Objective 12) and maximising sustainable use/re-use of material assets (Objective 13).

A number of unknown effects have been identified across both policies, namely for: Policy 34 (environmental quality, water environment, air quality, and landscape) and Policy 35 (biodiversity, environmental quality, water environment, and air quality). Any negative effects would be addressed at the planning application stage through the application of relevant LDP policies.

6.6.9 Natural Environment Group – Policy Assessment

As would be expected, overall the policies in this group are anticipated to deliver significant positive benefits to the majority of the SEA Topics, either individually or in conjunction with other policies in the Plan; particularly in relation to biodiversity, population and human health, Climate Change mitigation and adaptation, and landscape.

For Policies 43, 44 and 45, it is expected that there will be negative effects in terms of accommodating population and household (SEA Objective 2) as these policies restrict further development in the Lunan Lochs, Loch Leven, and River Tay catchments; however, the second part of the objective also requires that development is directed to ‘appropriate’ locations therefore the potential conflict should be lessened. This may also reduce the potential for securing enhancements to existing drainage and treatment infrastructure through new development. For these policies, there are also likely to be unknown effects across a range of SEA Topics, namely floodplain and flood risk, air quality, sustainable development, greenhouse gas emissions, climate change adaptation and mitigation, and waste minimisation; the effects for these policies would be most appropriately assessed at the planning application level against the relevant LDP policies.

6.6.10 Environmental Resources Group – Policy Assessment

Overall it is expected that Policy 46 (Minerals safeguarding) will have no impact on a number of the SEA Topics, as it looks to safeguard the area’s existing important minerals deposits rather than promoting development/extraction. It is considered to provide significant positive benefits in terms of the use/re-use of material assets (SEA Objective 13).

In terms of Policy 47 (Mineral Supply), potential negative effects in relation to objectives for reducing journey lengths and the need to travel and protecting and enhancing the character, diversity and special qualities of the area’s landscapes are anticipated due to the likely increased levels of transportation into and out of these sites and changes to landscapes as a result of workings. However, the policy’s criteria in respect of having regard to the visual effect of proposals and transport implications should help to ensure that these issues are addressed at the specific site level at planning application stage. The possible effects on biodiversity, soil, water quality, air quality, quality of life (traffic, noise, dust, pollution, vibration or disturbance) and minimising waste are largely unknown at present and will depend on the location, type and scale of proposals, and suitable restoration proposals. There are also expected positive benefits in relation to quality of life (employment opportunities), reducing area’s vulnerability to effects of Climate Change, and sustainable use/re-use of material assets, albeit these will be dependent upon the implementation and application of the policy in combination with other relevant policies.

Implementation of the group’s Prime Agricultural Land and Soils policies are expected to generate significant positive impacts for almost all of the SEA Objectives, either individually or in conjunction with other policies.

6.6.11 Building Resilience Group – Policy Assessment

It is anticipated that there will be mostly significant positive or no impacts as a result of implementing the policies in this group; particularly the policies on New Development and Flooding, the Water Environment, Noise Pollution, Light Pollution, Air Quality and Contaminated Land.

A number of uncertain or unpredictable effects were noted in terms of the historic environment, landscape, townscape and Climate Change objectives, as potential impacts will largely be dependent on the specific details of proposals. In order to ensure that any potential negative effects of development proposals are addressed, application of the Plan's policy framework to individual proposals at planning application stage should help to avoid/minimise any impacts and allow for the development of appropriate mitigation and enhancement measures.

It was considered that no assessment was required of the Policy on Health and Safety Consultation Zones as it will not result in any physical development but rather outline the Council's expectations at planning application stage in terms of requirements for enhanced consultation or additional assessment.

6.6.12 Digital Connectivity Group – Policy Assessment

Overall the policy is unlikely to have significant adverse impacts in terms of the environmental objectives as the development proposals arising out of this policy are likely to be reasonably small scale. However, consideration should be given to potential impacts of specific proposals at individual planning application stage, and also the potential to avoid/reduce/mitigate possible impacts and identify enhancement measures through the implementation of the policy in conjunction with other policies in the Plan.

Positive impacts have been identified in terms of those objectives relating to population and human health and directing development to sustainable locations, as improving communication infrastructure in rural areas can help to facilitate the development of more rural businesses, increase home working opportunities and as a result reduce the need for some people to commute.

The potential exists for negative impacts on the area's landscapes as a result of the visual impact of communications infrastructure in sensitive locations; however, those impacts are largely unknown at present as it will depend on the specific design, scale and location of specific proposals.

In the case of SEA Objectives 2, 4, 5, 8, 11 and 12 these are not considered relevant to the assessment of the Policy.

6.6.13 Transport & Accessibility Group – Policy Assessment

Overall the policy will have some uncertain or unpredictable effects with the environmental objectives due to the fact that each development involving transport infrastructure will be dealt with on a case by case basis and the impacts in each case could either contribute positively or negatively depending on the type of transport infrastructure being provided, its location and environmental sensitivities present. Any potential adverse impact should however be mitigated through the identification of specific mitigation measures for the individual proposal, which may include the application of other policies in the Plan. Positive impacts have been identified in terms of population, human health and material assets with promotion of more sustainable modes of transport to be provided with developments including the incorporation of low carbon fuel technologies. There are potentially negative impacts on soil and water quality, which should be considered in more detail through the supplementary guidance linked to this LDP policy and at individual planning application stage.

It was considered that no assessment was required of the Policy on Airfield Safeguarding as it will not result in any physical development but rather outline the Council's expectations at planning application stage in terms of requirements for enhanced consultation or additional assessment.

6.6.14 Summary of Policy Groupings Assessment

Overall it is expected that the majority of the policy groups and the individual policies that sit within them will have significant positive effects, either individually or when delivered in combination with other policies in the LDP. In a number of instances the likely effects of policies were noted as being uncertain or unpredictable due to any potential impacts being largely dependent on the specific details of proposals, and how those policies are implemented through the Development Management process. In particular policies in the Economic Development, Retail and Commercial Development, Residential Development, Energy, Heat & Electricity, and Environmental Resources groups were identified as having possible uncertain/unpredictable effects. However, in the event that potential significant effects are identified for specific proposals at planning application stage by implementing the Plan's policy framework it should be possible to avoid, reduce and/or mitigate any such impacts and also provide in many instances appropriate enhancement measures.

6.6.15 Further Supplementary Guidance

Further detailed information and regulation for some of the policy topics will be provided at a future date through the production of Supplementary Guidance. Each supplementary guidance document will be subject to individual screening and assessment process for the requirement for an SEA.

6.7 ASSESSMENT OF GREENBELT BOUNDARY CHANGES

The Adopted LDP identifies a Green Belt around Perth and sets the policy context through Policy NE5: Green Belt. The Proposed Plan for LDP2 proposes changes to both the boundary and the policy. This section of the assessment only focuses on the proposed boundary change, changes to the Green Belt Policy are assessed as part of the overall policy assessment (see Section 6.6).

The assessment includes three alternatives:

1. The original boundary
2. The suggested alterations at the MIR stage
3. The proposed alterations as shown in the Proposed Plan

6.7.1 Changes to the Green Belt Boundary

The Proposed Plan proposes changing the Green Belt boundary in light of significant changes which have occurred during the Plan period and includes smaller adjustments to rationalise the current boundary. The option put forward in the Proposed Plan is Alternative 3. Alternative 3 includes both omissions and additions to the adopted Green Belt map, as shown in figure 9. Please note that the Proposed Plan option incorporates an amendment that was approved at the Special Council Meeting on 22nd November 2017.

