Perth and Kinross Council

Local Development Plan 2
SEA Environmental Report

December 2015

DRAFT

PERTH & KINROSS COUNCIL

SEA ENVIRONMENTAL REPORT – COVER NOTE

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

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

Part 3	
X	**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**
	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**
	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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Part 5			
Signature	RMoylan	**Date**	16/12/2015

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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 it levels. Form 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 that 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.
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.
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: 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, 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.
SSSI	Site of Special Scientific Interest Areas of land or water which, in the opinion of SNH are of special interest by reason of their flora, fauna or geological or physiographical features.

INTRODUCTION

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 and area up to at least 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.

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

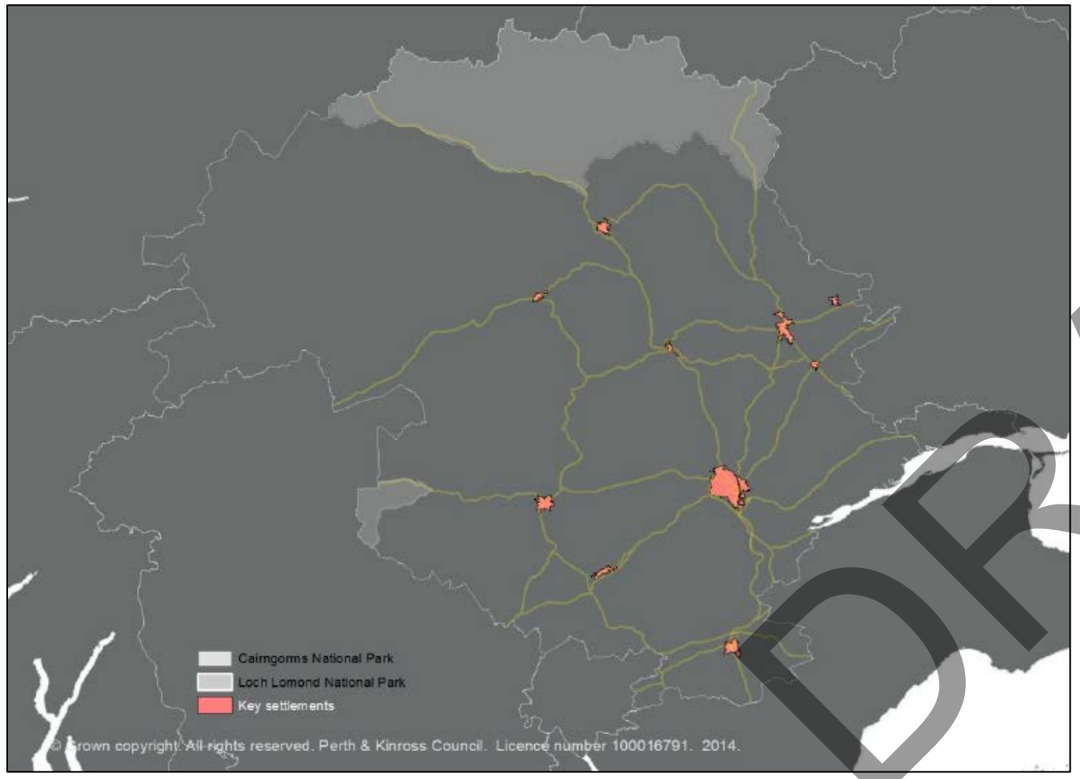
SEA Topic	Reason
Biodiversity, Flora and Fauna	The Plan has the potential to cause significant environmental effects despite mitigation through existing Development Plan policy protection of internationally and nationally protected sites. The potential also exists to positively enhance positive effects as a result of development.
Population	Potential generation of 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 have negative effects on air quality and greenhouse gas emissions; 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 to the need for long term adaptation to 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.

PLAN CONTEXT

The Perth and Kinross Area

The plan area covers 4,707km^2 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, at 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.

The Current LDP

The Planning etc. (Scotland) Act 2006 requires planning authorities at five yearly intervals to prepare LDP's 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 has begun the process of preparing the second LDP for its area.

As part of the LDP preparations the Local Development Plan Team intends to consult on both the Main Issues Report and the SEA Environmental Report in the autumn of 2015. Figure 2 below shows the current timetable for the production of the Plan, as contained in the Development Plan Scheme.

	Plan Process	Assessment Processes	Timescale	
Stage 1	Monitoring and Review Plan		January 2014	
	Development Plan Scheme (including Participation Scheme)		April 2014	
Stage 2	Pre-MIR Consultation (as per participation statement)	SEA Scoping Report Equality Impact Assessment	January 2015	
Stage 3	↓ Publish Main Issues Report and Monitoring Statement	↓ SEA Draft Environmental Report	December 2015	
	↓ MIR Consultation	↓ Draft Environmental Report Consultation	December 2015	WE ARE HERE
Stage 4	↓ Publish Proposed Plan	↓ SEA Final Environmental Report	September 2016	
	↓ Plan Consultation	↓ Appropriate Assessment Equality Impact Assessment	September 2016	
Stage 4a (optional)*	↓ *Modified Plan* *Consider representations and whether to modify*	↓ *SEA Modified Environmental Report and update HRA* *Review EQIA*	*January 2017*	
Stage 5	↓ Submit Proposed Plan to Scottish Ministers for Examination	↓ Submit SEA and HRA with proposed plan	June 2017	
	↓ Modifications to Proposed Plan	↓ Amend Environmental Report Update HRA	January 2018	
Stage 6	↓ Adoption	↓ Finalised Environmental Report Post Adoption Statement	May 2018	
	↓ Action Programme	↓	September 2018	
Stage 7	↓ Monitoring and Review of Plan	↓ Monitoring and Review of SEA Equality Impact Assessment Review	Ongoing 2018-2023	

Return to Stage 1 to begin the next LDP Review

* Modifications can cause significant delays and should not be undertaken as

Figure 2: Timetable for the LDP Progress

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 first TAYplan was approved in April 2012. It sets out the vision where "By 2032 the TAYplan region 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.

The Second LDP

A 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, 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.

Policies - these will give clear guidance on where development will be encouraged, and also where and in what circumstances it will not be permitted.

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.

The Local Development Plan Team has engaged in a pre-MIR consultation exercise and this along with the outcomes of our monitoring of the first LDP will be used to identify the Main Issues to be discussed in the MIR.

Main Issues Report

The first stage in the Perth & Kinross LDP process is 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 will focus on key issues and areas of change both, nationally and locally, since the adoption of the first LDP in February 2014.

Undoubtedly some issues or sites may be considered "significant" to local people may not be covered in this Main Issues Report which is more strategic in scale and nature than the Plan itself. This will mean that some sites or issues may not be considered in the Environmental Report which will be published alongside the Main issues Report. It is our intention to ensure these detailed issues are given careful consideration to ascertain whether the site should be allocated, amended or if development should be permitted or if there is an impact on the environment as a result of a new or reworded policy. However, this detailed analysis will be prepared alongside the Proposed Plan as that level of detail is not available to us until the options and alternatives are considered at Main Issues Report stage.

BASELINE

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 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

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 Governments 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 equalities 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 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 if 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 been 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 is currently under review. The proposed second TAYplan was available for public representations between 11 May and 3 July 2015.

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 a change in the vision or spatial strategy as it has to remain consisted with TAYplan. The proposed Plan highlights the importance of focusing growth within the principle settlements. The principle 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.

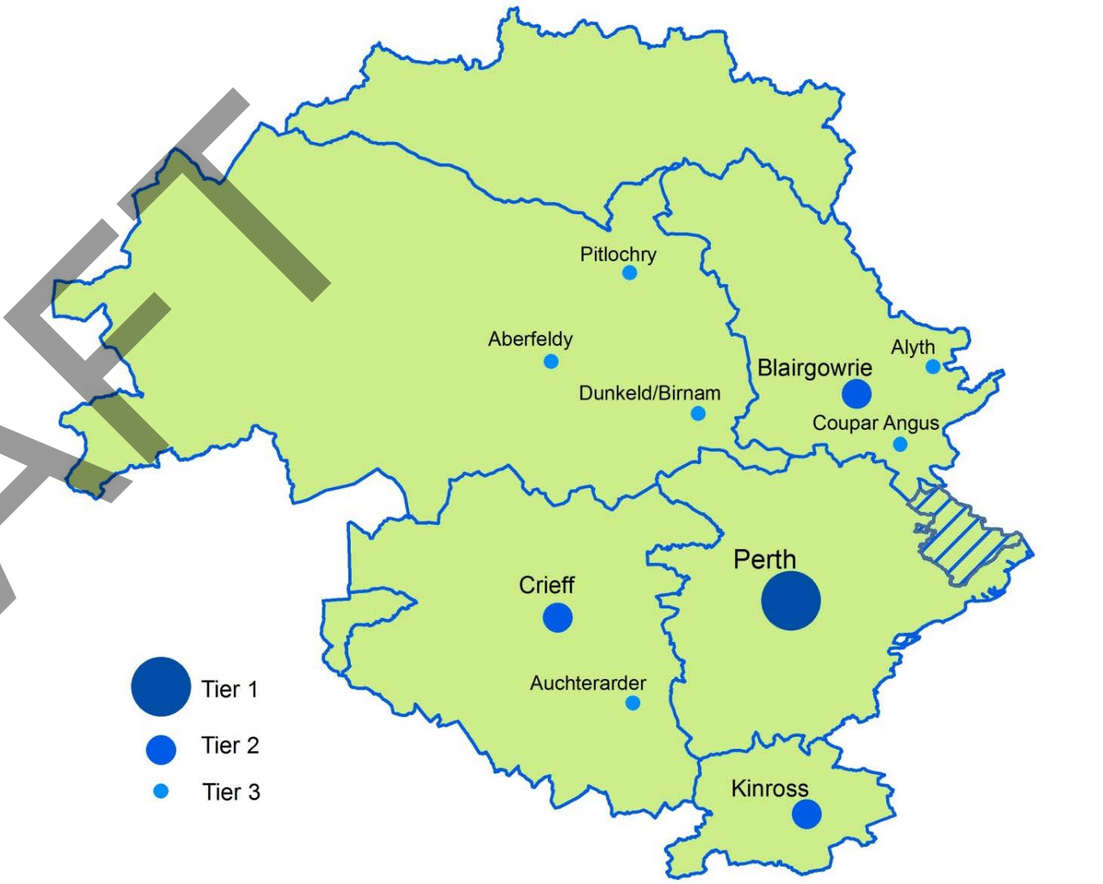


Figure 3: Principle Settlements within the TAYplan Area

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 an 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.

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 were 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.

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	▪ 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). - 2 National Nature Reserve Areas,) - 4 Ramsar sites - 22 Special Areas of Conservation, - 8 Special Protection Areas - 119 SSSIs - 8 Important Bird Areas (IBAs) ▪ There are 11 Special Landscape Areas (SLAs) spread across Perth and Kinross, and consist of a range of highland and lowland areas covering 144 400 ha or around 27% of Perth and Kinross. Recorded distributions of Protected (both LBAP and Statutory Protected Species) species indicate presence in 44% of all 1km squares in P&K (2008) ▪ Baseline of 9% priority BAP habitat coverage in P&K (1984-2007) ▪ 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) ▪ 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	Cultural Cultural Cultural Cultural Cultural
Population		
	▪ 146,652 (2011 Census)	Cultural
Human Health		
Health and Wellbeing	▪ Population density of 0.28 people/ per hectare (2011 Census) ▪ 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) ▪ 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%. ▪ 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) ▪ 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	Cultural Cultural Cultural Cultural Provisioning Provisioning
Soil		
Geology, Soils and Minerals	▪ In 2014/15 96 percent of Geological protected sites were considered to be	Cultural
	Geological protected sites were considered to be in favourable condition. ▪ The Forestry Commission identified approximately 57142 ha of ancient and semi-natural woodland in Perth and Kinross (2006). ▪ According the NFI 17% of Perth and Kinross is forested, an increase of 1% or over 6500 ha since 2002. (Forestry Commission, 2011)	Provisioning Provisioning

Resource	Key Facts	Ecosystem Service
	in favourable condition. This represents a decline of 4 percent in the condition of geological notified features. ▪ The Perth and Kinross Council area contains or adjoins 30 Geodiversity sites ▪ 11.6% or 62,000ha of the area is occupied 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)	Cultural Regulating Regulating
Vacant, Derelict and Contaminated Land	▪ 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	▪ 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	Regulating Regulating
Flooding	▪ The National Flood Risk Assessment has found that one in 22 of all residential 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 (see Appendix B for SEPA Flood Maps)	Regulating
Air		
Air Quality	▪ 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	▪ Emissions of CO_2 within P&K (2012): - 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 5577 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	▪ Distinctive local vernacular architecture(s)	Cultural
Waste	▪ 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)	Supporting Supporting Supporting

Resource	Key Facts	Ecosystem Service
	▪ 49.3% of Household Waste disposed of to landfill (2013) ▪ 42.8% of Household Waste recycled (2013)	Supporting Supporting
Cultural Heritage		
Historic and Cultural Heritage	▪ There were 36 designated conservation areas in Perth and Kinross ▪ 744 Scheduled Monuments ▪ 3113 listed buildings (131 of which are included on the Buildings at Risk register) ▪ 42 gardens and designed landscapes covering 11,123 ha ▪ 4 Historic Battlefields (Killiecrankie, Dunkeld, Tippermuir and Dupplin Moor)	Cultural Cultural Cultural Cultural Cultural
Landscape		
Landscape Character and Trends	▪ 13% of the area is designated as part of 5 National Scenic Areas: - Ben Nevis and Glen Coe[1] (4,500ha) - Loch Tummel (9,200ha) - Loch Rannoch and Glen Lyon (47,100ha) - River Tay (5,600ha) - River Earn (Comrie to St. Fillans – 3,000ha) ▪ Land Use/Land Cover in 1988: - Agriculture (33%) - Forestry/Woodland (16%) - Scrub/Heath/Moor (45%) - Water Bodies and Bog (3%) - Urban Industrial/Commercial (2%) - Predominantly residential areas (<1%) ▪ Key Landscape Character Areas in 2001: - Mountains of the Highlands and	Cultural Provisioning Provisioning

Resource	Key Facts	Ecosystem Service
	Islands (43%) - Highland and Island Glens (23%) - Agricultural Lowlands of the North East (10%) - Lowland Hills (8%) - Upland Igneous and Volcanic Hills (8%) - Remaining areas comprised of a mix of Lowland Basins and Valley, Peatlands and Inland Lochs ▪ Current driving forces and pressures leading to change in the landscape are: - agricultural change - forestry and woodlands - development pressures - building in the countryside - wind farms - tourism - road development - climate change ▪ Majority of development pressures concentrated in south eastern area ▪ There are 5 Wild Land Areas within or intersecting Perth and Kinross.	Cultural Cultural

[1] Partly in the Perth & Kinross area

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	❍❍❍	❍❍	❍❍

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
- Awaiting update of River Basin Management Plans and any further information this may provide
- 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 to comment on trends relating to wild land areas
- A lack of information on capacity of the landscape to accommodate development.

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 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 there has not been enough time for theses problem or issues to be resolved.

Table 4: SEA Topic and Associated Problems and Issues

SEA Topic	Associated Problems and Issues
Biodiversity, Flora and Fauna	• Impact on biodiversity, including habitat networks and wildlife corridors as well as designated sites, of 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	• Increasingly ageing population means there will be a need to take into account the scope for the provision of an 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	• Access to good quality recreation and open space • Impact of poor design on wellbeing

SEA Topic	Associated Problems and Issues
	• Access to facilities and services
Soil	• Irreversible loss of soil through development, contamination or erosion – the best quality agricultural land should be protected from development. • Increased development pressures in peat rich soil
Water Quantity	• 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. • 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.
Water Quality	• 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. • Lack of specific standards for water efficiency.
Air	• 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	• 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. • Potential future northwards migration of the population and planning for that higher growth rate • 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 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	• Constraints on infrastructure delivery including the current economic climate • Threats to recreation and open space
Cultural Heritage	• 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	• Increased pressure for development (including housing in the countryside) resulting in the incremental loss of landscape, both in terms of designated sites and wider landscapes. Resultant effects on health and quality of life. • Significant local landscapes and their characteristics • Balancing the desire to grow the tourism sector and safeguard the special characteristics of landscapes which attract tourists to the area

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 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.

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 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?
SEA 6	Water	Protect and where possible enhance the water environment	Will it prevent deterioration and enhance ecological status of the water environment?
SEA 7		Safeguard the functional floodplain and avoid flood risk	Will it avoid or reduce development on the functional floodplain?
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 manage existing flood risks appropriately and avoid new flood risks? 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?

PROPOSED METHODOLOGY

Introduction

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 planning. It is not possible nor is it necessary for the assessment to consider every conceivable effect. Nonetheless, all potential effects have been assessed through the methodology below.

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. Therefore cognisance will be paid to the strategies, landscape character and habitats of neighbouring local authority areas.

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 requirement.

Predicating the Effects of implementation

Predicting the effects of implementation is an essential part of the SEA. The purpose of carrying out SEA is to allow the decision maker to make 'good 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.

Assessment of the Main Issues Report

The Environmental Report will be published alongside the Main Issues Report and will provide an assessment of the issues highlighted within this report. As the Main Issues Report focuses on areas of change the Environmental Report will only provide an assessment of these areas and issues.

There will then be an Environmental Report Addendum published alongside the Proposed Plan which will provide greater detail including updated site assessments, where necessary, and an assessment of the Policies. The HRA will be published alongside this addendum.

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 it 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 the preferred alternative.

It is most likely that the preferred alternative to come out of the Main Issue Report will be the one that has the potential to achieve the best balance between environmental, social and economic considerations. This option will then undergo a more detailed assessment and evaluation in the Environmental Report.

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 without the need to be reassessed, this has helped ensure that the SEA remains proportionate.

Ecosystem Services Approach

Where possible an ecosystem services approach will be used. This will help ensure the environment is viewed in terms of its benefits and uses rather than just though 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.

Compatibility of 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 LDP Objectives. As the LDP objectives have not changed the assessment has also been brought forward to ensure the SEA is proportionate. In both instances a compatibility matrix was used to carry out the assessment, such as the one in Figure 5.