Figure 8: Alternative 1 – Retain Adopted LDP Greenbelt Boundary

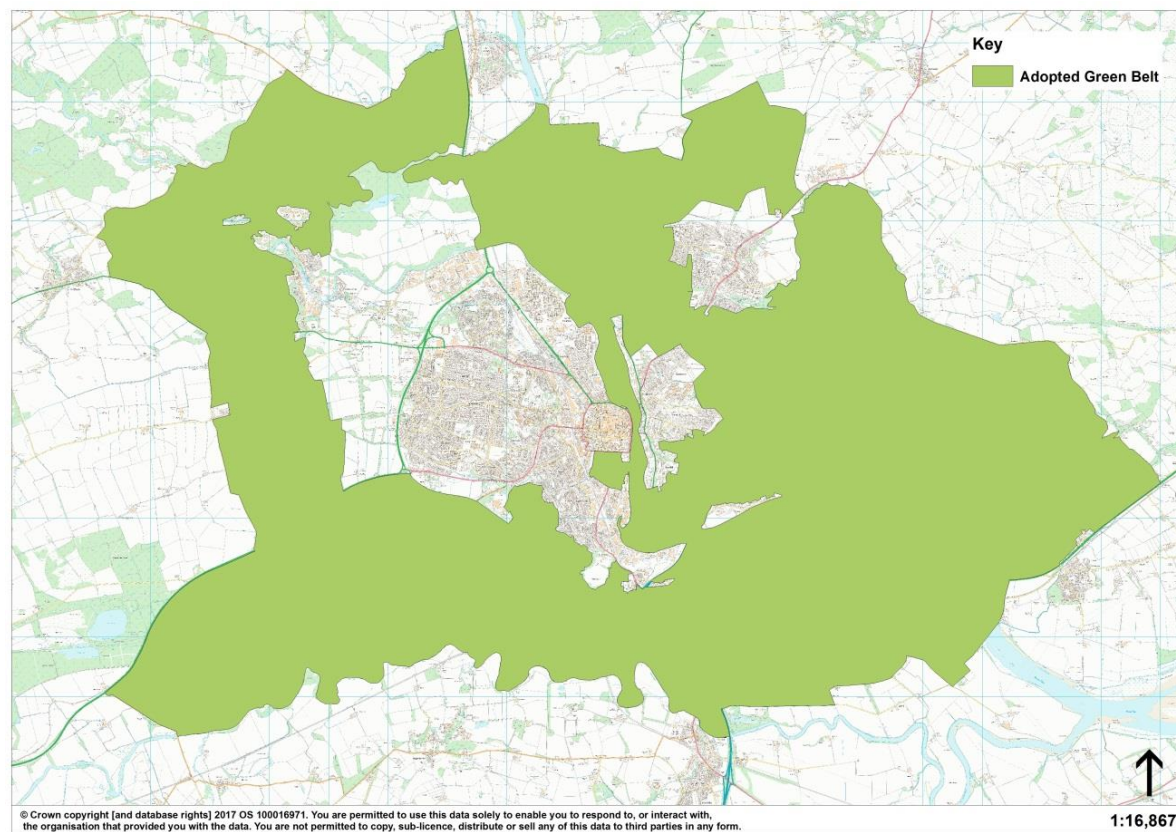


Figure 9: Alternative 2 –Proposed boundary alterations as highlighted in the MIR

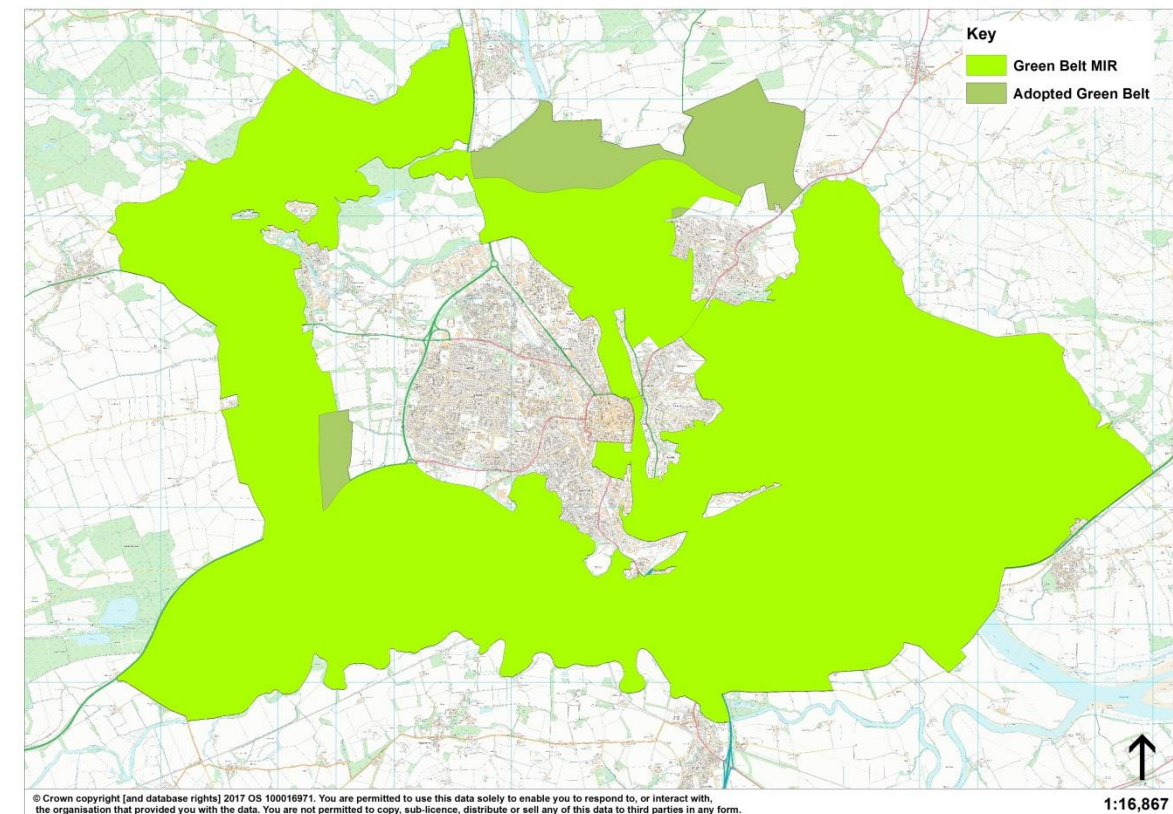
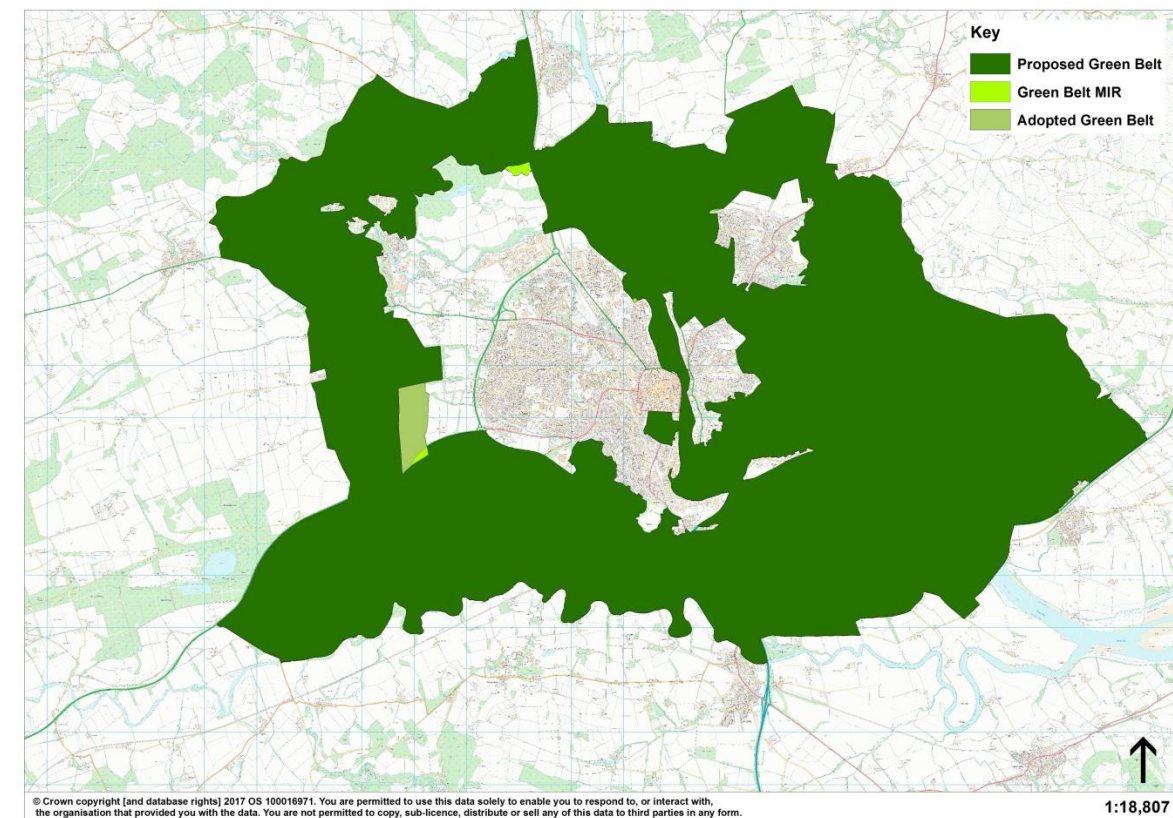
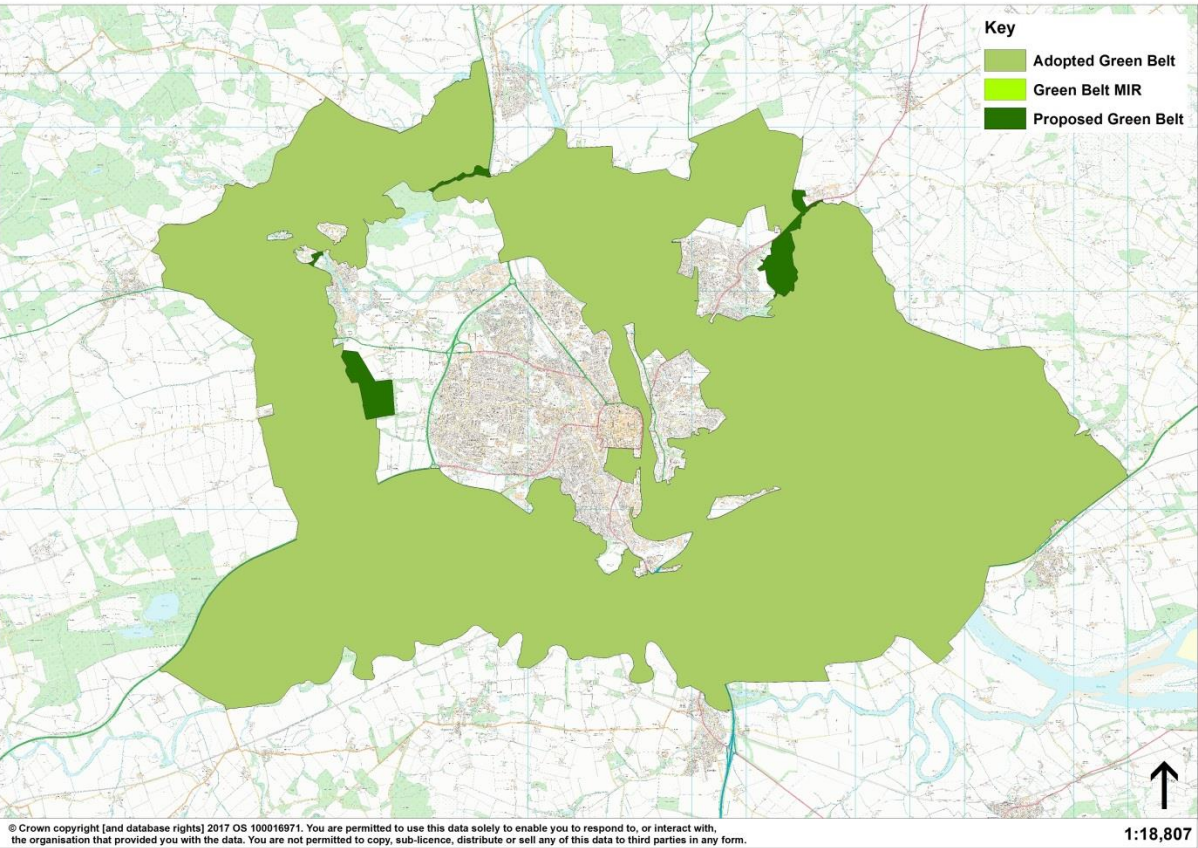