Figure 5: Matrix to Assess Compatibility of Objectives

LDP Objectives	SEA 1	SEA 2	SEA 3	SEA 4	SEA 5	SEA 6
LDP 1						
LDP 2						
LDP 3						
LDP 4						
LDP 5						
LDP 6						

SEA Objectives

Site Assessment

For all sites, both preferred and alternatives, a site assessment will be produced as well as a 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 below in Appendix C.

The SEA assessments published at MIR stage, alongside the Environmental Report will remain a work in progress. Site Assessments will be updated where and a finalised document containing all the site assessments will be published as alongside the SEA addendum.

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, within each settlement. At this stage only the tiered settlements have been assessed but this is currently a work in progress. Once the preferred options have been established each settlement within the proposed plan will be assessed. This assessment will be presented in the addendum to the Environmental Report, which will be published alongside the proposed plan.

Policy Assessment

A matrix approach will be used when undertaking the assessment of the policies within the policy groups and in presenting the results; Figure 5 provides an example of the matrix to be used. To keep the appraisal understandable and simple in its presentation, symbols will be used to express the judgement used in each criterion, with an overall summary which will clearly highlight the reasoning behind the predicated findings, an example of which can be seen in Figure 6.

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. The policy assessment will be published alongside the proposed plan as part of the SEA Addendum.

Figure 6: Matrix to be used for Policy Analysis

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

Figure 7: Judgement Criterion

++	+	+/-	0	-	--
Significant Benefit	Benefit	Mixed	Unknown	Adverse	Significant Adverse

Assessment of the Main Issues

A matrix based approach has been used to allow a comparative analysis of the Main Issues. 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 8. The judgement criterion used for this assessment will be the same as the one proposed for the policy analysis to allow for greater consistency (see figure 7).

Figure 8: Matrix Used to Assess the Main Issues

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….

Air				
Climatic Factors				
Material Assets				
Cultural Heritage				
Landscape				

Cumulative Assessment of other Policies, Programmes or Strategies

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 look at 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 will assess 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 9 below demonstrates how the results of this assessment will be presented.

Figure 9: 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				

What will not be covered in the Assessment of LDP2?

To ensure the SEA is proportionate we will only assess issues what can be addressed by LDP2. This means that a large scale infrastructure project such as the Cross Tay Link will not be assessed as part of this SEA; it has its own SEA. 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.

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 2014 Flood Maps
- Historical Flooding Data

As well as this we have help 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 highlighted which sites have provided an early opportunity to assess a sites potential to impact a Natura site. This information will be carried forward into the HRA and Appropriate Assessment which will be published alongside the Proposed Plan.

Conclusion

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 both the main issues and the proposed sites, 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.

ASSESSMENTS

Assessment of the LDP2 Vision

The visions of LDP2 and the main objectives have not changed since the first Local Development Plan was assessed in 2010. Although the wording of the SEA objectives has changed slightly, this change has not been significant and will not impact the findings of the assessment. This means that the findings of the first SEA can be brought forward. This is presented below (highlighted in purple box). The SEA objectives of LDP2 (see figure 10) are presented alongside the Objectives for SEA to allow for comparison.

ASSESSMENT OF THE LDP VISION

The SEA initially considers the Vision in broad terms, and analyses the potential for improvement of environmental considerations within the Strategy. 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 gives full consideration to both aspects of the proposals.

Inter-compatibility of SEA Objectives

This assessment firstly considered to what extent the SEA Objectives are complimentary to identify any potential conflicts and opportunities for enhancement. The results are presented in the compatibility matrix in Figure 5.1, which shows that the Objectives are largely compatible.

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 tension predicted from promoting development under SEA 2 (‘Accommodate population and household growth and direct to appropriate locations’) and the potential impacts on soil (SEA 5), waterbodies (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).

Tension may also arise from the promotion of development, even in sustainable locations under SEA 9 and the impact on soil (SEA 5), especially as some prime quality agricultural land 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 areas of prime quality agricultural land.

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

Compatibility of MIR Objectives with SEA Objectives

MIR Objectives were assessed against the SEA Objectives to determine their compatibility and highlight areas that may require further consideration. The analysis considered a MIR 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. Figure 5.2 presents the compatibility of the MIR Objectives with environmental objectives.

Almost all of the MIR’s Objectives are compatible with the SEA Objectives. However the assessment does highlight a few areas that will require some strengthening.

LDP Objectives 1, 3, 4, 10, 13 and 16 all involve the need for the further development of housing 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

pace to ensure future development causes minimal disruption to the biodiversity of the surrounding area and that measures are put in place that will lead to enhancement. 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, water resources and the areas historic environment. There is a lack of certainty how such resources will be protected. Such objectives will require additional support to ensure that negative impacts are not caused by the development proposal.

'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 9 of this report proposes a number of enhancements that will reduce the conflicts within the Vision Framework.

Reduction of Green House Gases (GHGs) and the improvement in air quality is another area that presents 'uncertainties'. The MIR 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.

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.

There is 'uncertainty' in the compatibility between LDP Objective 14 'Ensure a continuous 7 year supply of developable housing land’ and SEA Objective 10 that aims to 'Reduce the areas vulnerability to the effects of climate change…’. This 'uncertainty' is however mitigated by the proposed LDP Objective 6 'To ensure that development and land uses make a positive contribution to helping to minimise the causes of climate change and mitigating its impacts '.

The main tensions in the Vision Framework lie in ensuring that the natural and built environment, biodiversity and natural resources, including prime agricultural land are protected.

Table 5.1: LDP Objectives

Ref	LDP Objective
LDP 1	Produce a more efficient settlement pattern by ensuring that the location of new development contributes to reducing the need to travel
LDP 2	Protect and enhance the cultural and historic environment
LDP 3	Ensure that new development enhances the environment and embraces the principles of sustainable design and construction
LDP 4	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 to accommodate it
LDP 5	To improve the long term resilience and robustness of the natural environment to climate change.
LDP 6	To ensure that development and land uses make a positive contribution to helping to minimise the causes of climate change and mitigating its impacts
LDP 7	Conserve and enhance habitats and species of international, national and local importance
LDP 8	Identify and promote green networks where this will add value to the provision, protection, enhancement and connectivity of habitats, recreational land and landscape in and around settlements
LDP 9	Provide the framework to increase the economic sustainability of Perth and Kinross by maintaining and providing locally accessible employment opportunities
LDP 10	Ensure a continuous 7 year supply of developable economic development land
LDP 11	Provide a flexible policy framework to respond to changing economic circumstances and developing technology
LDP 12	Promote the vitality and viability of shopping centres and reduce the potential loss of shoppers to retail centres outwith Perth and Kinross
LDP 13	Accommodate population and household growth and direct that growth to appropriate locations
LDP 14	Ensure a continuous 7 year supply of developable housing land
LDP 15	Seek to ensure that the housing land supply accommodates the needs of the various sectors of the market
LDP 16	Identify and provide for new and improved social and physical infrastructure to support an expanding and changing population
LDP 17	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
LDP 18	Ensure investment in the renewal and enhancement of existing infrastructure consistent with the Strategy of the Plan in order to make best use of the investment embedded in our existing settlements

Table 5.2: 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
SEA 6	Protect and where possible enhance waterbody status
SEA 7	Safeguard the functional floodplain
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
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
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 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

Figure 10: LDP2 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
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

Figure 5.1: 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
+	Mostly compatible
~	Unclear relationship
-	Mostly incompatible
- -	Incompatible
?	Uncertain relationship

Figure 5.2: Compatibility of the Strategic Environmental Assessment and the Local Development Plan's 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	~	++	++	++	~	~	~	~	++	++	~	~	~	~	~	~	~
LDP 18	?	++	++	++	?	+	?	+	++	++	+	-	++	~	~	~	~

Matrix Key

+ +	Compatible
+	Mostly compatible
~	Unclear relationship
-	Mostly incompatible
- -	Incompatible
?	Uncertain relationship

The proposed Vision provides 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 to be achieved. Achievement of the Vision is also dependant on the spatial allocation of development. Each of the proposed spatial strategies will be assessed in the following sections of this report. The assessment of the Vision will be incorporated into this analysis allowing for the consideration of the implications of cumulative impacts of the Vision and the Spatial Strategy, and also to identify any conflicts that may exist between the two. This process will ensure that mitigation proposals in Section 9 are comprehensive and ensure that the LDP protects and enhances the environment of Perth and Kinross.

Assessment of the Vision – Scenarios for Implementation

The Vision Statement for Perth and Kinross draws on and complements 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.

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 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.

It was considered that there were no reasonable alternatives to the Vision Statement 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.

Table 5.3 below presents the results of the assessment carried out of the three possible scenarios for implementing the proposed LDP Vision:

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.

Assessment Key

Effect				
++ Major Positive	+ Minor Positive	0 Unknown	- Minor Negative	-- Major Negative

Table 5.3: 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. Environmental	
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. Scenario 2 is likely to have a positive impact on the objective to accommodate the expanding population due to its strong emphasis on 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. Scenario 3 whilst being likely to have positive effects on the objective to maximise the health and well being 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.
Improve the quality of life for communities in Perth and Kinross	++	+/-	+/-	
Maximise the health and wellbeing of the population through improved environmental quality	++	0	++	
Soil				

Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils	-	-	++	The potential for development under Scenarios 1 and 2 could lead to the loss of prime agricultural land around settlements and in the wider countryside. 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.
Water				
Protect and where possible enhance waterbody status	0	0	++	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 on waterbody status is unknown as it will depend on the location of development and the availability of appropriate infrastructure. 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. Scenario 3 is likely to support the SEA Objectives for the Water environment.
Safeguard the functional floodplain	+/-	0	++	
Air				
Protect and enhance air quality	+/--	+/--	++	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. 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.
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/+	0	++	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. 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 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.
Reduce greenhouse gas emissions	0	0	++	
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

Minimise waste per head of population	**-/+**	**-/+**	**++**	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. 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.
Maximise the sustainable use/re-use of material assets (land and buildings)	**++**	**+**	**++**	
Cultural Heritage				
Protect and where appropriate enhance 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	**+/-**	**+/-**	**+**	

Site Assessments

All sites within the MIR have been assessed using the Site Assessment Template (Appendix C) and the full list of Site Assessments can be found in Appendix E. The sites that were submitted during the Pre-MIR period have been considered and the site assessments of these have allowed officers to choose the most suitable alterative within each settlement.

In line with TAYplan, the majority of new development will be located within tiered settlements. This means that in settlements where is suggested an allocation could be removed, such as Comrie or Errol Airfield/Grange; it will be within the tiered settlements that we will look to relocating the housing numbers.

For most cases, the site assessment findings are presented in the cumulative assessment. However for the following allocations and development proposals the site assessments can be found in Appendix E:

- Binn Eco Park
- Cultybraggan Camp
- Perth Isla Road Cemetery
- Blairgowrie Heather Drive Cemetery

All sites assessments can be found in Appendix E.

Cumulative Assessment of Site Allocations

A comparative matrix has been used to assess the cumulative impacts of the allocations proposed, as well as the alternatives, 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.

Cumulative Assessment findings were based on the results of the initial site assessments which can be found in Appendix E. This matrix based approach used a scoring system as shown in Figure11.

Figure 11: Site Assessment Judgement Criterion

++	+	0	-	--
Significantly positive	positive	neutral	adverse	Significantly adverse

At this stage cumulative assessments have been completed for the following settlements:

<u>Strathmore Housing Market Area</u>
Alyth
Blairgowrie and Rattray
Coupar Angus
Meigle

<u>Kinross Housing Market Area</u>
Balado
Blairingone
Kinross
Milnathort

<u>Highland Housing Market Area</u>
Aberfeldy
Dunkeld and Birnam
Pitlochry

<u>Strathearn Housing Market Area</u>
Auchterarder
Crieff

<u>Perth Housing Market Area</u>
Perth
Abernethy
Bridge of Earn
Dunning
Scone
Stanley

<u>Dundee Housing Market Area</u>
Inchture

Assessment of Alternatives for Alyth

Key Environmental Issues for 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 location 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 SM. 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 MIR identifies that within the Strathmore and the Glens Housing Market Area there is a need to identify land to accommodate 160 houses in the years to 2028, in addition to the sites currently allocated in the LDP. However, should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement the Council will need to identify land for a total of 330 additional houses in the Strathmore and the Glens Housing Market Area in the same time period. The options for meeting these numbers are discussed in chapter 3.

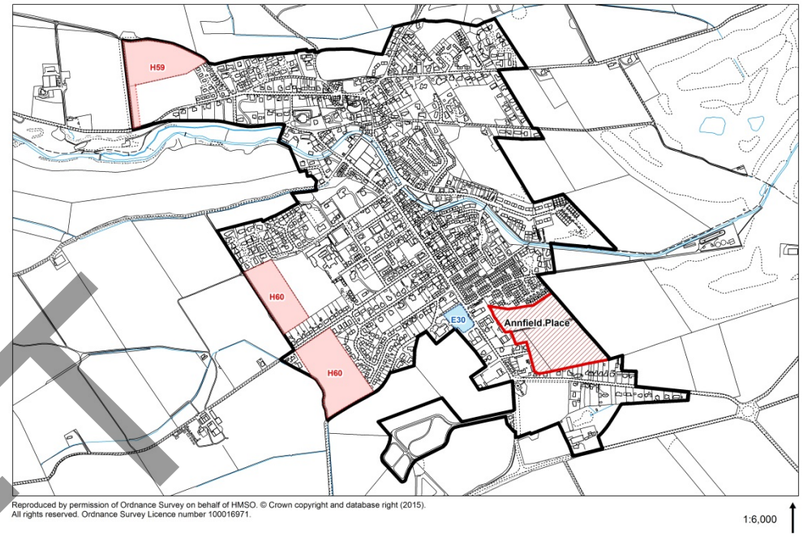
The potential need for additional employment land in Strathmore and the Glens amounts to 20ha and the existing adopted LDP allocations are sufficient to meet this requirement. No additional employment land allocations are proposed in Alyth.

The preferred option 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, both the preferred and alternative option for Strathmore and the Glens propose to continue with current Alyth allocations and the identification of a further site at Annfield Place.

<u>Additional Site Option:</u>

Continue with currently allocated LDP sites (E30 Mornity; H59 Glenree; and H60 Albert Street with St Ninians Road) with the addition of Annfield Place.

Figure 12: Map of Preferred Option in Alyth



A key requirement of SEA is to consider the cumulative impact of development within an area. In Alyth 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 Alyth, 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 Table 6.

Table 6: Alyth Cumulative Assessment

Additional Site Option
Biodiversity Flora and Fauna
H59
H60
E30
Annfield Place
Overall Impact
Population
H59
H60
E30
Annfield Place
Overall Impact
Human Health
H59
H60
E30

Annfield Place
Overall Impact
Soil
H59
H60
E30
Annfield Place
Overall Impact
Water
H59
H60
E30
Annfield Place
Overall Impact
Air
H59
H60
E30
Annfield Place
Overall Impact
Climatic Factors
H59
H60
E30
Annfield Place
Overall Impact
Material Assets
H59
H60
E30
Annfield Place
Overall Impact
Cultural Heritage
H59
H60
E30
Annfield Place
Overall Impact
Landscape
H59
H60
E30
Annfield Place
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 TA1B and Flood Risk Assessment. Also through the application of policy CF1B 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. 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 policy EP3 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 EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts.

Cultural Heritage

Overall neutral impact on cultural heritage as most sites not impending 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 policy HE1.

Landscape

Adverse overall impacts on landscape as sites are largely greenfield. If access was to be taken form 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.

Assessment of Alternatives for Blairgowrie and 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

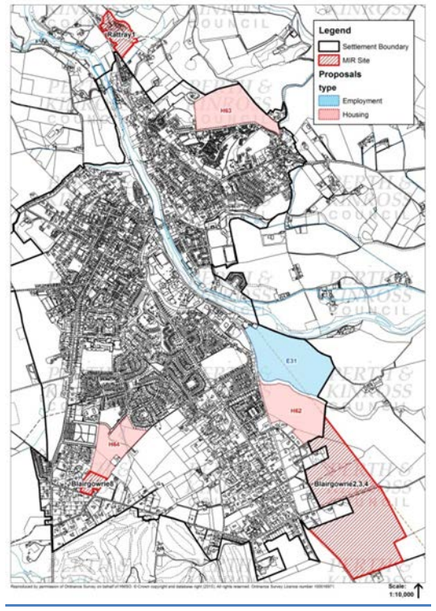
The MIR identifies that within the Strathmore and the Glens Housing Market Area there is a need to identify land to accommodate 160 houses in the years to 2028, in addition to the sites currently allocated in the LDP. However, should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement the Council will need to identify land for a total of 330 additional houses in the Strathmore and the Glens Housing Market Area in the same time period. The options for meeting these numbers are discussed in chapter 3.

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.

Given that Blairgowrie and Rattray is the only tier 2 settlement within Strathmore and the Glens, and the largest town in Perth and Kinross, both the preferred and alternative options seek to allocate the majority of new development sites within this tier 2 settlement. The only difference between the preferred and alternative options is the allocation of a large expansion in the east of Blairgowrie.

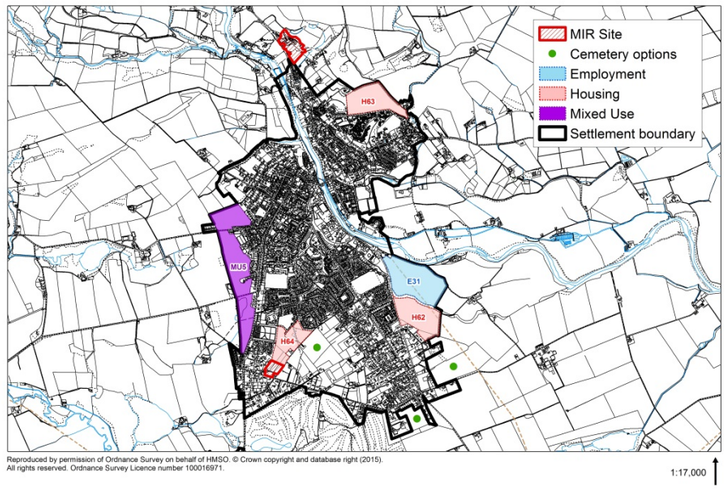
<u>Preferred Option:</u>
Continue with currently allocated sites (E31, MU5, H62, H63 and H64) with the addition of Blairgowrie Eastern Expansion, Golf Course Road and Westfields of Rattray

Figure 13: Map of Preferred Option in Blairgowrie



<u>Alternative Option:</u>
Currently allocated sites (E31, MU5, H62, H63 and H64) with the addition of Golf Course Road and Westfields of Rattray (excluding Blairgowrie Eastern Expansion)

Figure 14: Map of Alternative Option in Blairgowrie



A key requirement of SEA is to consider the cumulative impact of development within an area. In Blairgowrie and Rattray, there are 5 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 (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 table 7.

Table 7: Blairgowrie and Rattray Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Population	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Human Health	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Soil	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Blairgowrie Eastern Expansion	Golf Course Road (extension to H64)
Golf Course Road (extension to H64)	Westfields of Rattray
Westfields of Rattray	
Overall Impact	**Overall Impact**
Water	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Air	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Climatic Factors	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Material Assets	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Cultural Heritage	
E31	E31

MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**
Landscape	
E31	E31
MU5	MU5
H62	H62
H63	H63
H64	H64
Golf Course Road (extension to H64)	Golf Course Road (extension to H64)
Westfields of Rattray	Westfields of Rattray
Blairgowrie Eastern Expansion	
Overall Impact	**Overall Impact**

Conclusions

Preferred Option

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 policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B 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 policy EP3 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. 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 EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts.

Cultural Heritage

Overall Significantly adverse impact on cultural assets due to the location of SMs and presence of archaeology, particularly within the Blairgowrie Eastern expansion sites (including E31 and H62). Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1.

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 to the north 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.

Alternative Option

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.

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 policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B 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 policy EP3 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. 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 EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts.

Cultural Heritage
Overall adverse impact on the historic environment due to presence of SMs and archaeology, particularly within sites E31 and H62. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1. Less impact than the preferred option due to the inclusion of the whole eastern expansion site and the archaeology present within that site.

Landscape
Adverse overall impact on landscape although slightly better than the preferred option due to the exclusion of Blairgowrie eastern expansion. The brownfield site to the north 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.

Assessment of Alternatives for Coupar Angus

Key Environmental Issues for Coupar Angus

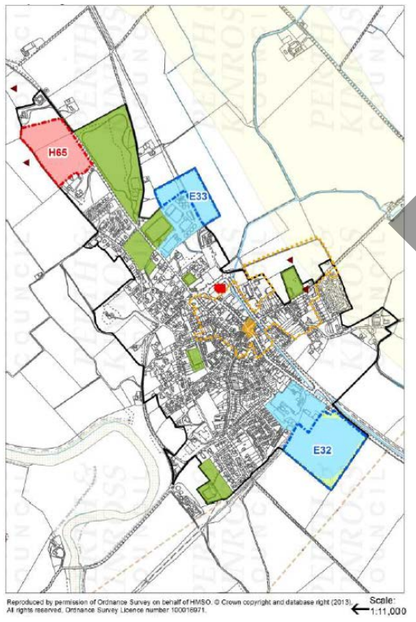
The SEA of LDP 1 assessed the key sensitivities and development pressures within Coupar Angus. This highlighted that the key issues for the area include prime agricultural land, flooding and surface water areas. Development becomes limited or fully constrained along the various waterbodies to the north, 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 SM and listed buildings.

Housing and Employment Land Requirement

The MIR identifies that within the Strathmore and the Glens Housing Market Area there is a need to identify land to accommodate 160 houses in the years to 2028, in addition to the sites currently allocated in the LDP. However, should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement the Council will need to identify land for a total of 330 additional houses in the Strathmore and the Glens Housing Market Area in the same time period. The options for meeting these numbers are discussed in chapter 3. 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.

Figure 15: Map of Preferred Option 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 for each site have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below in table 8.

Table 8: Coupar Angus Cumulative Assessment

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, 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 policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B 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 EP3 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 EP1, EP9 and EP10 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 policy HE1.

Landscape

Adverse overall impacts 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.

Assessment of Alternatives for Meigle

Key Environmental Issues for Meigle

The settlement of Meigle lies within Strathmore and the Glens area. 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 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. This is irrespective of whether the Reporter of any subsequent Development Plan Examination directs the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. Some changes are proposed for Strathmore and the Glens HMA, however, and these are discussed in the Main Issues Report Chapter 4. There are no proposals to change any of the land allocations in Mielge, and no additional land allocations are proposed in Meigle.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Meigle there are 3 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 Meigle in light of this new data.

Figure 16: Map Showing Preferred Option in Meigle

Scale: 1:7,000

Table 9: Meigle Cumulative Assessment

Preferred Option
Biodiversity, Flora and Fauna
H69
H69
E34
Overall Impact
Population
H68
H69
E34
Overall Impact
Human Health
H68
H69
E34
Overall Impact
Soil
H68
H69
E34
Overall Impact
Water
H68
H69
E34
Overall Impact
Air
H68
H69
E34
Overall Impact
Climatic Factors
H68
H69
E34
Overall Impact
Material Assets
H68
H69
E34
Overall Impact
Cultural Heritage
H68
H69

E34
Overall Impact
Landscape
H68
H69
E34
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 policies TA1B and Flood Risk Assessment and policy CF1B.

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 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 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 Meilge 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 policy HE1

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.

Assessment of Alternatives for 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. 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 were identified although site design was highlighted as being a crucial issue to ensure that proposed development does not obstruct existing views from the north and south. Some development was 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.

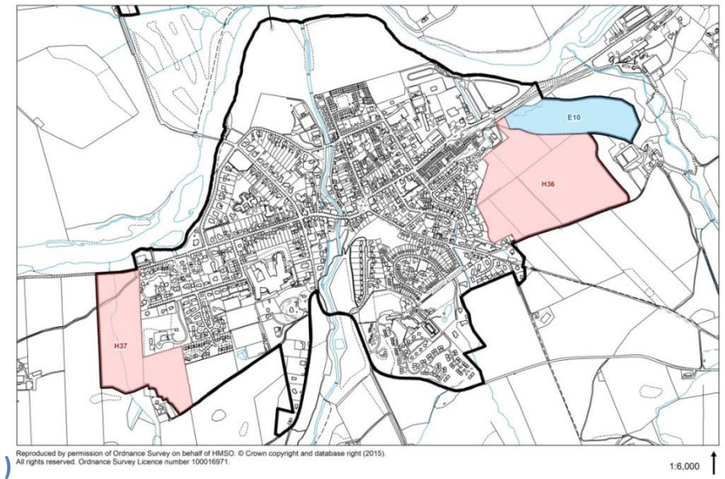
Housing and Employment Land Requirement

The MIR identifies there is a need to identify land to accommodate an additional 90 houses in the years to 2028 over and above that which is already allocated in the current LDP, or an additional 170 houses should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. The alternatives for meeting the additional allocations are discussed in the Main Issues Report Chapter 4. In Aberfeldy, however, monitoring has highlighted a lack of progress on the allocated site H37 South of Kenmore Road. As a result, the Main Issues Report considers whether there are other options for development in Aberfeldy. It presents 3 alternatives:

Preferred Option:

To continue with the existing allocations in the Adopted Plan (H36 Borlick and H37 South of Kenmore Road

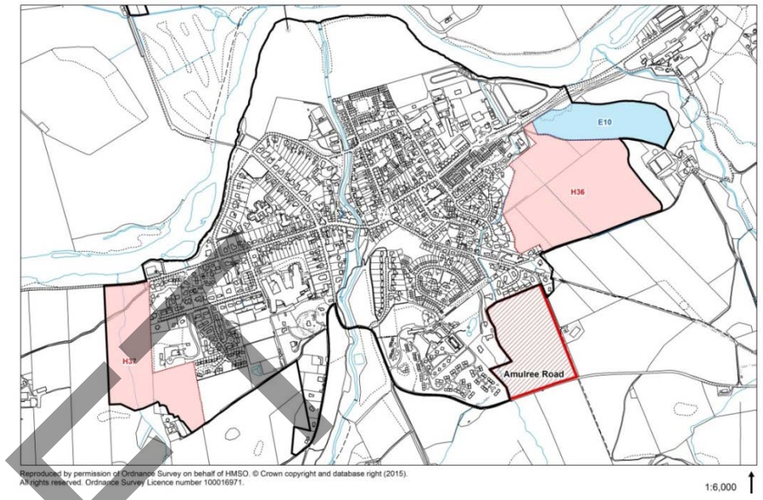
Figure 17: Preferred Option in Aberfeldy



Alternative Option 1:

Addition of a third site at Amulree Road

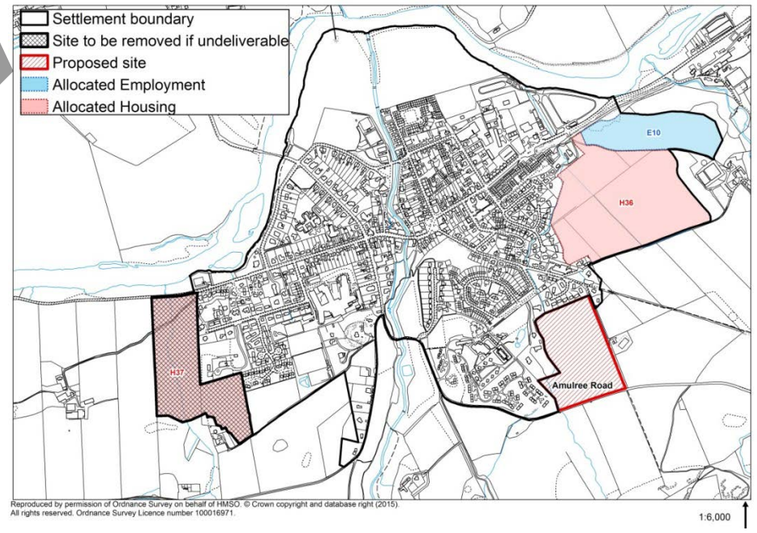
Figure 18: Map of Alternative 1 in Aberfeldy



Alternative Option 2:

Amulree Road site brought forward in place of the existing allocation at site H37 South of Kenmore Road

Figure 19: Map of Alternative 2 in Aberfeldy



The potential need for additional employment land in the Highland area amounts to approximately 5ha and the existing adopted LDP designations are sufficient to meet this identified employment land requirement. No additional land allocations are proposed in Aberfeldy.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Aberfeldy there are 2 allocations that could 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 Aberfeldy 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 table 10.

Table 10: Aberfeldy Cumulative Assessment

Preferred Option	Alternative Option1	Alternative Option 2
Biodiversity Flora and Fauna		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Population		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Human Health		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Soil		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Water		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Air		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Climatic Factors		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Material Assets		
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Cultural Heritage		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**
Landscape		
E10	E10	E10
H36	H36	H36
H37	H37	Amulree Road
	Amulree Road	
Overall Impact	**Overall Impact**	**Overall Impact**

Conclusions

Preferred Option

Biodiversity Flora and Fauna

Some sites connected to River Tay SAC via watercourses. Part of H37 within 500m of SSSI. Development at H37 may put pressure on the riparian areas at the River Tay and Urlar Burn. 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 Aberfeldy accessible from the proposed sites, and access to employment opportunities.

Human Health

Potentially negative effects from flood risk on some sites and impact on open space. 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 TA1B and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and path networks.

Soil

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

Water

Potential risk of both surface and river flooding (medium probability). Application of LDP policy EP3 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. Abstraction for recreational activities will need to be controlled to mitigate impacts on the Urlar Burn. Overall impact likely to be adverse due to flood risk.

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

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, all sites have a north facing aspect and there is a potential risk of both surface and river flooding (medium probability). Overall impact therefore likely to be adverse. Application of LDP policy EP3 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. There is a lack of capacity at Aberfeldy WWTW (previous SEA).

Cultural Heritage

There are some listed buildings in the vicinity of some 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. Part of E10 is ancient / semi-natural woodland. Any adverse impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

Existing allocations are all adjacent to Strath Tay Special Landscape Area. Housing on the more elevated slopes of H37 would be more widely visible than the rest of the site and would take the town's edge above the 'bowl' in which it currently sits. Potential adverse impacts on the SLA can be mitigated by the application of LDP policy ER6 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.

Alternative 1

Biodiversity Flora and Fauna

Some sites connected to River Tay SAC via watercourses. Part of H37 within 500m of SSSI. Development at H37 may put pressure on the riparian areas at the River Tay and Urlar Burn. Also potential for impact on priority species, habitats and botanical value of sites. Potential impacts on SAC will require assessment. Cumulative impacts of this option may be greater than either the Preferred Option or Alternative 2 as more land will be developed although this is unlikely to result in a significantly adverse overall impact. Impacts could be mitigated via retention of important trees, planting and hedgerows and landscaping to reinforce biodiversity value.

Population

Impacts generally positive or neutral based on access to and provision of a choice of housing opportunities, and access to employment opportunities. Less positive impact of this option in terms of the accessibility of the Amulree Road site for the settlement's key services. Overall impact still assessed as positive.

Human Health

Potentially negative effects from flood risk on some sites and impact on open space. 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 TA1B and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and path networks.

Soil

No effects on prime agricultural land, contamination or soil stability but all proposals involve the development of greenfield land so overall impact is adverse. Cumulative impacts of this option will be greater than either the Preferred Option or Alternative 2 as there would be more take up of greenfield land although this is unlikely to result in a significantly adverse overall impact.

Water

Potential risk of both surface and river flooding (medium probability). Application of LDP policy EP3 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. Abstraction for

recreational activities will need to be controlled to mitigate impacts on the Urlar Burn. Overall impact likely to be adverse due to flood risk.

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. Cumulative impacts of this option will be greater than either the Preferred Option or Alternative 2 as it will result in a higher number of houses overall although this is unlikely to result in a significantly adverse overall impact.

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, all sites have a north facing aspect and there is a potential risk of both surface and river flooding (medium probability). Overall impact therefore likely to be adverse. Application of LDP policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required. Cumulative impacts of this option will be greater than either the Preferred Option or Alternative 2 as it will result in a higher number of houses overall although this is unlikely to result in a significantly adverse overall impact.

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. There is a lack of capacity at Aberfeldy WWTW (previous SEA)

Cultural Heritage

There are some listed buildings in the vicinity of some sites but these generally have an existing buffer and so the potential impacts likely to be only slightly adverse. Part of E10 is ancient / semi-natural woodland. There may also be the potential for some impact on locally important archaeological features. There are several archaeological features to the north of the Amulree Road site which may be impacted if access to this site is taken from the north. Overall impact of this option may therefore be slightly more adverse than the Preferred Option. Impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

Existing sites are all adjacent to Strath Tay Special Landscape Area but the proposed site at Amulree Road is a visually prominent site and is within the SLA. The upper part of this site will be particularly visible in views from the north and the Amulree / Crieff Road to the south. Housing on the more elevated slopes of H37 would also be more widely visible than the rest of the site and would take the town's edge above the 'bowl' in which it currently sits. Overall impact likely to be greater than either the Preferred Option or Alternative 2 as more land on the edge of the existing settlement will be developed. Potential adverse impacts on the SLA can be mitigated by the application of LDP policy ER6 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.

Alternative 2

Biodiversity Flora and Fauna

Some sites connected to River Tay SAC via watercourses, also potential for impact on priority species, habitats and botanical value of sites. Deletion of H37 would reduce risk of impact on SSSI near that site. 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 or neutral based on access to and provision of a choice of housing opportunities, and access to employment opportunities. Less positive impact of this option in terms of the accessibility of the Amulree Road site for the settlement's key services. As this option replaces H37 with the less accessible Amulree Road site, overall impact assessed as neutral.

Human Health

Potentially negative effects from flood risk on some sites and impact on open space. 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 TA1B and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and path networks.

Soil

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

Water

Potential risk of both surface and river flooding (medium probability). Application of LDP policy EP3 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. Overall impact likely to be adverse due to flood risk.

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

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 all sites have a north facing aspect and there is a potential risk of both surface and river flooding (medium probability). Overall impact therefore likely to be adverse. Application of LDP policy EP3 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. There is a lack of capacity at Aberfeldy WWTW (previous SEA)

Cultural Heritage

There are some listed buildings in the vicinity of some sites but these generally have an existing buffer and so the potential impacts likely to be only slightly adverse. Part of E10 is ancient / semi-natural woodland. There may also be the potential for some impact on locally important archaeological features. There are several archaeological features to the north of the Amulree Road site which may be impacted if access to this site is taken from the north. Overall impact of this option may therefore be slightly more adverse than the Preferred Option. Impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

Existing sites are all adjacent to Strath Tay Special Landscape Area but the proposed site at Amulree Road is a visually prominent site and is within the SLA. The upper part of this site will be particularly visible in views from the north and the Amulree / Crieff Road to the south. Overall impact likely to be less than Alternative 1 (as Amulree Road would replace an existing site) but greater than the Preferred Option given that Amulree Road is within the SLA. Potential adverse impacts on the SLA can be mitigated by the application of LDP policy ER6 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.

Assessment of Alternatives for Dunkeld and 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. 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 MIR identifies there is a need to identify land to accommodate an additional 90 houses in the years to 2028 over and above that which is already allocated in the current LDP, or an additional 170 houses should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. The alternatives for meeting the additional allocations are discussed in the Main Issues Report Chapter 4. There are no proposals for additional land allocations in Dunkeld and Birnam.

The potential need for additional employment land in the Highland area amounts to approximately 5ha and the existing adopted LDP designations are sufficient to meet this identified employment land requirement. No additional land allocations are proposed in Dunkeld and Birnam.

Figure 20: Map of Preferred Alternative for Dunkeld and Birnam

A key requirement of SEA is to consider the cumulative impact of development within an area. In Dunkeld and Birnam 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 Dunkeld and Birnam 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 in table 11.

Table 11: Dunkeld and Birnam Cumulative Assessment

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. 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. 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

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 Tullymilly and encourage future opportunities for sustainable economic growth in Dunkeld and Birnam by reducing the need to travel further afield for employment.

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. Overall 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. Overall impact is therefore likely to be adverse. Development of the site could help clean up any contamination.

Water

Small areas 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. Overall impact likely to be adverse. Application of LDP policy EP3 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 overall impact on air quality likely to be negative. All sites are on or near bus routes.