Figure 10: Alternative 3 –Proposed boundary alterations as highlighted in the Proposed Plan





Matrix Key					
++	+	0	+/-	-	--
Significantly positive	positive	neutral	Mixed	adverse	Significantly adverse

Table 14 – Greenbelt Boundary Assessment

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement	Alternative 3	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	++		-	0	+	+
	The existing green belt boundary will have a positive impact on biodiversity flora and fauna as it will protect the area around Perth from development.	Other policies within the LDP will encourage the protection of designated sites, green networks and protected habitats and species.	The option covers less of the River Tay SAC and less ancient woodland especially around Muirward woods which is home to protected species so overall the impacts are negative	International legislation/policy will protect the SAC and there is a presumption against the removal of ancient woodland in Scottish Planning Policy. As well as this other policies within the LDP will encourage the protection of designated sites, green networks and protected habitats and species.	The proposed green belt boundary will have a positive impact on biodiversity flora and fauna as it will protect the area around Perth from Development. Alternative 3 includes the existing area of green belt to the north of Scone, as currently designated as greenbelt in the existing LDP. This will continue to provide positive effects in relation to biodiversity, flora and fauna. This option also protects some additional areas of woodland and farmland filling in gaps in the current Greenbelt boundary, as shown in Figure 10.	International policy will protect the SAC and there is a presumption against the removal of ancient woodland in Scottish Planning Policy. As well as this other policies within the LDP will encourage the protection of designated sites, green networks and protected habitats and species.

Population	0		0		0	
	The Green Belt boundary is unlikely to have a direct impact on the population.		The Green Belt boundary is unlikely to have a significant direct impact on the population.		The Green Belt boundary is unlikely to have a direct impact on the population.	
Human Health	0		0		0	
	The Green Belt boundary is unlikely to have a direct impact on human health.		The Green Belt boundary is unlikely to have a direct impact on human health.		The Green Belt boundary is unlikely to have a direct impact on human health.	
Soil	++		-	0	+/-	0
	The existing green belt boundary will protect the soils, including areas of carbon rich soil, surrounding Perth from development.	There will be policies within the LDP which will protect carbon rich soils and areas of prime agricultural land.	The boundary change will mean that a small area of mineral soils with occasional peat (which lies to the North of Scone) will be removed from the Green Belt. The boundary change will also mean areas of prime agricultural land are removed from the green belt.	There will be policies within the LDP which will protect carbon rich soils and areas of prime agricultural land.	The proposed green belt boundary will protect the soils, including areas of carbon rich soil, surrounding Perth from development. The boundary change will also mean that small areas of prime agricultural land are removed from the green belt while other smaller areas which are not currently included in the adopted boundary will be added to it.	There will be policies within the LDP which will protect carbon rich soils and areas of prime agricultural land.
Water	+		+		+	
	The existing green belt boundary will protect the water environment surrounding Perth from development.		The proposed green belt boundary will protect the water environment surrounding Perth from development.		The proposed green belt boundary will protect the water environment surrounding Perth from development.	
Overall	0		0		0	

	The Green Belt boundary is unlikely to have an impact on the air.		The Green Belt boundary is unlikely to have an impact on the air.		The Green Belt boundary is unlikely to have an impact on the air.	
Climatic Factors	0		0		0	
	The Green Belt boundary is unlikely to have an impact on climatic factors.		The Green Belt boundary is unlikely to have an impact on climatic factors.		The Green Belt boundary is unlikely to have an impact on climatic factors.	
Material Assets	0		0		0	
	The Green Belt boundary is unlikely to have an impact on material assets.		The Green Belt boundary is unlikely to have an impact on material assets.		The Green Belt boundary is unlikely to have an impact on material assets.	
Cultural Heritage	++		-	0	-	0
	The existing Green Belt boundary will have a positive impact on cultural heritage as it will protect the area surrounding from development.	There will be policies within the LDP to allow for the protection and enhancement of cultural heritage.	The proposed boundary change will remove an area of Tippermuir Battlefield and area of the Scone Palace Garden and Designed Landscape from the Green Belt.	National Policies as well as policies within the LDP will protect cultural heritage assets, including battlefields and gardens and designed landscapes.	The proposed Green Belt boundary will have a positive impact on cultural heritage as it will protect the area surrounding from development. However the proposed boundary change will remove an area of Tippermuir Battlefield from the Green Belt.	National Policies as well as policies within the LDP will protect cultural heritage assets, including battlefields.
Landscape	+		+		+	
	The existing boundary will protect the landscape surrounding Perth from development. The green belt will also reduce urban sprawl and help ensure the existing townscape of Perth is protected.		The proposed boundary will protect the landscape surrounding Perth from development. The proposed boundary has been change to reflect the proposed Cross Tay Link Road route and the Western boundary of the Perth West Development Proposal which is based on the proposed route for the A9 junction. By amending the boundary the Green Belt will follow logical boundaries, which will strengthen the settlement boundary.	Developments will continue to be regulated by the Housing in the Countryside policy in rural areas not protected by the proposed Greenbelt.	The proposed boundary will protect the landscape surrounding Perth from development. The proposed boundary has been changed to reflect the development at Perth West. It also includes a logical extension to the green belt at Bertha Park, rationalising the boundary in line with the Bertha Park development boundary. By amending the boundary the Green Belt will follow logical boundaries, which will strengthen the settlement boundary. By filling in gaps in the current boundary it will serve its purpose of restricting development on the settlement edge.	Developments will continue to be regulated by the Housing in the Countryside policy in rural areas not protected by the proposed Greenbelt.

6.7.2 Comparative Analysis: Changes to Green Belt Boundary

Biodiversity, Flora and Fauna

All three alternatives will protect large areas of land surround Perth from development. Alternative 1 is the preferred alternative in terms of biodiversity, flora and fauna as it will ensure the greatest area of land is protected from development. Alternative 3 is preferred to Alternative 2 as the addition of the area to the north of site H29 (Scone) in to the green belt will protect an area of existing woodland/forestry thus promoting the protection of associated biodiversity, flora and fauna.

Population

The Green Belt boundary is unlikely to impact the population.

Human Health

The green belt boundary is unlikely to have an impact on human health.

Soil

Alternative 3 will have mixed effects on soils as the proposed change to the boundary will remove small areas of valuable soil resources from the green belt, however the application of LDP policies on Soils and Prime Agricultural Land will ensure that loss of valuable soil resources is avoided or minimised with sufficient mitigation measures. Therefore based on this assessment Alternative 1 is the preferred alternative as it protects a larger area of land from development, particularly to the west of Perth City.

Water

All proposed boundaries will have a positive impact on the water environment as they will reduce development in the area surrounding Perth.

Air

The green belt boundary is unlikely to have an impact on the air.

Climatic Factors

The green belt boundary is unlikely to have an impact on climatic factors.

Material Assets

The green belt boundary is unlikely to have an impact on material assets.

Cultural Heritage

Alternative 2 removes a section of the Scone Garden and Designed landscape from the greenbelt and Alternatives 2 and 3 remove part of the Tippermuir Battlefield from the green belt. Any negative impact on these sites can be mitigated through national policy and LDP policies however the preferred alternative is alternative 1 as it allows for greater protection covering a larger area.

Landscape

All three alternatives are likely to have a positive impact on the landscape. Green belts will prevent

urban sprawl and so have a positive impact on the townscape of Perth. The boundary will also protect natural landscape features surrounding Perth including the Sidlaws Special Landscape Area. However the proposed boundary will follow the route for the proposed A9 junction into Perth West. This provides a more logical edge to the green belt.