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 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 so 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 impact on the landscape. Potential adverse impacts on the NSA can be mitigated by the application of LDP policy NE1 to ensure development is only permitted where the proposed development will not adversely affect the integrity of the area.

Assessment of Alternatives for 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. Much of the area was assessed as having development potential in that it was either free from or has limited strategic constraints. Potential for expansion was identified to the north, north east, south west and south towards the A9. High risk constraints were however identified 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).

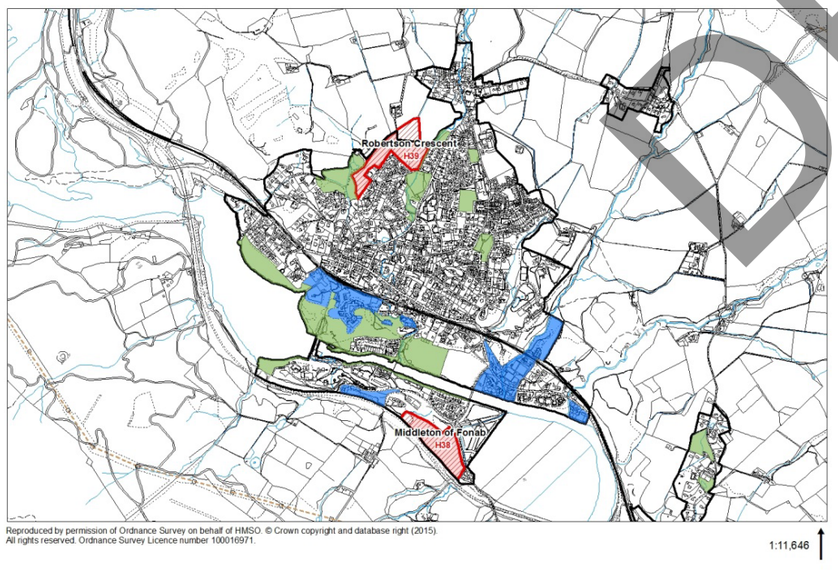
Housing and Employment Land Requirement

The MIR identifies there is a need to identify land to accommodate an additional 90 houses in the years to 2028 over and above that which is already allocated in the current LDP, or an additional 170 houses should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. The alternatives for meeting the additional allocations are discussed in the Main Issues Report Chapter 4. There are no proposals for additional land allocations in Pitlochry. Extensions have, however, been proposed to both the existing allocations. As a result, two alternatives need to be considered:

<u>Preferred Option:</u>

Extensions to the existing sites at H38 Middleton of Fonab and H39 Robertson Crescent

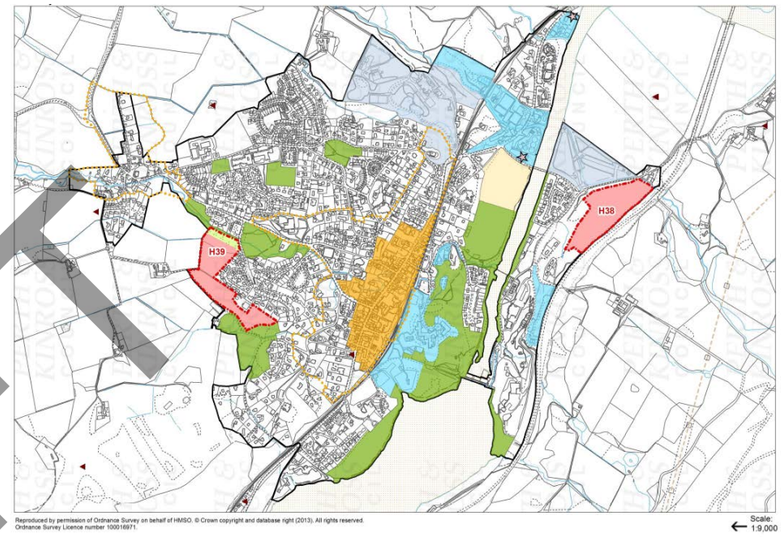
Figure 21: Map of Preferred Alternative in Pitlochry



<u>Alternative Option:</u>

To continue with the existing allocations in the Adopted Plan

Figure 22: Map of Alternative Option in Pitlochry



The potential need for additional employment land in the Highland area amounts to approximately 5ha and the existing adopted LDP designations are sufficient to meet this identified employment land requirement. No additional land allocations are proposed in Pitlochry.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Pitlochry there are two allocations that could 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 the site assessments for each proposed site (with and without the extensions) have been brought together to ensure there is no significant cumulative impact on the environment. This can be seen below in table 12.

Table 12: Pitlochry Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Population	
H38 extended	H38

H39 extended	H39
Overall Impact	**Overall Impact**
Human Health	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Soil	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Water	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Air	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Climatic Factors	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Material Assets	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Cultural Heritage	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**
Landscape	
H38 extended	H38
H39 extended	H39
Overall Impact	**Overall Impact**

Conclusions

Preferred Option

Biodiversity Flora and Fauna

Some sites connected to River Tay SAC via watercourses. Also potential for impact on priority species and habitats, including riparian areas. 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 and the range of services and facilities within Pitlochry although these are less accessible from H38.

Human Health

Potentially negative effects from flood risk on both sites and impact 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. 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 impact therefore likely to be adverse. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B 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 proposals involve the development of greenfield land so overall impact is 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 policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required. 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 overall impact.

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. The extension to H39 is only to allow access into the site and will not result in a higher number of houses; the extension to H38 may result in a slightly higher number of houses.

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 from both sites. Overall 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 but this can be mitigated through a requirement for compensatory planting. The extension of this site may 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. Overall impact therefore likely to be positive.

Cultural Heritage

There are no designations the sites themselves but there is the risk of impact on the setting of the Moulin Conservation Area at H39 and on locally important archaeological features at H38. 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. Neither extension area is considered likely to increase the risk of impact on the historic environment.

Landscape

Extension to H39 is within the Ben Vrackie Special Landscape Area although this only forms a small part of the whole site and is only to be used for access rather than houses. This is important as housing on this area would be more widely visible than on the rest of the site and would increase the risk of coalescence with Moulin. 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. Potential adverse impacts on the SLA can be mitigated by the application of LDP policy ER6 to ensure high quality design and maintain the character of the settlement.

Alternative Option

Biodiversity Flora and Fauna

Some sites connected to River Tay SAC via watercourses. Also potential for impact on priority species and habitats, including riparian areas. 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. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Population

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. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Human Health

Potentially negative effects from flood risk on both sites and impact on open space as well as a potential noise impact from the A9 at H38. 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. However, not including the extension to H38 would mean the retention of the woodland buffer to the employment area. Therefore whilst the overall impact is still adverse this is likely to be less so than the preferred option. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B 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 proposals involve the development of greenfield land so overall impact is adverse. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Water

Overall status of the water environment is good apart from the Kinnaird Burn which is bad. 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 policy EP3 will reduce negative impacts; Drainage Impact Assessment and / or Flood Risk Assessment can be required. There may be a slightly lower risk of flooding by not including the extension to H39 due to the risk from the watercourse to the east of this area but overall impact still likely to be adverse.

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. The extension to H39 is only to allow access into the site, therefore not including it will not reduce the number of houses on the site. Whilst the extension to H38 may result in a slightly higher number of houses the overall impact still likely to be adverse.

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 from both sites. Overall impact therefore likely to be slightly adverse. Flood risk could possibly be mitigated through appropriate site layout and / or Flood Risk Assessment. 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, and the potential to increase and enhance existing green networks. Not extending H38 would mean retention of the woodland but

may reduce the possibility of reaching agreement with the developer on an extension to the cemetery. Not extending H39 may impact on the deliverability of this site as topography means access would otherwise be difficult. Overall impact therefore likely to be negative.

Cultural Heritage

There are no designations within the sites themselves but there is the risk of impact on the setting of the Moulin Conservation Area at H39 and on locally important archaeological features at H38. 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. Impacts are not expected to be any greater or lesser than for the Preferred Option.

Landscape

Not including the extension to H39 would reduce impact on the Special Landscape Area. Overall impact likely to be adverse although perhaps less so than the preferred option. 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. Potential adverse impacts on the SLA can be mitigated by the application of LDP policy ER6 to ensure high quality design and maintain the character of the settlement.

Assessment of Alternatives for 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 MIR 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 even if the Reporter directed the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. The preferred option for the Perth area in the MIR 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 preferred option for Perth is for an enlarged more sustainable Perth West to be supported. In terms of other MIR preferred sites within the Perth core area, land at Friarton Quarry is currently identified as employment land but consideration should be 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; however, there is not sufficient confidence to allow allocation of this land. It is unclear how its development would provide suitable access connections to the surrounding facilities or a design and layout that delivers good residential amenity and is a positive contribution to the surrounding built environment. Therefore it is considered best to remove its allocation as public open space but not to identify it as a housing allocation. Options from the City plan (Perth Railway Station) are also being consulted on in the MIR.

Preferred Option: To continue with existing allocations in the adopted plan but identify Friarton Quarry as a housing and leisure allocation, remove the public open space allocation from land north of Burghmuir reservoir, reallocate Perth railway station for a new entrance and integrated railway and bus station with reuse of underutilised land and buildings, and support an enlarged more sustainable Perth West and adjust the settlement envelope accordingly.

Figure 23: Map of Preferred Option in Perth (north)

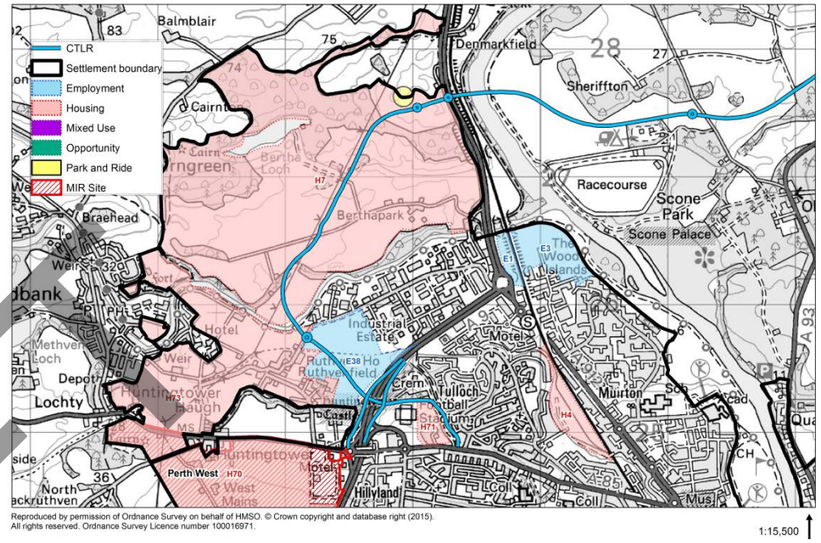
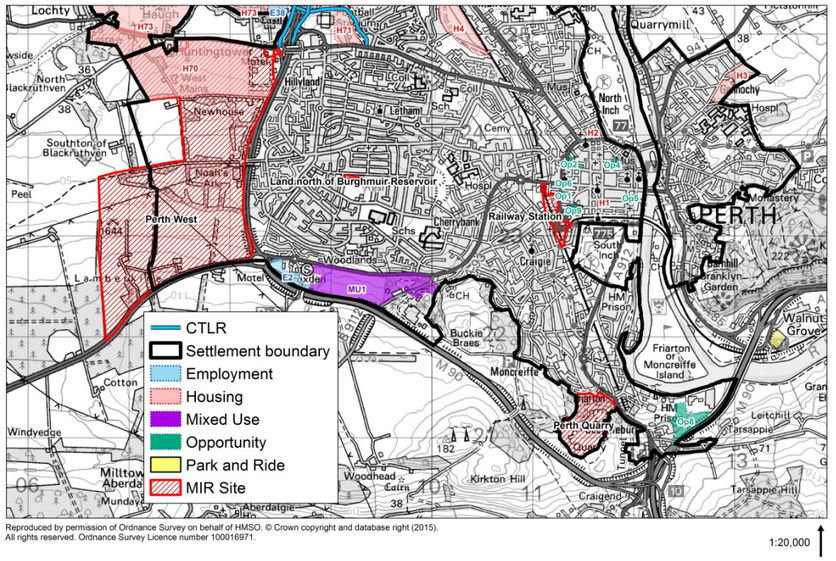


Figure 24: Map of Preferred Option in Perth (south)



Alternative Option: To continue with existing allocations in the adopted plan and remove the public open space allocation from land north of Burghmuir reservoir as there is no reasonable alternative to this.

Figure 25: Map of Alternative Option in Perth (north)

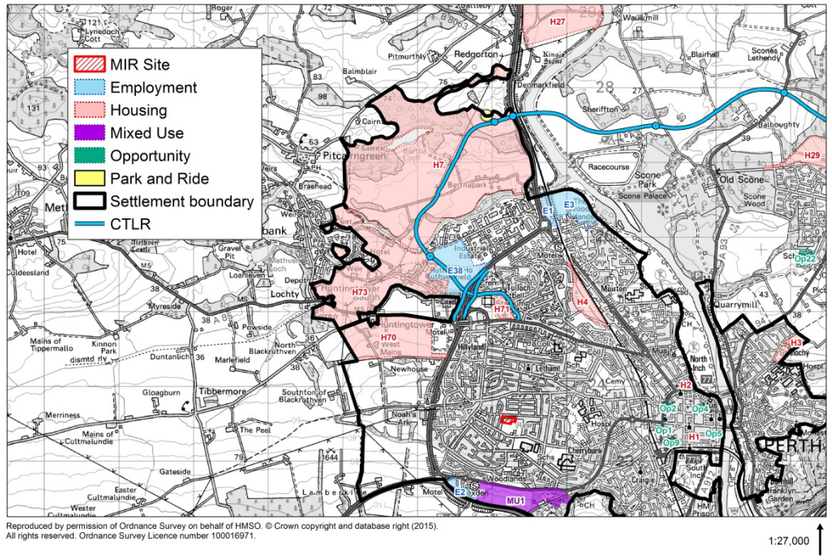
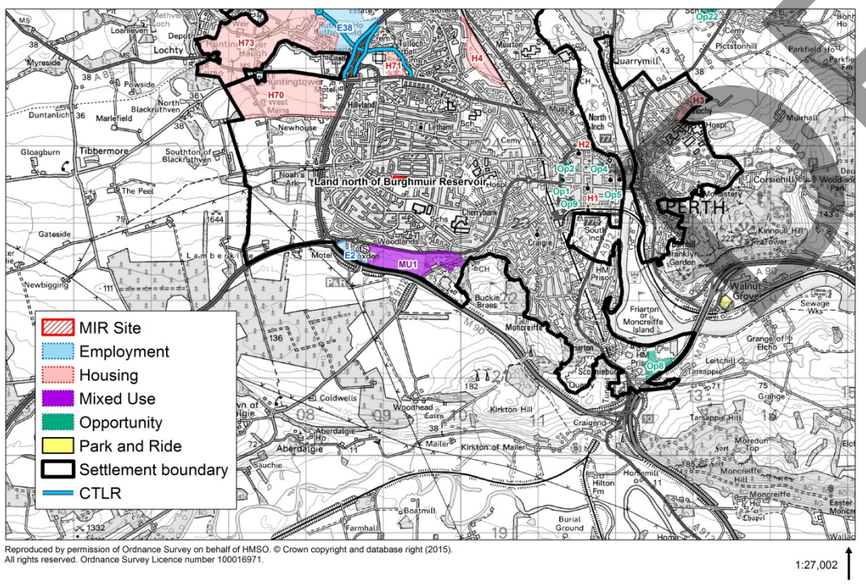


Figure 26: Map of Alternative Option in Perth (south)



A key requirement of SEA is to consider the cumulative impact of development within an area. In Perth there are 20 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 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 in table 13.

Table 13: Perth Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Population	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2

H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Human Health	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Soil	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2

E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Water	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Air	
H7	H7
Perth West	H70

H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Climatic Factors	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Perth Quarry	
Perth railway station	

Overall Impact	**Overall Impact**
Material Assets	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Cultural Heritage	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9

OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**Overall Impact**
Landscape	
H7	H7
Perth West	H70
H73	H73
MU1	MU1
E1	E1
E2	E2
E3	E3
E38	E38
H1	H1
H2	H2
H3	H3
H4	H4
H71	H71
Op8	Op8
Op1	Op1
Op2	Op2
Op5	Op5
OP6	OP6
OP9	OP9
OP3	OP3
OP4	OP4
Friarton Quarry	
Perth railway station	
Overall Impact	**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 MU1. On Berthapark H7 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 Perth West 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. With the preferred option the expanded Perth West this would increase the provision of employment land, but slightly offsetting this there would be the loss of Friarton Quarry as an existing employment site.

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 Perth West 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 Perth West to cope with future demand. With the preferred option the expanded Perth West would increase the provision of employment land, 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 a significant loss of prime agricultural land but there is a requirement to use good soils locally. There is a more significant impact with the preferred option as the proposed Perth West expansion site is nearly totally prime agricultural land.

Water

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

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 (or in the case of Perth West this will be checked before confirmation and inclusion within the Proposed Plan).

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 Berthapark and Perth West. There are no significant constraints to development though.

Cultural Heritage

There are allocated sites for listed buildings (H2 St John's School, OP1 Caledonian Road 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 Perth West 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.

With regard to the Lesser South Inch parklands with a Scheduled Monument for Cromwell's Citadel lying in the north portion of the site surveys should be undertaken prior to the implementation of any scheme to determine whether it will affect this site of archaeological importance and the setting of archaeological features. There are also important many A listed buildings adjacent to this site with the potential to negatively impact on their setting and the character of this special area of the city. However impacts on the historic environment should be avoided wherever possible through sensitive layout and a very high quality design. As there are no visible traces of Cromwell's citadel this proposal could provide an opportunity for recording artefacts and potentially onsite interpretation enhancing public awareness.

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 Perth West 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) if a larger Perth West boundary and change to the Green Belt boundary is to be supported in the Proposed Plan 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 Perth West 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

The lesser South Inch site is an important public open space within the South Inch parklands, and is a sensitive site due to impact its development could have on the character of the area and the relationship of the city centre and the river with the Inches. There will be a need to minimise the built development area of the site and ensure development provides a very high quality design and layout befitting of its position. It is also proposed that there should be compensatory parkland provided within one of the strategic expansion areas in West /Northwest Perth.

Alternative 1

Biodiversity Flora and Fauna

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 site and on MU1s. On Berthapark H7 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 site with Perth and the surrounding countryside.

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, 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. 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. Provision of land for a medical centre is required at Berthapark to cope with future demand.

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 a significant loss of prime agricultural land.

Water

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

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 on 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 Berthapark. There are no significant constraints to development though.

Cultural Heritage

There are allocated sites for listed buildings (H2 St John's School, OP1 Caledonian Road School, and OP6 Waverley hotel) with developer requirements for sensitive reuse/consideration to conversion/high quality design, and 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.

Landscape

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

Assessment of Alternatives for 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 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. This is irrespective of whether the Reporter of any subsequent Development Plan Examination directs the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. Some changes are proposed for the Perth HMA, however, and these are discussed in the Main Issues Report Chapter 4. There are no proposals to change any of the land allocations in Abernethy, and no additional land allocations are proposed in Abernethy.

Site E4 involves an existing employment site (with small extension) and therefore an assessment is not required for this site.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Abernethy there are 3 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 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.

Preferred Option:

No change from the existing LDP

Figure 27: Map Showing Preferred Alternative in Abernethy

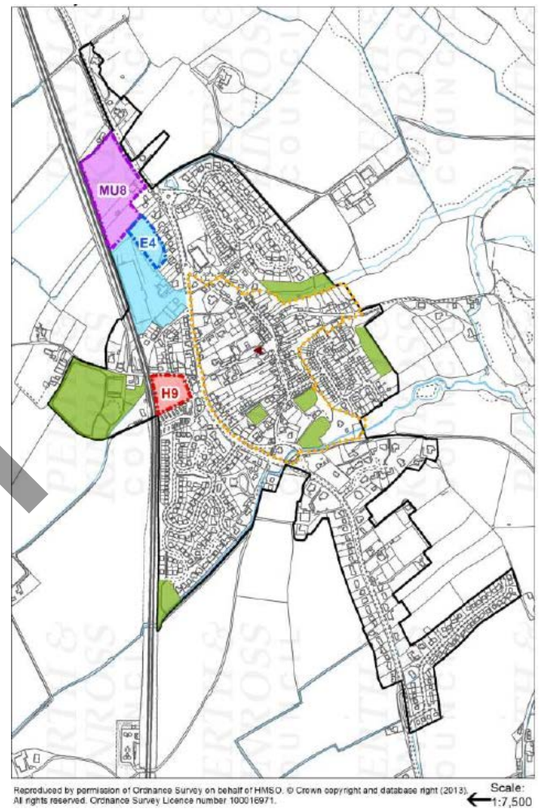


Table 14: Abernethy Cumulative Assessment

Preferred Option
Biodiversity Flora and Fauna
H9
MU8
Overall Impact
Population
H9
MU8
Overall Impact
Human Health
H9
E4
MU8
Overall Impact
Soil
H9
MU8
Overall Impact

Water
H9
MU8
Overall Impact
Air
H9
MU8
Overall Impact
Climatic Factors
H9
MU8
Overall Impact
Material Assets
H9
MU8
Overall Impact
Cultural Heritage
H9
MU8
Overall Impact
Landscape
H9
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 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 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 H9 and 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 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 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.

Assessment of Alternatives for Bridge of Earn and Oudenarde

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 issuing the decision has been delayed due to an outstanding Section 75 agreement, 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.

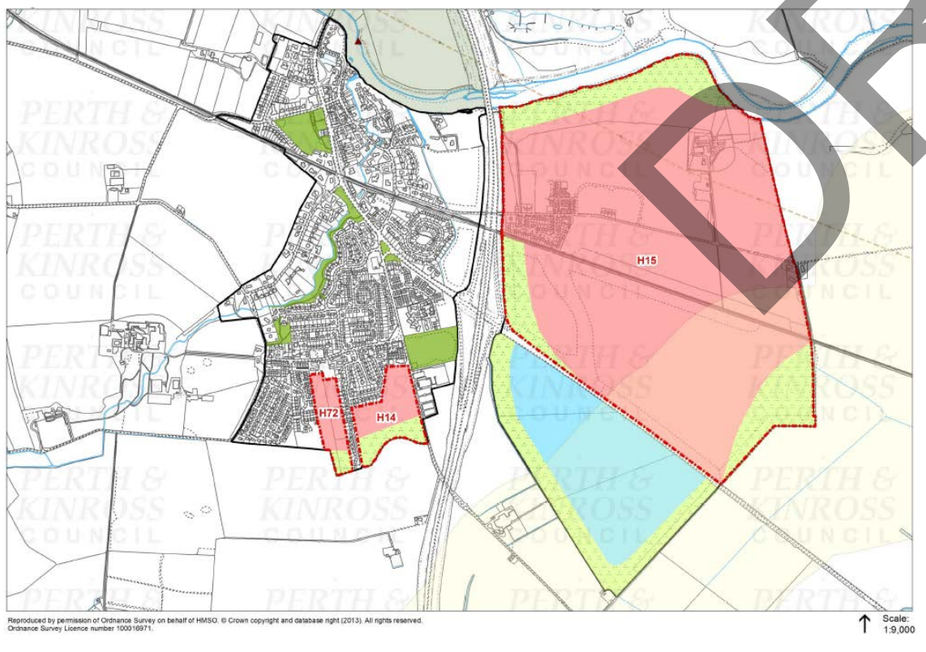
Housing and Employment Land Requirement

The MIR identifies there is no requirement to find additional housing land and instead seeks to take forward all the existing LDP allocations in Bridge of Earn which amounts to 1770 homes and employment land. The MIR presents 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.

Preferred Option:

No change from the existing LDP

Figure 28: Map of Preferred Alternative in Bridge of Earn



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 in table 15.

Table 15: Bridge of Earn and Oudenarde Cumulative Assessment

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 are possible noise impacts 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.

Assessment of Alternatives for 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. This is irrespective of whether the Reporter of any subsequent Development Plan Examination directs the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. Some changes are proposed for the Perth HMA, however, and these are discussed in the Main Issues Report Chapter 4. There are no proposals to change any of the land allocations in Dunning, and no additional land allocations are proposed in Dunning.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Dunning there are 3 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 can be seen below.

Preferred Option:

No change from the existing LDP

Figure 29: Map showing preferred Alternative in Dunning

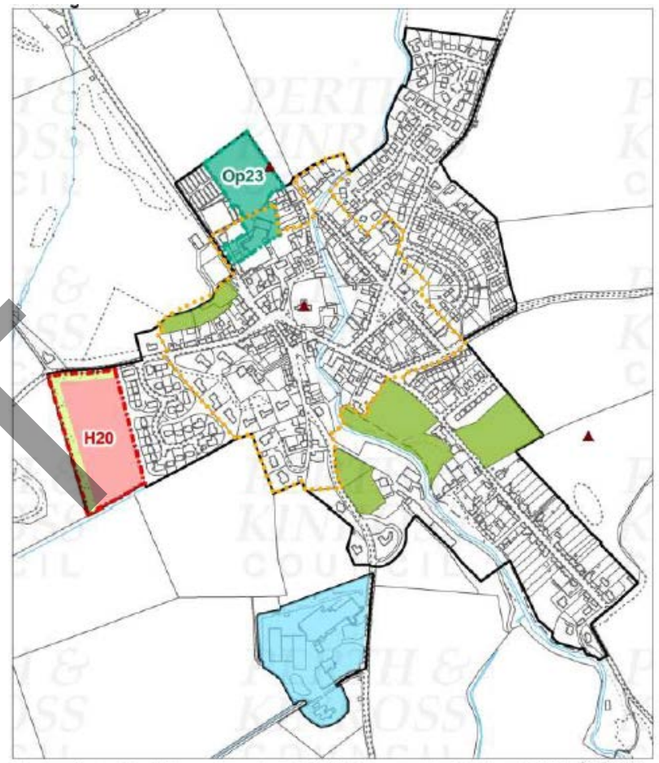


Table 16: Dunning Cumulative Assessment

Preferred Option
Biodiversity Flora and Fauna
H20
Op23
Overall Impact
Population
H20
Op23
Overall Impact
Human Health
H20
Op23
Overall Impact
Soil
H20
Op23
Overall Impact
Water

H20
Op23
Overall Impact
Air
H20
Op23
Overall Impact
Climatic Factors
H20
Op23
Overall Impact
Material Assets
H20
Op23
Overall Impact
Cultural Heritage
H20
Op23
Overall Impact
Landscape
H20
Op23
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 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 vilage 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.

Assessment of Alternatives for 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.

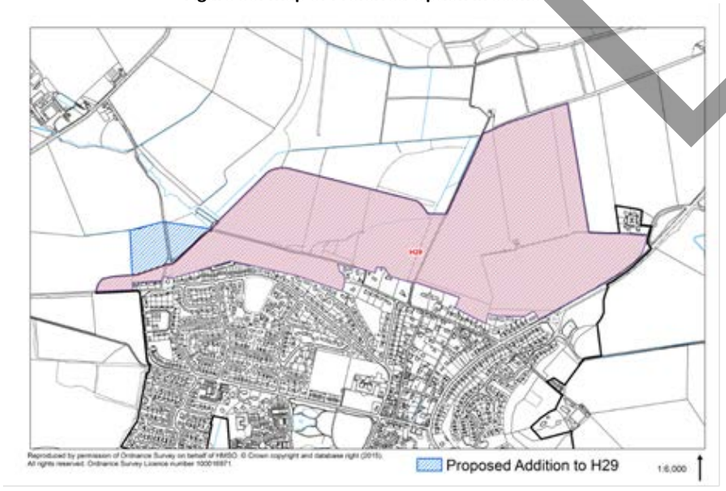
Housing and Employment Land Requirement

The 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. This is irrespective of whether the Reporter of any subsequent Development Plan Examination directs the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. Some changes are proposed for the Perth Core Area, however, and these are discussed in the Main Issues Report Chapter 4. There are no proposals for additional land allocations in Scone. An extension is, however, proposed to the existing allocation at H29. As a result, two alternatives need to be considered:

Preferred Option:

Extension to the existing site at H29 Scone North, in addition to the existing allocations at MU4 and Op22

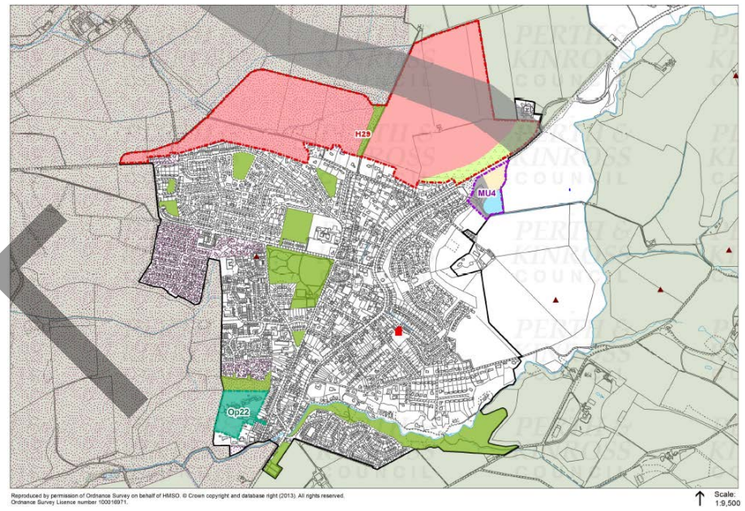
Figure 30: Map of Preferred Option in Scone



Alternative Option:

To continue with the existing allocations in the Adopted Plan

Figure 31: Map of Alternative Option 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 in table 17.

Table 17: Scone Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Population	
H29 extended	H29
MU4	MU4
Op22	Op22

Overall Impact	**Overall Impact**
Human Health	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Soil	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Water	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Air	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Climatic Factors	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Material Assets	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Cultural Heritage	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**
Landscape	
H29 extended	H29
MU4	MU4
Op22	Op22
Overall Impact	**Overall Impact**

Conclusions

Preferred Option

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. There is a risk of greater adverse impact on biodiversity from the potential effects on the ancient woodland than the alternative option. However, given that it is only a small portion of a much larger area of ancient woodland which may be affected this is unlikely to result in a significantly adverse overall impact.

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 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.

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.

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.

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. 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.

Cultural Heritage

Sensitivities from listed building and archaeological interests. Scone Palace Garden and Designed Landscape affects significant portion of H29. H29 extended also affects a small area of ancient woodland. 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 and the small area of ancient woodland potentially affected at the extended H29 site. There is a risk of greater adverse impact from the potential effects on the ancient woodland than the alternative option. However, given that it is only a small portion of a much larger area of ancient woodland which may be affected this is unlikely to result in a significantly adverse overall impact. 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.

Alternative Option

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 a 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.

Assessment of Alternatives for Stanley

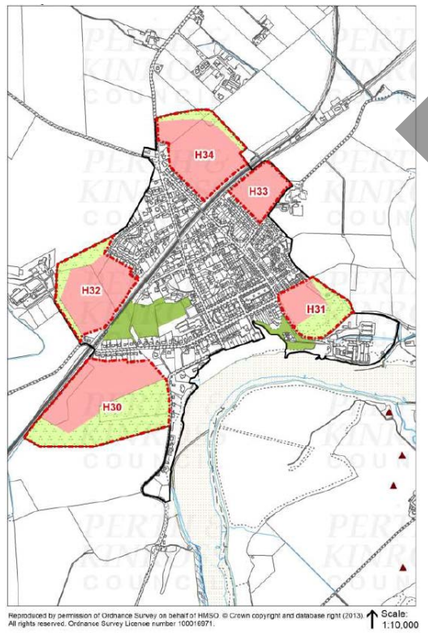
Key Environmental Issues for Stanley

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 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. This is irrespective of whether the Reporter of any subsequent Development Plan Examination directs the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. Some changes are proposed for the Perth Core Area, however, and these are discussed in the Main Issues Report Chapter 4. There are no proposals to change any of the land allocations in Stanley.

Figure 32: Map of Preferred Alternative 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 in table 18.

Table 18: Stanley Cumulative Assessment

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 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

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.

Assessment of Alternatives for 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 MIR proposes no changes for the LDP and 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 in the table 19.

Preferred Option:

No change from the existing LDP

Figure 33: Map Showing Preferred Alternative in Balado

Table 19: Balado Cumulative Assessment

Preferred Option
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 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.

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 ensures 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 keeping 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.

Assessment of Alternatives for 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 MIR identifies no changes for the LDP. Instead it identifies that the traditional developer approach may not yield the desired results and more novel approaches should be explored. These may include the provision of self-build serviced plots, small holdings and perhaps the application of the new Community Empowerment legislation for a community led project. A more flexible approach to delivery should be explored, however, to ensure compatibility with the TAYplan strategy the level of development allowed for will need to be broadly in line with current aspirations. It is beyond the scope of this MIR to explore these options and the preferred option the MIR proposes is for the Council to work with the community and landowners to develop a community plan which, subject to evidence of compatibility with Scottish Planning Policy and TAYplan, viability, and the results of the Strategic Environmental Assessment would be adopted as Statutory Supplementary Guidance to replace the current Blairingone settlement section of the adopted Plan.

Preferred Option: is to work with the community and landowners to develop a community plan to be adopted as Statutory Supplementary Guidance to replace the current Blairingone settlement section of the adopted Plan. In the meantime the adopted plan will remain unaltered.

Alternative Option: Is also for the adopted plan to remain unaltered so in SEA terms at this stage it is the same as the preferred option.

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.

<u>Preferred Option:</u>
No change from the existing LDP

Figure 34: Map Showing Preferred Alternative in Blairingone

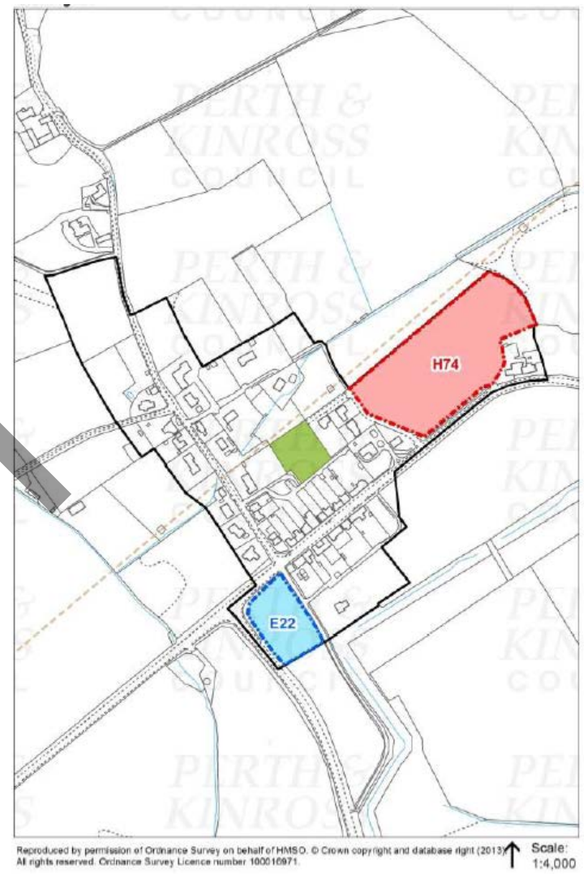


Table 20: Blairingone Cumulative Assessment

Preferred Option
Biodiversity Flora and Fauna
H74
E22
Overall Impact
Population
H74
E22
Overall Impact
Human Health
H74
E22
Overall Impact
Soil

H74
E22
Overall Impact
Water
H74
E22
Overall Impact
Air
H74
E22
Overall Impact
Climatic Factors
H74
E22
Overall Impact
Material Assets
H74
E22
Overall Impact
Cultural Heritage
H74
E22
Overall Impact
Landscape
H74
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.

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.

Assessment of Alternatives for 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.