6.7.3 Summary

All alternatives are likely to have a generally positive impact on the environment. Overall alternative 1 has more positive impact based on the larger area covered. On the other hand, the SEA also highlights that the changes proposed are not likely to have a significant impact on the environment when considering mitigation measures. In addition, the intention to rationalise the greenbelt boundary in line with the CTRL route and existing woodland at both Perth West and Scone North is expected to improve the robustness of the boundary in line with SPP.

The two key changes in the boundary are proposed at Perth West and to the North of Scone. In the case of Perth West, the boundary is altered to follow the proposed Perth settlement boundary. The settlement boundary was altered as a result of SEA assessment in order to allow for the extension of the MU7 mixed use allocation and the provision of essential infrastructure. This alteration makes the Greenbelt boundary more robust following the edge of the West Lamberkine woodland block.

In the case of North Scone/Perth, the boundary change allows for a rationalised boundary that follows the CTRL route. National Policies as well as policies within the LDP will continue to apply to this area and protect carbon rich soils, areas of prime agricultural land, biodiversity as well as the cultural heritage. The Housing in the Countryside Policy will also apply here, allowing for small scale change such as the renovation of houses, which may have a positive impact on the area.

In comparison to the MIR, Alternative 3 proposes some additions to the original Greenbelt in order to fill in existing gaps. Although this is not likely to have any significant impact, it contributes to limiting urban sprawl and framing the settlement boundaries more clearly. Furthermore, Alternative 3 is adjusted to include a smaller area at Bertha Park to rationalise the green belt boundary.

In conclusion, Alternative 3 is preferred as it provides a more logical edge to the Greenbelt, reflecting on strategic spatial changes in the area, without any significant impact on the environment.

6.8 CUMULATIVE ASSESSMENT OF PPS

Cumulative impacts are impacts that result from incremental changes caused by other past, present or reasonable foreseeable actions together with the Local Development Plan. Synergistic effects are when a total effect is greater than the sum of the individual effects.

In order to help determine the cumulative effects of the Plan on the environment the environmental assessments undertaken for other plans and policies that may have an effect on the areas environment have been analysed. This had allowed for an assessment to ascertain whether any negative impact of

the Plan will be counterbalanced by improvement in other areas or whether positive environmental outcomes. effects can be enhanced by similar actions in other areas. Table 15 provides a summary of these

Table 15: Cumulative Assessment of Plans, Programmes and Strategies

TAYplan Strategic Development Plan 2016	River Basin Management Plan (2015-2027)	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
Biodiversity, Flora and Fauna				
<p>Pressures from increased, poorly implemented or inappropriate development impact on habitat networks and wildlife corridors, both designated and non-protected.</p> <p>Cumulative development pressure on the TAYplan coastline, impact on birds, fish and marine mammals that are part of the qualifying interests of Natura sites.</p> <p>There are indirect effects such as disturbance, sedimentation and nutrient enrichment in watercourses/ waterbodies such as River Tay, Loch Leven and Dunkeld-Blairgowrie Lochs.</p> <p>Non-native species can have long term impacts on ecological communities, impacting watercourses in the TAYplan area.</p> <p>All Strategic Development Areas assessed predicted the protection and enhancement of biodiversity enabling habitat connections and the avoidance of habitat loss, with the exception of Montrose Port, Dundee Wider Waterfront and St. Andrew's West, which can include green infrastructure.</p>	<p>Measures to address diffuse pollution and point source pollution amongst other water-based activities will improve water quality, reduce Eutrophication and therefore have benefits for aquatic ecosystems.</p> <p>Water efficiency measures could potentially result in more water being available for aquatic ecosystems and for greater dilution of pollutants.</p> <p>Controlling the rate and timing of abstraction will reduce biological stress (especially during low flow periods) and also provides the additional benefit of a more "natural" hydrological regime.</p> <p>Measures to improve morphology will lead to direct improvements for aquatic and riparian habitats.</p> <p>Measures to deal with non-native invasive species will likely lead to direct biodiversity benefits in the affected areas.</p>	<p>Increasing range of pressures threaten Scotland's wildlife and biodiversity (e.g. Land use pressures, nutrient deposition, exploration of natural resources, pollution of air, water and land, invasive non-native species, climate change).</p> <p>Climate change will impact on weather patterns and this in turn could impact on the natural environment. Efforts to reduce greenhouse gas emissions could in some instances also have direct local effects on soil, water and biodiversity.</p> <p>Careful visitor management may be required where recreation is being encouraged in more sensitive areas, to avoid disturbance of species and habitats, and reduce the impact of paths and tracks on soil and wider landscapes.</p>	<p>Over the years the increased pressure from transport, road construction and associated infrastructure has resulted in a loss of landscape quality and biodiversity. Physical transport infrastructure projects have often led to a loss and fragmentation of habitats although mitigation planting has, in at least some instances enhanced local biodiversity. The RTS has positive measures to encourage the take up of public transport and a shift from heavy reliance on the car which should help to reduce the risk of potential effects that new road build, if permitted, would bring. As mentioned above, there are possible infrastructure schemes that may go ahead within the RTS so these could bring with them negative effects on landscape and biodiversity which the RTS would in effect be responsible for introducing. Detailed options studies and environmental impact assessment (EIA) would, however, allow mitigation to be identified to reduce the negative impacts of these schemes (which do also have potential to reduce congestion with subsequent environmental benefits).</p>	<p>Possible adverse impacts on biodiversity, water, soils, landscape and cultural heritage arising from a more flexible approach to land allocations in small and medium sized towns.</p> <p>Impacts on biodiversity arising from direct and indirect effects on protected sites. Implications for coastal and island habitats, disturbance of protected bird species and marine ecology.</p> <p>Overall, the Plan has potentially significant cumulative adverse effects that would not be mitigated by other plans.</p>
Population and Human Health				
<p>The SDP has a direct influence on how services are delivered to meet the needs of the population, and the provision of affordable houses and facilities</p> <p>Overall, the spatial strategy has a framework that would guide development in a positive manner that would improve the quality of</p>	<p>Measures to reduce diffuse and point source pollution will help to protect human health through reducing pollutant loads to protected areas such as drinking waters and bathing waters.</p> <p>Water efficiency measures could potentially result in more water being available for the</p>	<p>Planning for population change using sustainable locations for new development, could help to avoid flood risk, promote access to services, and provide good public transport links.</p> <p>NPF can support improvements to environmental quality. This includes</p>	<p>A key goal will be to deliver some level of modal shift away from the car towards more efficient public transport, cycling and walking and to provide enhanced accessibility. If measures are not introduced that also help to tackle noise increases from traffic growth and congestion then negative</p>	<p>Overall, the Plan would have significant positive cumulative effects when acting with other plans.</p>

TAYplan Strategic Development Plan 2016	River Basin Management Plan (2015-2027)	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
<p>life for the TAYplan population.</p> <p>Largely, the spatial strategy would ensure that development is concentrated in areas of greatest development pressure, thereby meeting the needs of the people. It would also seek to ensure rural inclusion by focusing on development at appropriate scales in settlements outside Dundee Core and Perth Core areas.</p>	<p>dilution of pollutants and hence provide additional protection for protected areas.</p> <p>Some measures may improve access to waters in the river basin district, particularly where measures to improve water quality will enable greater access for bathing or other recreational pursuits.</p> <p>Water improvements may increase amenity value of water bodies in the river basin district.</p>	<p>providing good quality greenspace, remediation of derelict and vacant land and in relation to air quality avoiding increases in or reliance on the private car.</p> <p>Access to services is an important issue in the remote island communities and more rural mainland local authorities. The NPF can support local services provision and improvements to transport links and locating new services in sustainably accessible locations.</p> <p>NPF could consider scope for future proofing new development from climate change through location, layout and building design.</p> <p>Planning can support outdoor recreation including walking and cycling access around and between communities.</p>	<p>effects will be inevitable. Overall, therefore, the local population would most likely be affected negatively without the RTS to combat and mitigate some of these potential effects.</p> <p>In terms of human health, issues such as obesity and heart disease are on the rise and may be further exacerbated by increases in sedentary modes of transport. Traffic growth and in particular congestion from the number of cars on the road, would be likely to increase air pollutants that affect health and could also have the ancillary effect of increasing the number of road traffic accidents.</p>	
Soil & Water				
<p>With the exception of the potential for regeneration in Dundee, development under the proposed strategy has the potential to have a negative impact on soil and land.</p> <p>The TAYplan has a large area of cultivatable land within its borders. Development would likely have a negative impact in terms of reducing the amount of this resource (both prime agricultural land and carbon rich soils), particularly when considering the potential for incremental loss throughout the rural settlements in tiers 2 and 3.</p> <p>The majority of development would be concentrated in areas that are currently failing to meet required 'good' ecological status as required by the Water Framework Directive, and could potentially cause further deterioration.</p>	<p>All of the measures in the draft RBMP are designed to address a pressure that is adversely affecting a water body and to improve its ecological status. All measures are designed to produce positive effects on the water environment in the water bodies to which they apply.</p> <p>Improvements in water quality caused by measures that tackle diffuse and point source pollution may result in improve soil quality as fewer pollutants will be deposited on land.</p> <p>Measures relating to abstraction and flow regulation may also lead to benefits for soils by reducing erosion by floods or soil loss through drought.</p> <p>Measures to improve morphological conditions of channel banks, shorelines, riparian zones and wetland habitats will help to improve infiltration rates, reduce run off and therefore contribute to reducing</p>	<p>Potential effects on water quality from economic development in and around cities and in accessible areas.</p> <p>Effects on water supplies arising from economic development in and around cities and in accessible areas.</p> <p>Potential for soil sealing arising from green-field site development to accommodate strategic economic development on edge of cities and in accessible areas.</p> <p>Impacts on coastal waters arising from an emphasis on shipping sector.</p> <p>Increased risk of water pollution and damage or loss of soils, arising from processes of derelict land remediation.</p>	<p>The balance of RTS measures was not assessed as having significant impacts on either soil or water. Legislation at the European level (such as the Water Framework Directive) and associated UK legislation aims to deliver long-term protection of the water environment and thus any negative impacts must be identified and a programme of improvement measures introduced. This should prevent any further decline of water quality in the absence of the RTS, so the effect is considered to be slightly beneficial.</p>	<p>Possible flooding and water management issues arising in the Tay and Earn catchments.</p> <p>The potential significant adverse effects could be mitigated to some extent by other plans.</p>