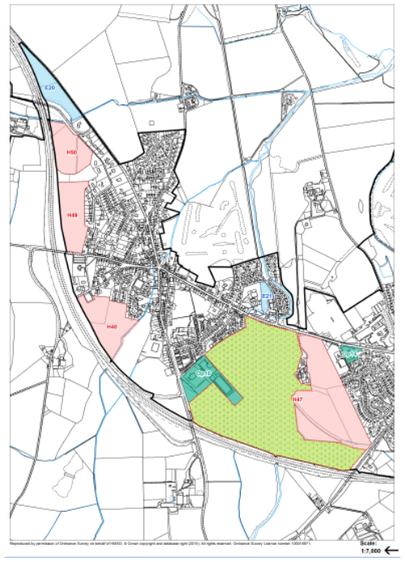
Housing and Employment Land Requirement

The MIR 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 even if the Reporter directed the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. The preferred option for Kinross is therefore for no change from the current LDP. Of the options put forward in Kinross the Lethangie site east of the High School in Kinross represents a reasonable alternative option. This is allocated in the current Local Development Plan as OP15 as a 3.5 hectare site for a Primary School. 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. The site OP15 is considered a suitable alternative option for housing.

Preferred Option:

To continue with existing allocations in the adopted plan (Op14 Health Centre, OP11 Turfhills Motorway Service Area (which has PP), OP24 Kinross Town Hall, H47 Lathro Farm, H75 Former High School, E18 Station Road South, and E16 South Kinross but remove site OP15 and adjust the settlement envelope accordingly).

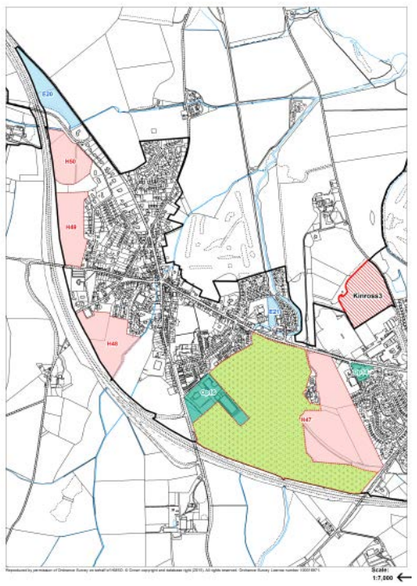
Figure 35: Map of Preferred Option in Kinross



Alternative Option:

To continue with existing allocations in the adopted plan (Op14 Health Centre, OP11 Turfhills Motorway Service Area (which has PP), OP24 Kinross Town Hall, H47 Lathro Farm, H75 Former High School, E18 Station Road South, and E16 South Kinross and allocate the OP15 Lethangie for housing development.

Figure 36: Map of Alternative Option in Kinross



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 in table 21.

Table 21: Kinross Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
	Lethangie (Housing)
OP14	OP14
OP11	OP11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Population	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Human Health	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Soil	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Water	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Air	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Climatic Factors	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Material Assets	
	Lethangie Housing
OP14	OP14
OP11	OP11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Cultural Heritage	
	Lethangie Housing

OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**Overall Impact**
Landscape	
	Lethangie Housing
OP14	OP14
Op11	Op11
OP24	OP24
H47	H47
H75	H75
E16	E16
E18	E18
Overall Impact	**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

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 some allocations are reusing existing brownfield sites.

Water

Where appropriate detailed FRA/DIA 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 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. Since OP11 is targeted for the motorway services and tourism market not attracting local custom then its position remote from other services is suitable. 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. On H75 the site lies within the conservation area and any proposal will be required to preserve or enhance the area and there is potential conversion of the listed building and brownfield land. Kinross Town hall OP24 also offers potential for reuse of a listed building and brownfield land and there is a specific developer

requirement for a sympathetic scheme for the restoration and reuse of the listed buildings. Also archaeological survey will be undertaken and impacts on the historic environment will be avoided wherever possible through sensitive layout and design on Op11.

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. Development of H47 will reduce the visual separation between Kinross and Milnathort but development will only be acceptable where improvements to the landscape, green networks and riparian habitat between Kinross and Milnathort have been implemented. Appropriate landscaping and woodland planting will also be required to other sites. 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.

Alternative 1

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

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 some allocations are reusing existing brownfield sites. There is a slightly more negative impact from this option as it involves the loss of more prime agricultural land at Lethangie although this is not likely to result in a significant impact and soils should be reused elsewhere in the locality.

Water

Where appropriate detailed FRA/DIA 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 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. Since OP11 is targeted for the motorway services and tourism market not attracting local custom then its position remote from other services is suitable. 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. On H75 the site lies within the conservation area and any proposal will be required to preserve or enhance the area and there is potential conversion of the listed building and brownfield land. Kinross Town hall OP24 also offers potential for reuse of a listed building and brownfield land and there is a specific developer requirement for a sympathetic scheme for the restoration and reuse of the listed buildings. Also archaeological survey will be undertaken and impacts on the historic environment will be avoided wherever possible through sensitive layout and design on Op11 and the Lethangie housing site. Whilst conservation of existing walls on and adjacent to the Lethangie site is required.

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. Development of H47 will reduce the visual separation between Kinross and Milnathort but development will only be acceptable where improvements to the landscape, green networks and riparian habitat between Kinross and Milnathort have been implemented. Appropriate landscaping and woodland planting will also be required to other sites. 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.

Assessment of Alternatives for 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.

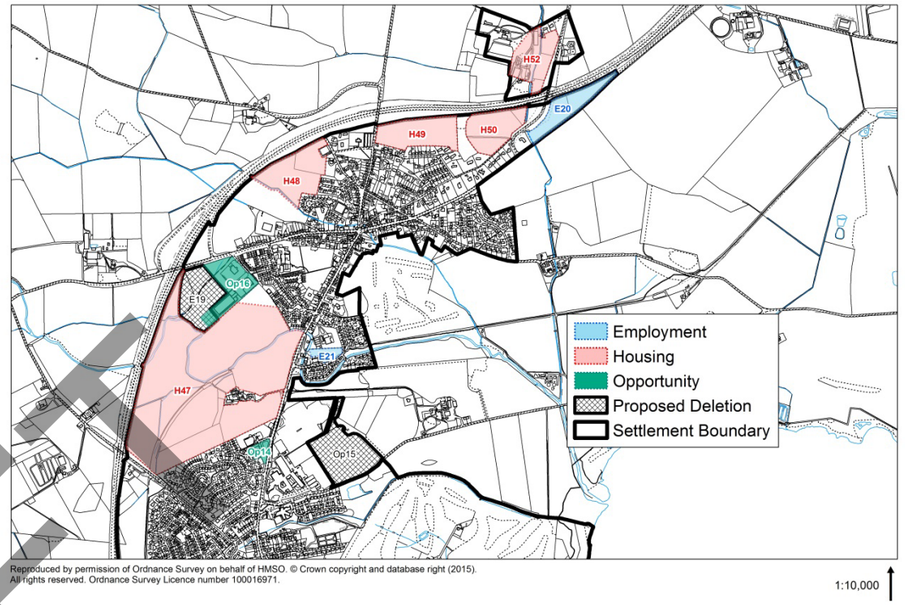
Housing and Employment Land Requirement

The MIR 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 even if the Reporter directed the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. In the case of site E19 there is little evidence of this site progressing and it is for the site owners to demonstrate that this site is likely to be brought forward to contribute to the effective land supply during LDP2 plan period.

Preferred Option:

The preferred option for Milnathort is to keep existing allocations H48 Pitdownie, H49 Pace Hill, and H50 Old Perth Road (which has PP), E20 old Perth Road, E21 Auld Mart Road, Op16 Stirling Road (but adjust to the area which has PP) and amend to remove area within functional flood plain, and remove part of E19 Stirling Road (that does not have PP).

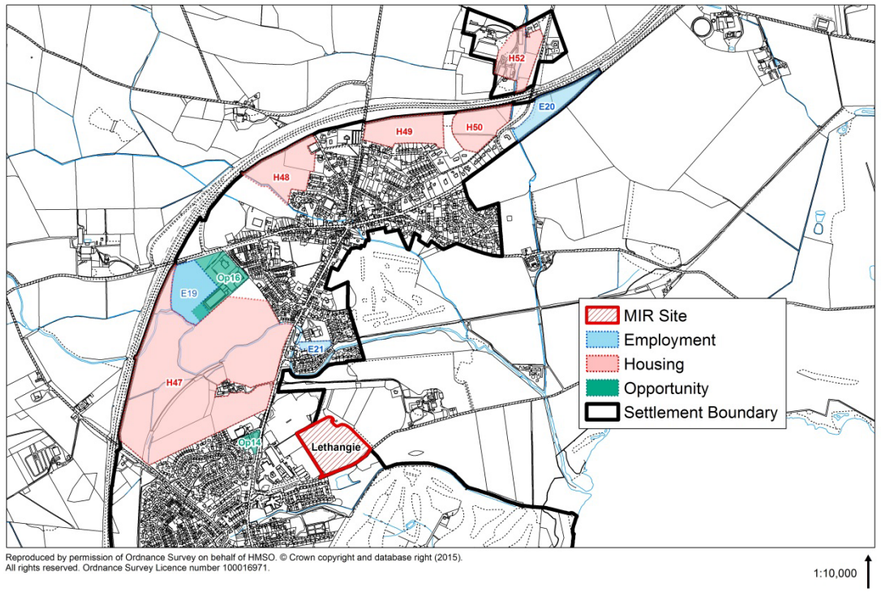
Figure 37: Map of Preferred Option in Milnathort



Alternative Option:

The preferred option for Milnathort is to keep all the existing allocations including E19 Stirling Road but for Op16 Stirling Road to be amended to remove the area within functional flood plain.

Figure 38: Map of Alternative Option in Milnathort



A key requirement of SEA is to consider the cumulative impact of development within an area. In Milnathort, there are 6 allocations in the preferred option and 7 in the alternative option 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 in table 22.

Table 22: Milnathort Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Population	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Human Health	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Soil	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Water	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Air	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Climatic Factors	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Material Assets	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**
Cultural Heritage	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**Overall Impact**

Landscape	
H48	H48
H49	H49
H50	H50
E20	E20
E21	E21
OP16 amended	E19
	OP16 amended
Overall Impact	**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.

Water

Reduced area of E20 affected by SEPA medium flood risk now just an area towards the western edge of the site. On E19 no areas are now affected by SEPA medium river flood risk but there is a pocket of surface water flood risk within the eastern part of the site and modelling work has shown that the eastern area (triangular part) here is within the functional flood plain (SEPA have objected to this corner being developed so it should be removed from the LDP). Add possible requirement for DIA and adjust site to remove area within the functional flood plain. 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.

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.

Alternative 1

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, E19 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. Impact would be more positive than the preferred option if E19 is effective as it could provide another opportunity for new employment generation.

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. If E19 is effective there is a requirement for core path enhancement through this site.

Soil
There is an effect on prime agricultural land and loss of greenfield land with allocations outwith the existing settlement. There is a slightly more negative impact from this option as it involves the loss of more prime agricultural land at E19 although this is not likely to result in a significant impact and soils should be reused elsewhere in the locality to help mitigate this.

Water
Reduced area of E19 affected by SEPA medium flood risk now just southern edge of the site. Reduced area of E20 affected by SEPA medium flood risk now just an area towards the western edge of the site. On E19 no areas are now affected by SEPA medium river flood risk but there is a pocket of surface water flood risk within the eastern part of the site and modelling work has shown that the eastern area (triangular part) here is within the functional flood plain (SEPA have objected to this corner being developed so it should be removed from the LDP). Add possible requirement for DIA (already FRA requirement) and adjust site to remove area within the functional flood plain. 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.

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**.**

Assessment of Alternatives for Inchture

Key Environmental Issues for Inchture

The SEA of LDP 1 assessed the cumulative and strategic sensitivities within Inchture. This highlighted that the key issues for Inchture include the capability of the surrounding land for agriculture, and cultural heritage considerations. 84% of the area was assessed as either being free of or has 1-2 development sensitivities present. No strategic environmental sensitivities were identified for the existing allocation. Preservation and enhancement of the distinctive landscape of the Perth area is important in maintaining community well-being, biodiversity and supporting the local economy (tourism in particular).

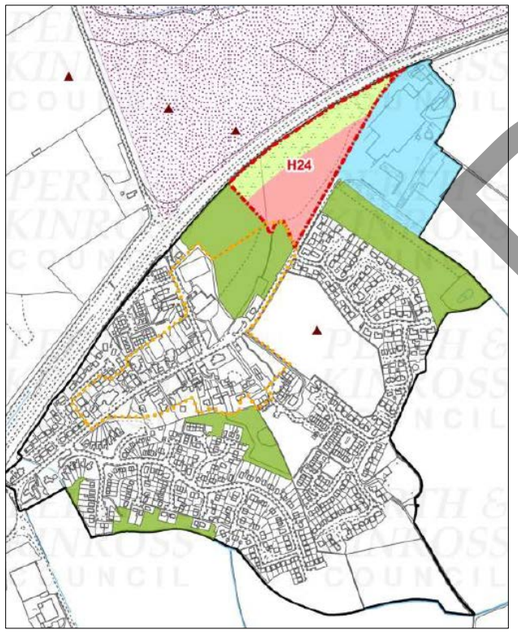
Housing and Employment Land Requirement

The MIR identifies there is a need to identify land to accommodate an additional 15 houses in the years to 2028 over and above that which is already allocated in the current LDP, or an additional 20 houses should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement. It presents two alternatives to meet this target – the allocation of a site in Longforgan or an additional site in Inchture. For Inchture therefore there are two alternatives:

Preferred Option:

To continue with the existing allocation at H24 Moncur Farm Road (with the additional land requirement identified in Longforgan)

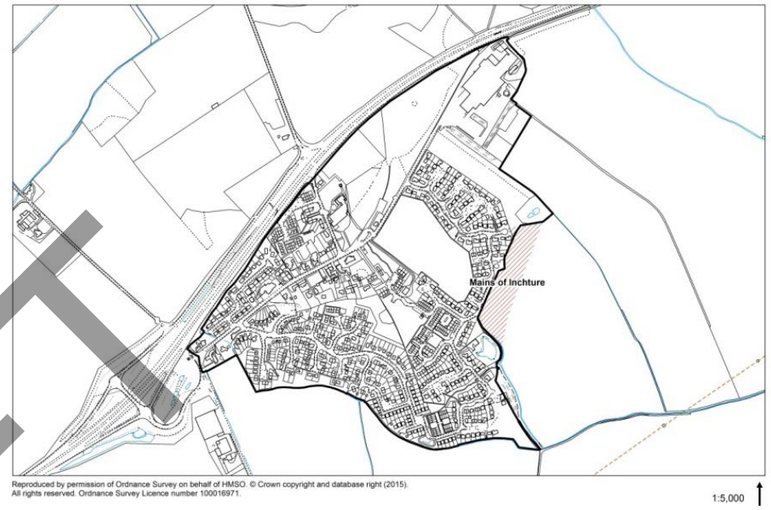
Figure 39: Map of Preferred Option in Inchture



Alternative Option:

Existing allocation at H24 plus a small extension to the existing development at Mains of Inchture

Figure 40: Map of Alternative Option in Inchture



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 Inchture.

A key requirement of SEA is to consider the cumulative impact of development within an area. In Inchture there is one allocation that will be carried forward from the previous SEA. The site assessment for these can be found in appendix E. In order to develop an understanding of the potential cumulative impacts of development in Inchture 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 table 23.

Table 23: Inchture Cumulative Assessment

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Population	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Human Health	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**

Soil	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Water	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Air	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Climatic Factors	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Material Assets	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Cultural Heritage	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**
Landscape	
H24	H24
	Mains of Inchture
Overall Impact	**Overall Impact**

Conclusions

Preferred Option

Biodiversity Flora and Fauna

No designated site or protected species but there are some hedges, trees and boundary walls which could have some biodiversity value. Overall impact therefore likely to be adverse. Impacts will be mitigated through the retention of important features and measures to enhance biodiversity.

Population

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

Human Health

Some risk of flooding identified which could adversely impact human health. Development would result in the loss of open space and there could be noise issues from the adjacent road and factory. However Inchture is served by public transport links and the site is close to the village centre and the open space network. Overall therefore effects likely to be neutral. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and path networks.

Soil

Development will result in the loss of category 2 agricultural land. Potential contamination and soil stability issues unlikely. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Some risk of surface water flooding (medium probability). Mitigation will be through application of LDP policy EP3 and a Drainage Impact Assessment / hydrology study if required. Knapp Burn / Huntly Burn classified as moderate status with diffuse and point source pollution (sewage) pressures noted. Longforgan pumping station listed as a key pressure on the waterbody.

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. Inchture is served by public transport links.

Climatic Factors

Services and facilities in the village centre are limited so there is likely to still be a need to travel to larger centres from some facilities. However Inchture is served by public transport links. Site orientation gives some scope to make the best use of solar gain although there may be the risk of exposure to prevailing winds due to open aspect. Overall impacts therefore likely to be slightly adverse.

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. There are no significant constraints.

Cultural Heritage

Several sites of interest to the North but these are separated from the site by the A90. The site is immediately adjacent to the conservation area on the southern boundary. Adverse impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

No specific landscape designations. Once developed, the site will appear as part of the settlement without adverse impact on the landscape.

Alternative Option

Biodiversity Flora and Fauna

No designated site or protected species but these are greenfield sites which are likely to have some biodiversity value. Cumulative impact could be more adverse than the Preferred Option as more greenfield land will be taken up although this is unlikely to result in a significantly adverse overall impact. Impacts will be mitigated through the retention of important features and measures to enhance biodiversity.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, and the range of services and facilities within Inchture accessible from the proposed sites. Cumulative impacts of this option may be greater than the Preferred Option as there would be more choice of housing although this is unlikely to result in a significantly positive overall impact.

Human Health

Some risk of flooding identified which could adversely impact human health. Development would result in the loss of open space / agricultural land and there could be noise issues from the road and factory adjacent to H24. However Inchture is served by public transport links and the site is close to the village centre and the open space network. Overall therefore effects likely to be neutral. Effects can be mitigated through the application of LDP policies TA1B and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and path networks.

Soil

Development will result in the loss of category 2 and 3.1 agricultural land. Potential contamination and soil stability issues unlikely. Impacts can be mitigated through the removal of good quality soils for use in other parts of Perth & Kinross.

Water

Some risk of river flooding (medium probability) and small risk of surface water flooding. Mitigation will be through application of LDP policy EP3 and a Drainage Impact Assessment / hydrology study if required. Knapp Burn / Huntly Burn classified as moderate status with diffuse and point source pollution (sewage) pressures noted. Longforgan pumping station listed as a key pressure on the waterbody.

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. Inchture is served by public transport links. Cumulative impacts of this option will be greater than the Preferred Option as it will result in a slightly higher number of houses overall although this is unlikely to result in a significantly adverse overall impact.

Climatic Factors

Services and facilities in the village centre are limited so there is likely to still be a need to travel to larger centres from some facilities. However Inchture is served by public transport links. Site orientation gives some scope to make the best use of solar gain although there may be the risk of exposure to prevailing winds due to open aspect. Overall impacts therefore likely to be slightly adverse. Cumulative impacts of this option will be greater than the Preferred Option as it will result in a slightly higher number of houses overall although this is unlikely to result in a significantly adverse overall impact.

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. There are no significant constraints.

Cultural Heritage

Most significant impact likely to be from H24 due to proximity to the conservation area. Sites of archaeological interest separated from both sites by a buffer (housing or road) therefore cumulative impact of this option likely to be similar to that of the Preferred Option. Adverse impact on the historic environment will be avoided wherever possible through appropriate scheme location and design.

Landscape

No specific landscape designations. H24 once developed, will appear as part of the settlement without adverse impact on the landscape. Mains of Inchture extension likely to be developed by the same developer as the surrounding area so design likely to be in keeping and specific developer requirements will require the creation of a new natural settlement edge to the east.

Assessment of Alternatives for Auchterarder

Key Environmental Issues for Auchterarder

The SEA of LDP 1 assessed the key sensitivities and development pressures within Strathearn. This highlighted that the key issues within this area include water environment, flooding, the historic environment, and prime agricultural land. Auchterarder benefits from a significant supply of effective housing land already allocated within the settlement envelope in LDP1.

Land to the north of Auchterarder (at sites known as Kirkton and Castlemains) and land to the south of the town (known as Townhead) was first identified for housing and employment uses in the Strathearn Area Local Plan (2001). A masterplan for the development of the three sites – The Auchterarder Development Framework (2008) – was subsequently adopted by the Council as planning guidance. In the adopted LDP, the two sites to the north (Kirkton and Castlemains) were shown as sites with significant housing proposals inside the settlement envelope to reflect that planning permissions in line with the masterplan that had already been granted, while the Townhead site was given an allocation Op20 to show that planning permission was not yet in place at that time.

The Auchterarder Development Framework site at Kirkton, in the north of the settlement, originally incorporated a 4 ha allocation for employment use. LDP1 however allows for an alternative employment site in the Auchterarder area (E25) to be brought forward instead, meaning that the 4 ha site at Kirkton (which is within the settlement envelope) could be developed for housing.

Housing and Employment land Requirement

The MIR identifies that since the housing land supply to 2028 exceeds the housing land requirement, there is no need to find additional housing land in Auchterarder. Instead it seeks to take forward the existing LDP allocation in the town (Op20: 180 houses). However, should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement the Council will need to identify land for a total of 65 additional houses in Strathearn in the same time period. The options for meeting these numbers are discussed in chapter 3 of the MIR. The MIR presents an option should all of these additional 65 houses require to be provided within Auchterarder by proposing housing at the 4 ha of land previously identified for employment uses at Kirkton, because it is considered this site has capacity for these additional units without significant adverse environmental impact, and because LDP1 has already allocated suitable alternative employment land in the area at site E25.

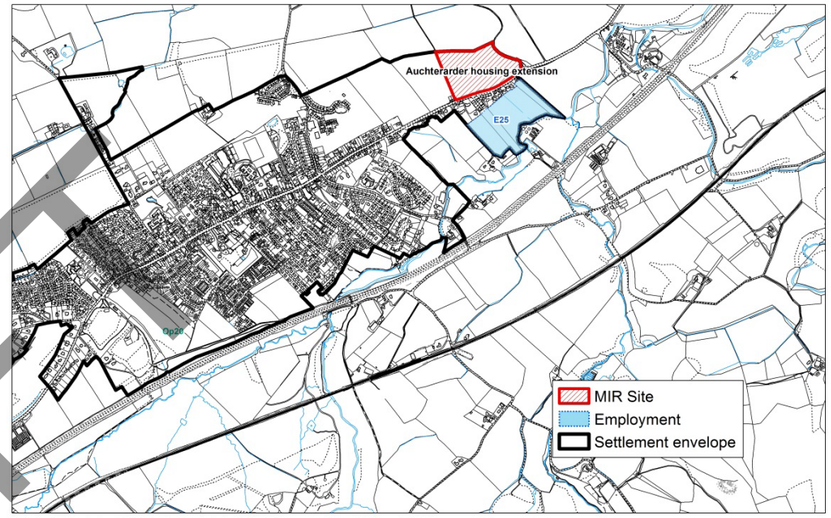
The potential need for employment land in Strathearn amounts to approximately 20 ha and the Adopted LDP identifies allocations that are sufficient to meet this need. No additional employment land allocations are proposed in Auchterarder.

Since Auchterarder is one of two TAYplan tiered settlements in Strathearn (it is tier 3; and the other is Crieff, which is tier 2), it is appropriate that the option to meet the additional housing land requirement (if needed) should be in these settlements. The only difference between the preferred and alternative options in Auchterarder is a change of use of the 4 ha of employment land previously allocated at the site at Kirkton to housing.

Preferred option:

Continue with the currently allocated sites (E25 and Op20), and a change to the 2008 Auchterarder Development Framework to allow housing at the 4 ha of land at Kirkton previously identified in the Framework for employment uses. No additional allocations.

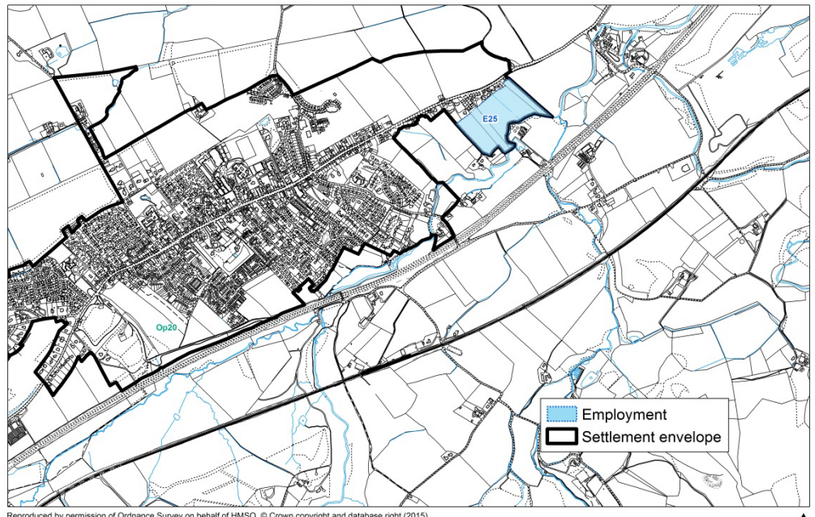
Figure 41: Map of Preferred Alternative in Auchterarder



Alternative option:

Continue with the currently allocated sites (E25 and Op20). No additional allocations.

Figure 42: Map of Alternative Option in Auchterarder



A key requirement of SEA is to consider the cumulative impact of development within an area. In Auchterarder 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 Auchterarder 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 table 24.

Table 24: Assessment of Alternatives in Auchterarder

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Population	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Human Health	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Soil	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Water	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Air	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Climatic Factors	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Material Assets	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Cultural Heritage	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**
Landscape	
E25	E25
Op20	Op20
Kirkton	
Overall Impact	**Overall Impact**

Conclusions

Preferred Option

Biodiversity Flora and Fauna

There is potential for adverse impact on priority species, habitats and botanical value of sites. Impacts could be mitigated via retention of important trees, planting and hedgerows; habitat creation for protected species; 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 the town accessible from the proposed sites, and access to employment opportunities. The relatively large size of the Op20 and Kirkton allocations mean it is likely that more than one developer will work the sites, leading to greater choice in the town.

Human Health

A balance of positive and adverse impacts; adverse air quality issues but positive contribution to open space and improved services. Effects can be mitigated through the application of LDP policies TA1B, EP11 and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and networks to the town centre and countryside around the town.

Soil

Majority of sites involve developing on greenfield or agricultural land, therefore produces an overall adverse impact. In the case of Op20 however, the soil is not classed as prime agricultural.

Water

There is potential adverse impact on water environment for all sites. Some risk of surface/river flooding. Application of policy EP3 will reduce negative impacts and some are likely to require Drainage and Flood Risk Assessments as a mitigation measure.

Air
Auchterarder has no Air Quality Management Areas identified however all new development is likely to increase vehicle trips and emission levels, with a consequent overall adverse impact on air quality. Particularly because of the town's strategic position on the trunk road network that offers access to Perth, Dundee and Stirling; while Edinburgh and Glasgow are also within reach. The cumulative impact of development will result in an adverse effect, which will be difficult to mitigate. Some effects can be mitigated through the application of policy EP11 and retention and enhancement of paths.

Climatic Factors
Most development sites within close proximity to Auchterarder town centre, where there is a good range of services and facilities, so journeys should not be long distance and accessible by sustainable modes of transport. The site at Kirkton is on the periphery of the settlement but within reach of the town centre. However increased journeys and more commuters within the area will contribute to a significant overall adverse impact on the climate. All new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise benefit of southerly aspect in terms of solar orientation.

Material Assets
Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts. Provision of waste management facilities in appropriate developments and locations. There are also some positive impacts, such as helping retain and enhance employment opportunities in the town, and development could make a proportionate contribution to any enhancements to the road and path network in the area that are required as a consequence of the development.

Cultural Heritage
Overall potential for significantly adverse impact on cultural assets at Op20 due to the location of Scheduled Monuments nearby and presence of archaeology, particularly Tipperwhy Well. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1.

Landscape
Overall impact is likely to be negative because almost all development takes place on greenfield sites. Site Op20 is already fairly urban in character within the town but E25 and Kirkton are on the periphery of the town and their proposed development will have an adverse impact on the town's setting. Newly-designated Special Landscape Areas should provide protection for most sensitive sites. Policy PM1 and site specific developer requirements will require a landscape framework to ensure that development fits in sensitively with the surrounding landscape.

Alternative Option
Biodiversity Flora and Fauna
There is potential for adverse impact on priority species, habitats and botanical value of sites. Impacts could be mitigated via retention of important trees, planting and hedgerows; habitat creation for protected species; 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 the town accessible from the proposed sites, and access to employment opportunities. The relatively large size of the Op20 allocation means it is likely that more than one developer will work the site, leading to greater choice in the town.

Human Health
A balance of positive and adverse impacts; adverse air quality issues but positive contribution to open space and improved services. Effects can be mitigated through the application of LDP policies TA1B, EP11 and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and networks to the town centre and countryside around the town.

Soil
Majority of sites involve developing on greenfield or agricultural land, therefore produces an overall adverse impact. In the case of Op20 however, the soil is not classed as prime agricultural.

Water
There is potential adverse impact on water environment for all sites. Some risk of surface/river flooding. Application of policy EP3 will reduce negative impacts and some are likely to require Drainage and Flood Risk Assessments as a mitigation measure.

Air
Auchterarder has no Air Quality Management Areas identified however all new development is likely to increase vehicle trips and emission levels, with a consequent overall adverse impact on air quality. Particularly because of the town's strategic position on the trunk road network that offers access to Perth, Dundee and Stirling; while Edinburgh and Glasgow are also within reach. The cumulative impact of development will result in an adverse effect, which will be difficult to mitigate. Some effects can be mitigated through the application of policy EP11 and retention and enhancement of paths.

Climatic Factors
Most development sites within close proximity to Auchterarder town centre, where there is a good range of services and facilities, 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 a significant overall adverse impact on the climate. All new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise benefit of southerly aspect in terms of solar orientation.

Material Assets
Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts. Provision of waste management facilities in appropriate developments and locations. There are also some positive impacts, such as helping retain and enhance employment opportunities in the town, and development could make a proportionate contribution to any enhancements to the road and path network in the area that are required as a consequence of the development.

Cultural Heritage

Overall potential for significantly adverse impact on cultural assets at Op20 due to the location of Scheduled Monuments nearby and presence of archaeology, particularly Tipperwhy Well. Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1.

Landscape

Overall impact is likely to be negative because almost all development takes place on greenfield sites. Site Op20 is already fairly urban in character within the town but E25 is on the periphery of the town and its proposed development will have an adverse impact on the town's setting. Newly-designated Special Landscape Areas should provide protection for most sensitive sites. Policy PM1 and site specific developer requirements will require a landscape framework to ensure that development fits in sensitively with the surrounding landscape.

Assessment of Alternatives for Crieff

Key Environmental Issues

The SEA of LDP 1 assessed the key sensitivities and development pressures within Strathearn. This highlighted that the key issues within this area include water environment, protected species, the historic environment, and prime agricultural land. Crieff benefits from an attractive and well contained landscape setting and there are few if any opportunities for significant development within the town's built envelope. This means it would be unlikely that significant numbers of houses could be accommodated on brownfield land within Crieff, and that some development would inevitably take place on greenfield land on the periphery of the town, which would be likely to have an adverse impact on Crieff's landscape and setting.

On the Broich Road MU7 300 unit mixed use housing and employment land site, there is scope to make better use of this greenfield land allocated in the LDP. The site was enlarged following the outcome of the LDP Examination, although the number of units allocated at the site remained the same at around 300. The enlarged site includes land south west of the Arnbro Caravan Site, and land to the east of Broich Road Farm, and it would be possible to increase the density of development at the site.

Housing and Employment land requirement

The MIR identifies that since the housing land supply to 2028 exceeds the housing land requirement, there is no need to find additional housing land in Crieff. Instead it seeks to take forward all the existing LDP allocations in the town which amounts to 420 homes (MU7: 300 + H57: 120). However, should the Reporter of any subsequent Development Plan Examination direct the Strategic Development Plan Authority to include an additional 10% to the housing land requirement the Council will need to identify land for a total of 65 additional houses in Strathearn in the same time period. The options for meeting these numbers are discussed in chapter 3 of the MIR. The MIR presents an option should all of these additional 65 houses require to be provided within Crieff by a significant increase of around 20% to the density of housing at site MU7, because it is considered the site has capacity for these additional units without significant adverse environmental impact.

The potential need for employment land in Strathearn amounts to approximately 20 ha and the Adopted LDP identifies allocations that are sufficient to meet this need. No additional employment land allocations are proposed in Crieff.

Since Crieff is one of two TAYplan tiered settlements in Strathearn (it is tier 2; and the other is Auchterarder, which is tier 3), it is appropriate that the option to meet the additional housing land requirement (if needed) should be in these settlements. The only difference between the preferred and alternative options in Crieff is an increase to housing density at MU7 south of Broich Road.

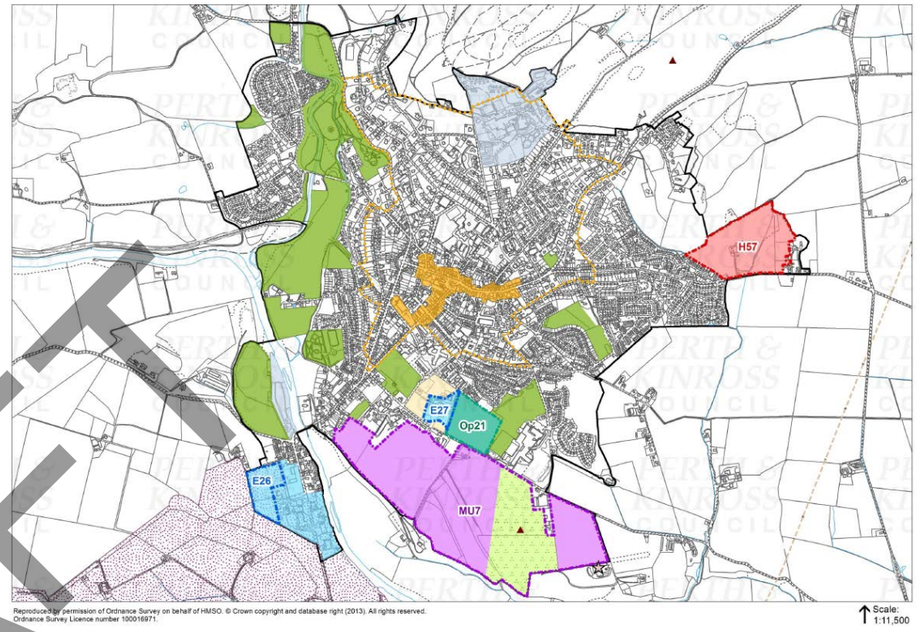
Preferred option:

Continue with the currently allocated sites (E26, E27, H57, MU7), but with a significant increase to the density of housing at MU7). No additional allocations.

Alternative option:

Continue with the currently allocated sites (E26, E27, H57, MU7). No additional allocations.

Figure 43: Existing Allocations in Crieff



A key requirement of SEA is to consider the cumulative impact of development within an area. In Crieff there are four 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 Crieff 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 table 25.

Table 25: Assessment of Alternatives in Crieff

Preferred Option	Alternative Option
Biodiversity Flora and Fauna	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Population	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7

Overall Impact	**Overall Impact**
Human Health	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Soil	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Water	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Air	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Climatic Factors	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Material Assets	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Cultural Heritage	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**
Landscape	
E26	E26
E27	E27
H57	H57
MU7 increased density	MU7
Overall Impact	**Overall Impact**

Conclusions

Preferred Option

Biodiversity Flora and Fauna

There is potential for adverse impact on priority species, habitats and botanical value of sites. In particular Swifts are recorded in the south Crieff area. Impacts could be mitigated via retention of important trees, planting and hedgerows; habitat creation for protected species; and landscaping to reinforce biodiversity value. The increase in housing density at MU7 has potential to have a slightly increased adverse impact.

Population

Impacts generally positive based on access to and provision of a choice of housing opportunities, range of services and facilities within Crieff accessible from the proposed sites, and access to employment opportunities. The relatively large size of the MU7 allocation means it is likely that more than one developer will work the site, leading to greater choice in the town.

Human Health

A balance of positive and adverse impacts; slightly more adverse air quality issues but positive contribution to open space and improved services. Effects can be mitigated through the application of LDP policies TA1B, EP11 and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and networks.

Soil

Majority of sites involve developing on greenfield or agricultural land, therefore produces an overall adverse impact.