TAYplan Strategic Development Plan 2016	River Basin Management Plan (2015-2027)	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
	<p>erosion.</p> <p>Note: The Tay Area Management Plan was designed to address existing pressures on the water environment in order to improve its ecological status. If the LDP proposes new development that will exacerbate existing pressures or create new ones, additional mitigation and enhancement measures will be required to address these issues.</p>			
Air				
<p>The plan aims to promote development in areas where transport infrastructure will assist in promoting the use of public services, and that development is placed strategically to allow for energy efficient infrastructure to develop in the future.</p> <p>Under the proposed spatial strategy, there would be an increased number of people that live in AQMAs however there would be the potential benefits from clustering development in the city regions allowing for future strategic planning of energy efficient infrastructure.</p> <p>The SDP will have limited direct influence on reducing the level of air pollutants however it can set the agenda for the issue through such indirect measures as stated above.</p>	<p>Does not propose measures that will affect, either positively or negatively, the air quality of the region.</p>	<p>Potential impacts on air quality as a result of national transport developments and economic development.</p> <p>Effects of renewable and mixed use energy infrastructure support depend on the performance of energy sectors.</p>	<p>It is in relation to the predicted effects of the strategy on traffic growth and hence on emissions of carbon dioxide and local air pollutants where it is likely that the baseline environment in Tayside and Central Scotland would differ significantly in the absence of the RTS. Information obtained during the preparation of the RTS suggests that car ownership is likely to increase with growing congestion particularly in the hot spot areas of Perth. With or without the RTS it is predicted that air pollutant (NOx and particulates) and CO2 emissions are likely to increase, although implementation of the RTS should slow down this increase, thus without the RTS the effect is considered to be more adverse.</p>	<p>Overall, the Plan has potentially significant adverse effects.</p>
Climatic Factors				
<p>The spatial strategy will promote a large amount of development in coastal areas and areas at risk from flooding.</p> <p>The majority of these areas are low-medium risk.</p>	<p>Many measures will result in positive effects, particularly in relation to sustainable flood management, mitigation of floods and droughts, and climate change adaptation.</p> <p>Greater efficiency in water use may reduce the volume of water that has to be treated, which may result in some energy and greenhouse gas emission savings.</p> <p>Measures relating to abstraction and flow regulation in particular may have positive</p>	<p>Does not propose measures that will affect, either positively or negatively, the climate quality of the region.</p>	<p>It is in relation to the predicted effects of the strategy on traffic growth and hence on emissions of carbon dioxide and local air pollutants where it is likely that the baseline environment in Tayside and Central Scotland would differ significantly in the absence of the RTS. Information obtained during the preparation of the RTS suggests that car ownership is likely to increase with growing congestion particularly in the hot spot areas</p>	<p>Conflicts arising from long-term development aspirations and climate change impacts on capacity.</p> <p>Potential conflicts between settlement patterns that build in climate change adaptation and more traditional environmental constraints including biodiversity, cultural heritage, and landscape.</p> <p>Overall, other plans would mitigate the</p>

TAYplan Strategic Development Plan 2016	River Basin Management Plan (2015-2027)	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
	benefits for the management of floods and droughts.		of Dundee, Perth and Stirling. With or without the RTS it is predicted that air pollutant (NOx and particulates) and CO2 emissions are likely to increase, although implementation of the RTS should slow down this increase, thus without the RTS the effect is considered to be more adverse.	potential negative impacts of the Plan.
Material Assets				
<p>The strategy has the potential to promote and ensure high standards of sustainable design and construction, the effects will largely depend on implementation as well as spatial allocation. This highlights the importance of design quality.</p> <p>There is the potential to have cumulative negative impacts associated with rising sea-levels and infrastructure security, in the Perth Core Area.</p> <p>There will be an increase in the amount of waste produced, which is in direct conflict with MIR objective of zero waste. This objective will require operational mechanisms to ensure it is achieved.</p>	Measures aimed at increasing water use efficiency (e.g. leakage reduction) will result in more sustainable use of water and as a result better use of other resources such as energy. As a result of the above, it is possible that this could delay the need for additional new infrastructure.	<p>Potential impact on natural resources and increased waste as a result of economic development.</p> <p>Requirement to consider strategies for waste reduction will depend on implementation, technology and sector growth</p>	The RTS includes measures that would help to maintain the quality of transport infrastructure and also introduce measures to encourage more sustainable design and construction techniques and use of recycled materials.	The Plan's impact is uncertain as it will depend on implementation.
Cultural Heritage				
<p>Considering the historic environment there are a number of listed buildings and Scheduled Monuments in the TAYplan area, as well as ancient woodlands, historic gardens and designated landscapes.</p> <p>Current and predicted development areas place significant pressure on many of the region's cultural assets.</p> <p>Overall, the spatial strategy proposes development that could have negative impacts on the historic environment through incremental losses if protection is not properly given.</p>	The majority of measures are not likely to have significant effects on cultural heritage.	Potential loss of or damage to archaeology and effects on the setting of historic buildings, monuments, landscapes and townscapes in and around cities as a result of economic development.	<p>Although through the activities of agencies such as Historic Scotland the cultural heritage will continue to be conserved and where appropriate enhanced, traffic growth and congestion, particularly in the historic towns and cities could cause harm to historic buildings and archaeological sites through emissions, noise and vibration. This could also impact negatively on townscapes and settings.</p>	<p>Negative impacts on the historic character or setting of small and medium sized towns as a result of development/diversification.</p> <p>Potential for loss or damage to the historic environment arising from development and associated visitor activity.</p> <p>Overall, the impact of the Plan is uncertain as it depends on how all plans are implemented.</p>
Landscape				

TAYplan Strategic Development Plan 2016	River Basin Management Plan (2015-2027)	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
<p>The proposals under the spatial strategy provide the opportunity to positively impact on landscape through the regeneration of Dundee.</p> <p>They could also potentially have negative impacts on landscape, in terms of capacity issues and urbanising rural areas. These impacts could include changes to landscape within the visual influence of settlements, causing alteration to the physical and visual relationships between the town and the countryside.</p>	<p>The majority of measures are not likely to have significant effects on landscape, although measures to improve downgraded water bodies (especially where they have been physically changed) will have positive landscape effects at a local level.</p>	<p>Potential for cumulative effects of economic growth on landscape quality and character.</p> <p>The enhancement of grid infrastructure and the redevelopment of existing power stations could result in landscape change and have detrimental effects on biodiversity, air and water.</p>	<p>Over the years the increased pressure from transport, road construction and associated infrastructure has resulted in a loss of landscape quality and biodiversity. Physical transport infrastructure projects (e.g. new roads, rail lines etc.) have often led to a loss and fragmentation of habitats although mitigation planting has, in at least some instances enhanced local biodiversity. The RTS has positive measures to encourage the take up of public transport and a shift from heavy reliance on the car which should help to reduce the risk of potential effects that new road build, if permitted, would bring. As mentioned above, there are possible infrastructure schemes that may go ahead within the RTS so these could bring with them negative effects on landscape and biodiversity which the RTS would in effect be responsible for introducing. Detailed options studies and environmental impact assessment (EIA) would, however, allow mitigation to be identified to reduce the negative impacts of these schemes (which do also have potential to reduce congestion with subsequent environmental benefits).</p>	<p>Impacts on urban fringe landscapes arising from reallocation of industrial land for mixed use development.</p> <p>Potential conflict between commitments to renewable energy development and emphasis on protecting and enhancing landscapes.</p> <p>Possible effects on landscape arising from requirements for new waste and road infrastructure.</p> <p>The impact of the Plan is uncertain as it is dependent on how all plans are implemented.</p>

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Assessment of the Visions & Objectives

The Proposed Local Development Plan (2017) includes an overall Vision, as adopted from TAYplan Strategic Development Plan (2016), as well as themed Visions for each of the Proposed Plan chapters: Successful, Sustainable Place; Low Carbon Place; Natural, Resilient Place; and Connected Place.

The overall vision has been considered through the TAYplan Strategic Environmental Assessment. For each of the themed visions, the key findings are identified in section 6.1. The Proposed Plan has also identified a range of Objectives linked to the Visions for each chapter, and these are assessed against the SEA Objectives to identify any significant environmental effects.

The proposed Visions and Objectives provide a good basis from which to give consideration to environmental sustainability in the area. This assessment has identified some areas where additional measures should be incorporated into the Plan that will allow the Vision and Objectives to be achieved. Achievement of the Visions and Objectives is also dependant on the spatial allocation of development, and the themed policy groups will be applied to development proposals to ensure that any significant environmental effects are avoided or minimised.

An assessment of potential alternative scenarios was also undertaken. As expected *Scenario 3: Environmental* is likely to overall have the most positive impact on the environment of Perth and Kinross; however in reality the preferred strategy is a combination of all three possible scenarios and their potential effects due to the nature and purpose of the Plan and in order to achieve a balance between social, economic and environmental interests across the area.

7.2 Assessment of Spatial Strategies

The proposed Spatial Strategies, as well as the Visions and Objectives, provide a good basis from which to give consideration to environmental sustainability in the area. This assessment has identified some areas where additional measures should be incorporated into the Plan that will allow the Spatial Strategies to be achieved whilst ensuring potential environmental effects are avoided or minimised. Achievement of the Spatial Strategies is also primarily dependant on the spatial allocation of development and the themed policy groups will be applied to development proposals to ensure that any significant environmental effects are avoided or minimised.

7.3 Assessment of Sites

The site assessments highlight the potential issues with each site and highlight site specific mitigation measures that could address these issues. These site assessments have been considered when allocating sites and proposals for the Proposed Plan. The mitigation measures will include developer requirements which will avoid, and/or reduce any identified negative environmental impacts.

7.4 Cumulative Assessments of Site Allocations

The cumulative assessment has been used to highlight the environmental impact(s) of various development scenarios within those settlements where more than one site has been suggested through the MIR process. The conclusions drawn for each settlement are available in Section 6.4 and it is clear that the effects are dependent upon the scale, nature and type of the development proposals and environmental considerations associated with each settlement. Potential environmental effects identified through the cumulative assessment(s) have informed the development strategy of the Proposed Plan.

7.5 Assessment of Settlement Boundaries

The assessment of settlement boundaries considers the general environmental impacts of settlement boundaries and highlights any potential significant environmental impact(s) as a result of the implementation of the Policy. A comprehensive assessment of settlement boundaries was undertaken for LDP1 and this Addendum to the Environmental Report has further reviewed where there may be the likelihood of significant effects, particularly where settlement boundary changes are proposed. For the majority of the settlements, there were no reasonable alternatives to the boundaries within the existing LDP. Overall, the effects on settlement boundaries are dependent upon each locale and the details for the assessment of each settlement can be found in Section 6.5.

7.6 Assessment of Policies

In order to assess the likelihood of significant environmental effects arising from the implementation of the Proposed Plan policies, a matrix assessment has been undertaken. This assessment considers the detail of each Policy against the SEA Objectives in order to consider the compatibility of the policy framework for considering planning applications. Generally, it is expected that the majority of the policy groups and the individual policies that sit within them will have significant positive effects, either individually or when delivered in combination with other policies in the LDP. In a number of instances the likely effects of policies were noted as being uncertain or unpredictable due to any potential impacts being largely dependent on the specific details of proposals, and how those policies are implemented through the Development Management process.

7.7 Assessment of the Green Belt Boundary

All options/alternatives are likely to have a generally positive impact on the environment. Overall alternative 1 has more positive impact based on the larger area covered. However when you consider mitigation measures, including the implications of national policies, it is unlikely that the proposed boundary change (alternative 3) will have a significant effect on the environment and in some instances will provide positive environmental effects through the inclusion of additional areas in to the green belt and rationalising parts of the boundary.

7.8 Cumulative Assessment of PPS

In order to help determine the cumulative effects of the Plan on the environment the environmental assessments undertaken for other plans and policies that may have an effect on the areas environment have been analysed. This has allowed for an assessment to ascertain whether any negative impact of the Plan will be counterbalanced by improvement in other areas or whether positive environmental effects can be enhanced by similar actions in other areas. Section 6.8 details the assessment of other Plans, Policies and Strategies which may give rise to potential cumulative or synergistic effects on the environment.

7.9 Overall Assessment Conclusions

The overall conclusions are that the effects are largely uncertain as they will depend on how the Plan is taken forward, implemented and decisions taken on individual proposals. From an analysis of the assessments, potential proposals in some locations are likely to have significantly more negative effects on the environment than others. Such proposals, for example the Cross Tay Link Road, will be subject to a separate and more detailed Environmental Report. In other instances it may be that there are measures which could mitigate or enhance the effects on the environment of the second LDP.

8. MITIGATION AND ENHANCEMENT

Schedule 3 of the Act requires that measures are identified to prevent, reduce and as fully as possible offset any significant adverse effects on the environment as a result of implementing the Plan. Mitigation measures are a crucial part of SEA in that they offer an opportunity to not only address potential adverse effects of a plan, but also make a plan even more positive than it may already be. As part of the environmental assessment of each of the options, consideration was given to the mitigation measures which would be necessary to offset any adverse impact on each of the SEA objectives.

However, unlike in project assessment, it is not possible to include a list of specific measures of a practical nature, such as screen planting or noise attenuation bunds. It is more likely that the mitigation measures will be covered by policies or site specific requirements to avoid or reduce the potential adverse effects of LDP2 is to reduce the uncertainty attached to this assessment. These should be incorporated into the Proposed Plan.

Consequently, it is considered that much could be done to improve the environment if the Proposed Plan identified matters that would strengthen its contribution to enhancing and managing biodiversity, reducing the risk from flooding, addressing climate change through mitigation and adaptation, air quality improvements, managing greenspace to improve biodiversity and townscapes and protecting soils. In summary the Plan should provide leadership to ensure that the planned economic, social and environmental activity achieves a net gain for the environment which will ultimately enhance well-being for local communities.

8.1 Changes to the Plan

One of the most important mitigation measures is to change the plan itself as a result of the findings of the environmental assessment process. However it is not always possible to summarise the results of the continuous and innumerable adaptations to the plan made during the preparation of it. It is an unrecorded process because minimising the environmental impacts is a continuous process. It is not practical to record every decision in the drafting of a plan that way taken with a view to avoiding or reducing environmental effects. The fact that these many decisions are not recorded or set out in a report does not diminish their importance as mitigation measures or weaken the environmental assessment reporting process; it is an integral part of good planning practice.

8.2 Enhancement of the Proposed Plan

There has been extensive iteration between the SEA process and the preparation of the Plan. This has enabled the strength of the environmental weighting to be brought through in the context of the Plan. Discussions have sharpened the text of the Plan, and have allowed for enhancements to be incorporated at an early stage.

Both mitigation and enhancement measures were considered throughout the assessment of the plan.

8.3 TAYplan Recommendations for Mitigation and Enhancement

As part of the environmental assessment the recommendations and mitigation measures set out in the TAYplan SEA were considered. This ensures that any potential impacts as a result of this higher level assessment are considered at a local level to ensure there is no significant environmental effect.

Many of the mitigation measures highlighted within the TAYplan SEA are reliant on detailed policies within the LDPs. This assessment of the LDP policies takes account of this and environmental enhancement was a priority during the writing of these policies. The TAYplan SEA goes on to highlight the importance of a robust assessment of the Strategic Development Areas. This has been done through the SEA Site Assessment tables, which have considered mitigation and enhancement measures to ensure there is minimal environmental impacts as a result of development of these sites. These detailed assessments will help mitigate against any negative effects highlighted in the TAYplan SEA.

8.4 Summary of the Mitigation/Enhancement Measures

The Development Strategy is explicitly founded on the principles of sustainable development, which are written into the vision and objectives of the strategy, this approach will help to ensure that adverse environmental effects during the implementation of the Second Local Development Plan (LDP2) are minimised and beneficial effects maximised. The primary mitigation measures in the LDP will be the application of all relevant policies across the whole plan to all development proposals. Therefore, even if there is no explicit reference to environmental protection policies in, for example, the Spatial Strategies, and other sections of the plan, policies related to environmental protection nevertheless apply and will be used by the Council in determining planning applications submitted to implement the allocated proposals.

Nonetheless, as part of the assessment process, mitigation measures have been identified that may be applied to offset significant adverse effects on the environment resulting from implementing the Plan. Mitigation measures are suggested and full details of the proposed mitigation measures and Council's responses will be presented in the Post Adoption Statement.

Table 16 to follow sets out a list of general mitigation and enhancement measures for each of the 17 SEA Objectives which are applicable to all proposals with the potential to impact on any of the individual SEA Objectives, and the specific mitigation and/or enhancement measures for the future development sites are included as part of the site assessments. This has been carried forward from the previous SEA with some minor amendments, in line with Consultation Authority responses.

Table 16: Proposed Mitigation/Enhancement Measures against SEA Objectives

Reference	Objective	Potential effect	Opportunities for mitigation and enhancement arising from the Assessment
SEA 1	Conserve and enhance the diversity of species and habitats	<p>Positive It does not appear that the specific environmental designations within Perth and Kinross will be significantly affected by these development proposals; however this is subject to confirmation by Habitat Regulations Appraisal at project level.</p> <p>Negative The potential loss of habitats and biodiversity due to release of land for development.</p>	<p>Enhancement The implementation of the Green Infrastructure Strategy, will integrate and co-ordinate all the new development and will assist in achieving this objective. Policies ensure that for all development proposals in sensitive areas and any large scale development developers should carry out an assessment of the existing biodiversity, ensuring minimal disruption to the existing flora and fauna, creation of enhanced habitats within new developments and the promotion of wildlife corridors between developments.</p> <p>Mitigation An assessment of ecological value of sites should be carried out on site in combination with an assessment of how this land contributes to the wider surrounding area of high ecological value. A habitat management plan for major sites would help prevent deterioration of habitats and loss of species. Important habitat should be retained to mitigate potentially significant negative effects on biodiversity.</p>
SEA 2	Accommodate population and household growth and direct that growth to appropriate locations	<p>Positive Use of existing infrastructure thus minimising resource use.</p> <p>Negative Potential loss of habitats, landscapes, and a reduction in water quality. Development in areas of flood risk. Development not well located in terms of existing transport infrastructure.</p>	<p>Enhancement The implementation of the Green Infrastructure Strategy will integrate and co-ordinate all new development. Compensatory habitat to be secured through the use of habitat management plans and planning obligations.</p> <p>Mitigation Develop a landscape strategy for Perth and Kinross to ensure development is focused on appropriate locations. Recommend scheme-level design such that impacts to landscape are minimised.</p>
SEA 3	Improve the quality of life for communities in Perth and Kinross	<p>Positive Well-designed places</p> <p>Negative Loss of quality of life due to overdevelopment, loss of green space, loss of local landscape quality and badly located and constructed development.</p>	<p>Enhancement Use greenspace to create integrated habitat networks.</p> <p>Mitigation Integration into local communities through sustainable construction, layout, public open spaces and integrated transport.</p>
SEA 4	Maximise the health and wellbeing of the population through improved environmental quality	<p>Positive Protection and incorporation of green network as this provides opportunities for healthy transport options such as walking and cycling, and reduction in car use would be positive with regards air quality.</p> <p>Negative Lack of employment opportunities, easily accessible green space and poor infrastructure provision.</p>	<p>Enhancement Human health, well-being and a balanced population structure would be promoted if employment opportunities arising from proposed developments are identified.</p> <p>Mitigation Where loss of green space is unavoidable, consideration should be given to reserving green space elsewhere as compensation.</p>

SEA 5	Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils and protect carbon rich soils	<p>Positive Some benefits for soil may be achieved as a result of proposed wider environmental enhancement measures and commitments to reducing pollution</p> <p>Negative Loss of soils (including carbon rich soils)/soil-sealing due to development and land use change and this could have repercussions for other environmental resources including habitats and the water environment.</p>	<p>Mitigation Recycle materials for structural fill and buildings. Surplus topsoil from construction used to enhance landscapes / environments elsewhere e.g. return brown field sites to green. Continuing prioritisation of development on brownfield land to help minimise land take in areas that are currently undeveloped. Development plans have an important role to play in continuing to apply this principle at a local level, and in steering development away from particularly vulnerable and valuable soil resources, such as prime agricultural land and carbon rich soils.</p>
SEA 6	Protect and where possible enhance the water environment	<p>Positive Development concentrated in areas with public drainage systems.</p> <p>Negative Reduced water quality and habitat loss as a result of land use change and development.</p>	<p>Enhancement Improvements in water quality, removal of invasive non-native species, restoration of habitats and reduction of flood risk due to rehabilitation of river morphology and flood storage.</p> <p>Mitigation Reduce diffuse pollution from run off and use of septic tanks in rural areas (in line with LDP Policies) and ensure the use of SUDs in all new development.</p>
SEA 7	Safeguard the functional floodplain and avoid flood risk	<p>Positive Development encouraged in areas outwith functional floodplain.</p> <p>Negative Reduction in the floodplain functions and morphological impacts as a result of land use change and development.</p>	<p>Enhancement Infrastructure and buildings are designed to cope with future climate conditions.</p> <p>Mitigation To reduce vulnerability to the effects of climate change, the likely impacts on new developments should be assessed and all appropriate adaptation measures implemented, including restricting development in floodplains.</p>
SEA 8	Protect and enhance air quality	<p>Negative New developments will result in traffic growth that is higher than the predicted “natural” increase leading to a potential reduction in air quality.</p>	<p>Mitigation To mitigate the projected increase in traffic volumes and to promote sustainable transport, it is recommended that the business developments should be located adjacent to public transport nodes. Restrictions should be placed on parking and use of private car and green transport plans developed by large employers. The Air Quality Management Areas in Perth and Crieff will help improve air quality. Consideration should be given to relevant measures to safeguard air quality at the design stage of development.</p>
SEA 9	Direct development to sustainable locations which help to reduce journey lengths and the need to travel	<p>Negative Issues linked with emissions associated with growth in car usage.</p>	<p>Enhancement Link walking and cycling facilities to green infrastructure and encourage climate change adaptation through green infrastructure such as tree planting, green walls and street planting.</p> <p>Mitigation Develop ‘no car’ areas and developments.</p>

SEA 10	Reduce emissions of greenhouse gases	Negative Increased emissions of greenhouse gases (i.e. carbon dioxide) resulting from new developments.	Enhancement In addition to encouraging use of public transport, consideration should be given to developing renewable energy (with targets for all new developments), to strict design standards for energy efficiency and conservation, and to actions to offset carbon emissions caused by traffic growth. Mitigation Set carbon reduction targets for all new developments. Avoid the disturbance and loss of carbon rich soils through the application of relevant LDP policies.
SEA 11	Reduce the area's vulnerability to the effects of climate change through identifying appropriate mitigation and adaptation measures	Negative Reduction in the floodplain functions and morphological impacts as a result of land use change and development.	Enhancement Infrastructure and buildings are designed to cope with future climate conditions and encourage climate change adaptation through green infrastructure such as tree planting, green walls and street planting. Mitigation To reduce vulnerability to the effects of climate change, the likely impacts on new developments should be assessed and all appropriate adaptation measures implemented, including restricting development in floodplains, unless it accords with the risk framework in SPP. Avoid the disturbance of carbon rich soils could be included within the mitigation and enhancement sections.
SEA 12	Minimise waste per head of population to meet Zero Waste Plan Objectives	Positive Less need for landfill sites or increased life of existing ones. Negative The production of waste from the construction of new developments and the operation of residential, commercial and industrial premises will present issues for waste management operations.	Enhancement Topsoil from excavations used to enhance landscapes elsewhere. Mitigation Adoption of waste minimisation programmes, more efficient transport of waste and reuse of material from existing building stock would contribute to sustainable waste management.
SEA 13	Maximise the sustainable use/re-use of material assets (land and buildings)	Negative Unsustainable use of 'virgin' materials in construction and infrastructure projects.	Mitigation LDP to include policy coverage on sustainable construction; occupation; sustainable layout, public open spaces, and integrated transport.
SEA 14	Promote and ensure high standards of sustainable design and construction	Positive Commitment to sustainability and high quality design of new developments although details are not explicit.	Enhancement High design quality and sustainability could be safeguarded through careful review and clarification of existing design standards, effective design briefing and master planning. Mitigation Strict design standards for all new layout layouts and buildings in the area to promote energy efficiency and conservation

SEA 15	Protect and enhance where appropriate the historic environment	<p>Positive Development proposals could provide finance to regenerate buildings and conservation areas.</p> <p>Negative Development proposals and new transport infrastructure could potentially impact upon the cultural heritage of the area. Additionally development upon and adjacent to ancient monuments, Listed Buildings, and conservation areas will have a potential to lead to their removal or compromise their setting.</p>	<p>Mitigation Avoidance of impact on sites of Cultural Heritage should be the primary form of mitigation. A range of mitigation actions should be considered, including an archaeological survey, conservation management plans for key historic areas and relocation plans for Listed Buildings threatened by development.</p>
SEA 16	Protect and enhance the character, diversity and special qualities of the area's landscapes to ensure new development does not exceed the capacity of the landscape to accommodate it	<p>Positive Development provides opportunities to enhance landscape qualities and improve degraded areas.</p> <p>Negative Adverse impact upon important designated and non-designated landscape features due to the expansion of settlements and development.</p>	<p>Mitigation Development of a landscape strategy for Perth and Kinross. Where loss of green space is unavoidable, consideration should be given to preserving and enhancing green space elsewhere as compensation.</p>
SEA 17	Protect and enhance townscape character and respect the existing pattern, form and setting of settlements.	<p>Positive Development provides opportunity to enhance townscape and correct past 'mistakes'.</p> <p>Negative Loss of townscape character. Lack of or loss of landscape capacity to accommodate development around settlements.</p>	<p>Mitigation The Green Infrastructure Strategy will help protect the landscape. Ensure landscape capacity studies, design briefs and masterplans are developed.</p>

9. MONITORING

The SEA Directive requires that the significant environmental effects of the second Local Development Plan are monitored. This will also allow for the assessment of the effectiveness of the mitigation and enhancement proposals.

It is essential to develop a strong framework for monitoring, facilitated by feedback systems. The monitoring proposed below should be incorporated into an adaptive management system, which would require the identification of targets and limits for each of the indicators. If future monitoring

shows adverse impacts arising from the implementation of the second LDP, consideration will need to be given to further review the Plan.

The indicators to be monitored are set out in Table 17; alongside the SEA objectives which were used in the assessment. The SEA objectives and indicators were originally developed through the SEA of the first LDP. These have changed slightly to correspond with changes to national legislation but will still allow for comparison and a consistent approach to monitoring.

Table 17: Monitoring Framework

SEA Topic	Objective	Indicator	Data Sources	Responsibility for Monitoring
Biodiversity, Flora and Fauna	Conserve and enhance the diversity of species and habitats	- % area of land designated for the protection of habitats and species in favourable condition	SNH	SNH/PKC
		- % of Biological or Mixed SSSI features in favourable condition	SNH	SNH/PKC
		- Abundance of terrestrial breeding birds	BTO/JNCC/RSPB	BTO/JNCC/RSPB/PKC
		-Woodland Cover and Diversity	Forestry Commission	Forestry Commission/PKC
		- % of priority BAP habitat coverage in P&K	SNH	SNH/PKC
Population	Accommodate population and household growth and direct that growth to appropriate locations	- No. of years effective housing supply in each Housing Market Area (*HMSs)	PKC – Planning& Development	PKC
		- Level of affordable housing provision across HMAs	PKC Housing and Community Care	PKC
Human Health	Improve the quality of life for communities in Perth and Kinross	- % resident population that travel to work/school by a) private motor vehicle, by public transport, or c) on foot or cycle	PKC – Facilities Management	PKC
		-% of residents surveyed finding it easy to access key local services	Scottish Household Survey	Scottish Government/PKC
		-% of households within 200m of an open space	PKC	PKC
		- Area of greenspace	PKC	PKC
		- % of residents surveyed who are satisfied with their neighbourhoods	Scottish Household Survey	Scottish Government/PKC
		- % of data zones ranked in the most deprived areas	SIMD; GROS	GROS/PKC
		- % of households within 500m of a signposted draft core plan	PKC	PKC
	Maximise the health and wellbeing of the population through improved	-Life expectancy at birth rate (male and female)	GROS	GROS/PKC
		-Mortality rate from coronary heart disease under the age of 75 (per 100,000 population)	ISDS	ISDS/PKC

	environmental quality			
Soil	Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils and protect carbon rich soils	% area of Geological SSSIs in favourable condition	SNH	SNH/PKC
		No. of planning applications approved for development of prime agricultural land	PKC - Planning & Development	PKC
		% change in the area of land recorded as vacant and derelict land	PKC/Scottish Vacant & Derelict Land Study	PKC/Scottish Government
		% area of “potentially” contaminated land	PKC	PKC
		Total area of brownfield land rehabilitated	PKC/ Scottish Vacant & Derelict Land Study	PKC/Scottish Government
Water	Protect and where possible enhance the water environment	% of waterbodies at good status	SEPA	SEPA/PKC
		% of groundwater area failing to meet quality standards	SPEA	SEPA/PKC
		Mean daily peak river flows	SEPA	SEPA/PKC
	Safeguard the functional floodplain and avoid flood risk	% area of land in P&K at medium to high risk of flooding which is developed	SEPA/PKC – Planning and Development	PKC
Air	Protect and enhance air quality	Mean annual levels of key air pollutants	PKC – The Environment Service	PKC
		No. of days air quality exceed legislative limits in AQMA	PKC – The Environment Service	PKC
	Direct development to sustainable locations which help to reduce journey lengths and the need to travel	% resident population that travel to work/school by a) private motor vehicle, b) public transport, or c) on foot or cycle	PKC – Facilities Management	PKC
Climatic Factors	Reduce emissions of greenhouse gases	% carbon released by sector (road transport, industry, and domestic sources)	DEFRA/BERR	DEFRA/BERR/PKC
		Total domestic energy consumption per capita (kWh)	BERR	BERR/PKC
		Total domestic electric gas consumption per capita	DECC	DECC/PKC
		Number of new building reaching the gold or platinum sustainability requirement annually.	PKC – The Environment Service	PKC
	Reduce the area’s vulnerability to the effects of climate change through identifying appropriate mitigation and adaptation measures	Installed capacity of renewable energy schemes within the area	PKC	PKC
		% area of land in P&K at medium to high risk of flooding which is developed	SEPA/PKC – Planning and Development	PKC
Material Assets	Minimise waste per head of population to meet Zero Waste Plan Objectives	Total municipal waste arising	SEPA	SEPA/PKC
		% of household waste collected and treated by recycling, composting, energy from waste and landfilling	SEPA	SEPA/PKC
		Location and no. of waste treatment facilities	SEPA	SEPA/PKC
	Maximise the sustainable use/re-	Total area of land stock that is vacant and derelict	PKC/ Scottish Vacant & Derelict Land Study	PKC/Scottish Government

	use of material assets (land and buildings)	Amount of new development undertaken on greenfield compared to brownfield land considering the amount of brownfield land available.	PKC/ Scottish Vacant & Derelict Land Study	PKC/Scottish Government
	Promote and ensure high standards of sustainable design and construction	Number of new building reaching the gold or platinum sustainability requirement annually.	PKC – The Environment Service	PKC
		% of households within 200m of open space	PKC	PKC
		Total energy consumption per capita (kWh)	BERR	BERR/PKC
Cultural Heritage	Protect and enhance, where appropriate, the historic environment	No. of and area covered by Conservation Areas	PKC/Historic Scotland	PKC/Historic Environment Scotland
		% change of listed buildings and SMs at risk	Historic Scotland	PKC/Historic Environment Scotland
		No. of planning approvals with Listed Building Consent or Conservation Area Consent.	PKC/ Historic Scotland	PKC/Historic Environment Scotland
Landscape	Protect and enhance the character, diversity and special qualities of the area's landscapes to ensure new development does not exceed the capacity of the landscape to accommodate it	% area of woodland cover	Forestry Commission	Forestry Commission/PKC
		% change in land cover categories	James Hutton Institute	James Hutton Institute/PKC
		Change in no. of national designated landscape areas	SNH	SNH/PKC
		% change in areas of wild land	PKC/SNH	PKC/SNH
	Protect and enhance townscape character and respect the existing pattern, form and setting of settlements	Changes to existing settlement boundaries	PKC – Planning & Development	PKC

10. NEXT STEPS

10.1 Consideration of SEA Findings - Consultation

As per the requirement of Section 17 of the Environmental Assessment (Scotland) Act 2005, the findings of the Environmental Report were taken into account by the Council when preparing the second Local Development Plan. This section also requires the responsible authority i.e. Perth and Kinross Council to take into account the findings of the consultation on the second Local Development Plan in finalising it prior to adoption.

Following the adoption of a plan or programme, the Environmental Assessment Act requires the responsible authority to provide the public and the Consultation Authorities (Historic Environment Scotland, Scottish Environment Protection Agency and Scottish Natural Heritage) with the information on how environmental considerations and the consultation responses have been reflected in the plan or programme, and also future monitoring arrangement for the Plan’s implementation.

In order to satisfy this requirement Perth and Kinross Council will prepare a Statement to accompany the completed Local Development Plan. It will outline how the Environmental Report informed the development of the Plan, including how opinions made on the Environmental Report have been taken into account in finalising the Plan. This will be called the “Post-Adoption Statement” and will be published under section 18 (1) (a) (iii) of the Environmental Assessment (Scotland) Act 2005.

10.2 Consultation Questions

Consultees are asked to provide their responses on proposals for the Perth and Kinross Local Development Plan. It may be helpful to consider the following questions in the context of the Proposed Plan:

1. Do you agree with our understanding of the baseline environment in the Perth and Kinross Area?
2. Do you think that there are any other plans, policies (in addition to those listed in this report) or wider environmental objectives that should be taken into account?
3. In your opinion have we identified the most important or significant environmental problems affecting the Perth and Kinross area?
4. Do you disagree with any of our assessment questions? If do please identify which ones and why. (Please support this with additional baseline data and explain your reasoning).
5. Do you have concerns about significant or cumulative environmental effects on particular parts of the Perth and Kinross area or on particular environmental features? (If yes, please support this with additional data and explain your reasoning).

6. Do you think that there are further, relevant positive aims and aspirations for the environment that the second Local Development Plan could deliver in the long term? (If yes please provide details).

10.3 Proposed Timescales

The table below sets out the future key milestones in the development of the Plan and associated SEA.

Table 18: SEA Milestones

Milestone	Anticipated Date
Publication of Environmental Report Addendum	December 2017
Publication of Proposed Plan	December 2017
Consultation period for Proposed Plan and Environmental Report Addendum	December 2017-February 2018
Consideration of Representations and Potential Modifications to the Plan	February – March 2018
If Modifications are not significant/notifiable submit Plan to the Scottish Ministers	
Submit Proposed Plan to Scottish Ministers for Examination	June 2018
Receipt and Consideration of Reporters recommendations	Early 2019
Plan Adoption	May 2019
Prepare and Publish SEA Post Adoption Statement	Autumn 2019
Monitoring and Review of the Plan	May 2019 - onwards

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