Water

There is potential adverse impact on water environment for all sites. Some risk of surface/river flooding. Application of policy EP3 will reduce negative impacts and some are likely to require Drainage and Flood Risk Assessments as a mitigation measure. The increase in housing density at site MU7 could result in slightly increased adverse impact, however the measures identified should mitigate the impact.

Air

Crieff has an Air Quality Management Area identified and all new development is likely to increase vehicle trips and emission levels, with a consequent overall adverse impact on air quality. The increase in housing density of around 20% at MU7 will result in correspondingly higher adverse effects. The cumulative impact of development is a significantly adverse effect, which will be difficult to mitigate. Some effects can be mitigated through the application of policy EP11 and retention and enhancement of paths. The increase in housing density at MU7 could slightly increase usage of the path network in the town. All sites are on or near bus routes.

Climatic Factors

Most development sites within close proximity to Crieff town centre and/or Strathearn Community Campus, where there is a good range of services and facilities, 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 a significant overall adverse impact on the climate. All new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise benefit of southerly aspect in terms of solar orientation.

Material Assets
Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts. Provision of waste management facilities in appropriate developments and locations. There are also some positive impacts, such as helping retain and enhance employment opportunities in the town, and development could make a proportionate contribution to any enhancements to the road and path network in the area that are required as a consequence of the development.

Cultural heritage
Overall significantly adverse impact on cultural assets due to the location of Scheduled Monuments and presence of archaeology, particularly north and south of Broich Road (parts of E27 and MU7). Careful consideration to design and layout would mitigate impact of historic environment, with the application of policy HE1. Increased housing density at site MU7 will have a significantly negative impact because it has potential to have a larger land requirement placing pressure on the buffer that is needed to protect the Scheduled Monument and its setting. Mitigation should strictly avoid development with potential to adversely affect archaeologically sensitive areas and their setting.

Landscape
Overall impact is likely to be negative because almost all development takes place on greenfield sites on the periphery of the town. Newly-designated Special Landscape Areas should provide protection for most sensitive sites. Policy PM1 and site specific developer requirements will require a landscape framework to ensure that development fits in sensitively with the surrounding landscape. Increased housing density at site MU7 will have a positive impact because it requires development to be contained within that site.

Alternative Option
Biodiversity Flora and Fauna
There is potential for adverse impact on priority species, habitats and botanical value of sites. In particular Swifts are recorded in the south Crieff area. Impacts could be mitigated via retention of important trees, planting and hedgerows; habitat creation for protected species; 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 Crieff accessible from the proposed sites, and access to employment opportunities. The relatively large size of the MU7 allocation means it is likely that more than one developer will work the site, leading to greater choice in the town.

Human Health
A balance of positive and adverse impacts; adverse air quality issues but positive contribution to open space and improved services. Effects can be mitigated through the application of LDP policies TA1B, EP11 and Flood Risk Assessment. Also through the application of policy CF1B and the retention and enhancement of existing core paths and networks.

Soil
Majority of sites involve developing on greenfield or agricultural land, therefore produces an overall adverse impact.

Water
There is potential adverse impact on water environment for all sites. Some risk of surface/river flooding. Application of policy EP3 will reduce negative impacts and some are likely to require Drainage and Flood Risk Assessments as a mitigation measure.

Air
Crieff has an Air Quality Management Area identified and all new development is likely to increase vehicle trips and emission levels, with a consequent overall adverse impact on air quality. The cumulative impact of development is a significantly adverse effect, which will be difficult to mitigate. Some effects can be mitigated through the application of policy EP11 and retention and enhancement of paths. All sites are on or near bus routes.

Climatic Factors
Most development sites within close proximity to Crieff town centre and/or Strathearn Community Campus, where there is a good range of services and facilities, 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 a significant overall adverse impact on the climate. All new houses will be built in line with energy efficient guidelines so impact from the development will be minimised. Siting and design will maximise benefit of southerly aspect in terms of solar orientation.

Material Assets
Overall impact likely to be adverse due to increased number of houses and consequences on waste management. Policies EP1, EP9 and EP10 should be applied to new development to mitigate adverse impacts. Provision of waste management facilities in appropriate developments and locations. There are also some positive impacts, such as helping retain and enhance employment opportunities in the town, and development could make a proportionate contribution to any enhancements to the road and path network in the area that are required as a consequence of the development.

Cultural Heritage
Overall significantly adverse impact on cultural assets due to the location of Scheduled Monuments and presence of archaeology, particularly north and south of Broich Road (parts of E27 and MU7). Careful consideration to design and layout could mitigate impact to historic environment, with the application of policy HE1.

Landscape
Overall impact is likely to be negative because almost all development takes place on greenfield sites on the periphery of the town. Newly-designated Special Landscape Areas should provide protection for most sensitive sites. Policy PM1 and site specific developer requirements will require a landscape framework to ensure that development fits in sensitively with the surrounding landscape.

Assessment of Main Issue - Housing

Housing Numbers

One of the objectives of the LDP is to maintain an effective supply of deliverable land for development. The LDP identifies a specified amount of land for housing in each of its Housing Market Areas (HMAs). The amount of land required is the Housing Land Requirement which is set by TAYplan and has been informed by the TAYplan-wide Housing Need and Demand Assessment. On top of this the revised Scottish Planning Policy published in 2014 now requires the housing land requirement to include a 10-20% increase over what is actually needed. Although TAYplan argues that there is already significant flexibility in the amount of housing land needed in Perth & Kinross we have considered it as an alternative. This will ensure the environmental effects have been considered should the Reporter in any future TAYplan examination disagree with the approach taken.

Alternative 1- Housing numbers as set out in TAYplan

Alternative 2 - Housing numbers including additional 10% flexibility allowance

Table 26: Assessment of Housing Numbers

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	-		--	
	New development is likely to have a negative impact on biodiversity flora and fauna. There is greatest potential for negative impacts will occur when a development is in close proximately to or within a nationally or internationally designated site. In order to meet the total housing numbers set out in TAYplan the second local development plan will promote the development of sites that have previously been undeveloped there is potential that there could be a negative environmental impact.	Some of the negative impacts could be mitigated against by encourage green networks and creating greater connectivity between habitats.	New development is likely to have a negative impact on biodiversity flora and fauna. There is greatest potential for negative impacts will occur when a development is in close proximately to or within a nationally or internationally designated site. In order to meet the total housing numbers set out in TAYplan as well as the additional 10% flexibility allowance the second local development plan will promote the development of sites that have previously been undeveloped there is potential that there could be a negative environmental impact. This will have particularly negative impact in highlight constrained areas such as Kinross and Highland that have multiple designated sites and would	Some of the negative impacts could be mitigated against by encourage green networks and creating greater connectivity between habitats.
				struggle to meet the extra 10% requirement without a significantly negative impact on these areas.	
Population	+			+	
	By developing more areas for housing we will be able to help sustain existing communities and contribute towards creating a better environment for people to live and work. By meeting the housing numbers we will be contributing towards ensuring everyone in Perth and Kinross has a place to live which will have a positive impact on the population.	These effects could be enhanced through the provision of cultural, leisure activities within new housing areas which will enhance quality of life.	By developing more areas for housing we will be able to help sustain existing communities and contribute towards creating a better environment for people to live and work. By meeting the housing numbers as well as the flexibility allowance we will be contributing towards ensuring everyone in Perth and Kinross has a place to live which will have a positive impact on the population.	These effects could be enhanced through the provision of cultural, leisure activities within new housing areas which will enhance quality of life.
Human Health	+			+	
	Providing new housing will help sustain existing communities. This is likely to include healthcare services within a village and so could have a positive impact on human health. As well as this new housing developments are likely to incorporate sustainable transport methods including walking and cycling which will have a positive impact on human health.		Providing new housing will help sustain existing communities. This is likely to include healthcare services within a village and so could have a positive impact on human health. As well as this new housing developments are likely to incorporate sustainable transport methods including walking and cycling which will have a positive impact on human health.	
Soil	-			--	
	To meet the numbers set out within TAYplan development will have to occur on previously undeveloped land. This could result in a loss of prime agricultural land and carbon rich soils.	Avoid allocated sites in areas of prime agricultural land or where there are carbon rich soils.	To meet the numbers set out within TAYplan including the 10% flexibility allowance development will have to occur on previously undeveloped land. The higher housing numbers will increase the pressure to develop on previously undeveloped land and could result in the loss of prime	Avoid allocated sites in areas of prime agricultural land or where there are carbon rich soils.

			agricultural land and carbon rich soils.	
Water	-		-	
	Increasing housing numbers will increase development which is likely to have a negative impact on the water environment; although this is not likely to be significant. There is potential for new development to add to an areas vulnerability to flooding as it often removes natural flood defences (e.g. impact on natural flood drainage systems).	This could be mitigated against by ensuring flood risk assessments are undertaken in areas where flooding is likely. There is potential for enhancement of the water environment through developer requirements.	Increasing housing numbers will increase development which is likely to have a negative impact on the water environment; although this is not likely to be significant. There is potential for new development to add to an areas vulnerability to flooding as it often removes natural flood defences (e.g. impact on natural flood drainage systems).	This could be mitigated against by ensuring flood risk assessments are undertaken in areas where flooding is likely. There is potential for enhancement of the water environment through developer requirements.
Air	-		-	
	An increase in houses is likely to result in an increase in people suing private cars. This will result in an increase in pollution and could contribution to congestion which will have a negative impact on the environment.	The negative impacts could by requiring sustainable travel alternatives within new housing development.	An increase in houses is likely to result in an increase in people suing private cars. This will result in an increase in pollution and could contribution to congestion which will have a negative impact on the environment.	The negative impacts could by requiring sustainable travel alternatives within new housing development.
Climatic Factors	-		-	
	An increase in development will result in an increase in greenhouse gases which will have a negative impact on the environment.	Greenhouse gases can be reduces by encourage sustainable construction methods and the development of efficient low houses.	An increase in development will result in an increase in greenhouse gases which will have a negative impact on the environment.	Greenhouse gases can be reduces by encourage sustainable construction methods and the development of efficient low houses.
Material Assets	+/-		+/-	
	New housing development is likely to result in an increase in waste generated throughout Perth and Kinross.	New development will have to consider the safe treatment	New housing development is likely to result in an increase in waste generated throughout Perth and Kinross.	New development will have to consider the safe treatment
	However new houses will be built to higher standards in terms of energy efficiency which will have a positive impact in term of material assets.	of waste which could reduce the likely environmental impacts.	However new houses will be built to higher standards in terms of energy efficiency which will have a positive impact in term of material assets.	of waste which could reduce the likely environmental impacts.
Cultural Heritage	-		-	
	It is likely that new housing development will have a negative impact on the historic environment as it may have an impact on local character within settlements. However it is not likely that these impacts will be significant.	Avoid large scale development when it is not in keeping with the area (e.g. within or adjacent to a conservation area).	It is likely that new housing development will have a negative impact on the historic environment as it may have an impact on local character within settlements. However it is not likely that these impacts will be significant.	Avoid large scale development when it is not in keeping with the area (e.g. within or adjacent to a conservation area).
Landscape	-		--	
	New development could have a negative impact on the landscape as it may not be in keeping with the existing pattern, scale of the settlement. The landscape setting of an area could be at risk as there may be a need to allocate housing sites in smaller settlement where there is not the capacity within the landscape to accommodate it.	New developments should be in keeping with surrounding area.	To meet the flexibility allowance there is likely to be significant negative environmental impacts. New development could have a negative impact on the landscape as it may not be in keeping with the existing pattern, scale of the settlement.	New developments should be in keeping with the surrounding area and avoid areas where the landscape is high value.

Comparative Analysis: Housing Numbers

<u>Biodiversity, Flora and Fauna</u>

Alternatives 1 and 2 are both likely to have a negative impact on the environment. An increase in development will mean there will be more housing allocation on previously undeveloped land which will have an impact on the biodiversity flora and fauna within these sites.

Alternative 2 requires a higher level of housing which will result in more sites being allocated which will have a more significant effect on biodiversity flora and fauna, particularly in areas where the land is

constrained by a high number of environmental designations. Alternative one would therefore be the preferred option in this case.

Population

Both alternatives are likely to have a positive impact on the population as they will help to sustain existing communities. As there is likely to be a positive result from both alternatives there is no preferred alternative in terms of the impact on the population.

Human Health

Both alternatives are likely to have a positive impact on the population as they will help to sustain existing communities and are likely to incorporate sustainable travel methods. As there is likely to be a positive result from both alternatives there is no preferred alternative in terms of the impact on the population.

Soil

Alternatives 1 and 2 will put pressure on releasing previously undeveloped land which will have an impact on soils. The preferred option in this case is alternative one as the lower housing levels will put less pressure on undeveloped land and so are less likely to have a significant effect on soils.

Water

An increase in development as proposed in both alternatives is likely to have a negative impact on the water environment. Increased development could have a negative impact on natural flood defences systems and increase pollution levels within the water environment. Alternative 1 puts forward lower housing numbers and so there would be less development and so less negative impacts. This would make alternative 1 the preferred option in this instance.

Air

There is likely to be a negative impact on air quality as a result of both alternatives. Alternative 1 would be the preferred option as it would result in less houses being built and so will have slightly less impact on air quality.

Climatic Factors

Allocating land for housing has the potential to contribute towards climate change a sit will contribute towards greenhouse gas emissions, either thought the house itself or through the increase in private car usage in the area. Therefore Alternative 1 is the preferred alternative as it will result in fewer houses being built which will have a less significant impact on the environment.

Material Assets

Both alternatives will have a mixed effect on material assets. New houses will likely be built to a higher standard which will have a positive impact however an increase in housing will result in an increase in the total waste generated.

Cultural Heritage

Alternatives 1 and 2 will have a negative impact on cultural heritage. An increase in developed could result in an increase in the number of houses around conservation areas and listed building which may not always be in keeping with the area. This is more likely in Alternative 2 where housing numbers are high and so there will need to be an increase in the number of sites allocated and so there is likely to be a greater impact on cultural heritage.

Landscape

As both alternatives require additional land to be allocated both have potential to have a negative impact on landscape, especially in sensitive areas with a lower landscape capacity. The effects are likely to be greater in Alternative 2 as it requires more land to be allocated.

Conclusions

Both alternatives will have mixed impact on the environment. For both alternatives mitigation and enhancement measures have been suggested. The majority of these mitigation proposals can be achieved through the policies within the LDP which will encourage positive environmental effects.

The main difference between the two alternatives is that alternative one will allocate more housing. This will put greater pressure on the land and so there is potential for there to be greater negative impacts. From this we can conclude that the preferred alternation should be Alternative 1.

Flexibility Allowance

As well as housing numbers the Main Issue of housing considers the reallocation of housing numbers between HMAs. This is in recognition of the fact that we have areas where additional land allocations were required in order to maintain an effective supply of land however it is not thought to be possible to meet in some areas due to high levels of constraint.

The TAYplan SEA considered the alternative in terms of flexibilities for allocating housing land within local authorities. This concluded that the greater flexibility the greater the opportunity to protect manage and enhance the environment in meeting housing need and planning for the most sustainable development. This assessment is shown below within the purple boxes.

Options for proposed change to flexibilities for allocating housing land within local authority boundaries Comparative Analysis	
Strategy Option 1 Increase from 10% and possibly up to 25%	Strategy Option 2 Retain 10%
Biodiversity	
Significantly Positive	**Positive**
This option recognises the existing policy principle and offers greater flexibility to respond to local environmental constraints faced in TAYplan"s Housing Market Areas. Development proposals have the potential to have a significant effect on biodiversity in the TAYplan area which has sites of international, national and local importance. . It offers an opportunity for LPAs to be proactive in meeting the statutory duty on all to further conservation of biodiversity, respond positively to environmental constraints and reduce the negative impact of development in certain areas. It is considered to be a more forward looking approach to help meet the challenges of delivering new homes.	Development proposals have the potential to have a significant effect on biodiversity in the TAYplan area which has sites of international, national and local importance. This option continues the existing policy principle which offers flexibility to LPAs to respond to local infrastructure or environmental constraints faced in TAYplan"s housing market areas. It offers an opportunity for LPAs to be proactive, respond positively to environmental constraints and reduce the negative impact of development in certain areas whilst meeting the challenges of delivering new homes.
Population and human health	
Significantly Positive	**Positive**
This option improves the flexibility afforded by the existing policy principle to ensure the provision of affordable housing across the area for the current population and future projected population increases. It is considered to promote a more forward looking approach to deliver new homes where serious environmental or infrastructure constraints have been identified.	This option continues the existing policy principle to ensure the provision of affordable housing across the TAYplan area for the current population and future projected population increases.
Soil and land	
No known significant effect	**No known significant effect**

This option provides LPAs with greater flexibility to respond to serious local infrastructure and environmental constraints within their areas whilst meeting the housing needs of the market area. It offers an opportunity for LPAs to reduce the negative impact of development on the soil resource and in some instances could offer an opportunity to reduce the pressure on prime agricultural land.	This option continues the existing policy principle and provides LPAs with an opportunity to respond to serious local infrastructure and environmental constraints within their areas whilst meeting the housing needs of the market area. It offers an opportunity for LPAs to reduce the negative impact of development on the soil resource and in some instances could offer an opportunity to reduce the pressure on prime agricultural resources in the region.
Water	
No known significant effect	**No known significant effect**
Development will see increased pressure on this resource. There is the potential for significant impact on habitats and communities from development along the Tay Estuary and there a number of flood risk areas in the TAYplan region. This option offers greater flexibility to LPAs to respond to serious environmental and infrastructure constraints within their areas whilst meeting the housing needs of the market area.	This option continues the existing policy principle and provides LPAs with an opportunity to respond to serious environmental and infrastructure constraints within their areas whilst meeting the housing needs of the market area.
Air	
No known significant effect	**No known significant effect**
There is likely to be increased emissions as a result of an increase in population and housing and this is likely lead to an increase in the number of people exposed to poor air quality. Mitigation can be provided through ensuring good accessibility to services by a range of sustainable transport modes. 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. This option offers greater flexibility than the existing policy principle to respond to serious environmental and infrastructure constraints whilst meeting the housing needs of the market area.	This option continues the existing policy principle and provides LPAs with an opportunity to respond to serious environmental and infrastructure constraints within their areas whilst meeting the housing needs of the market area.
Water	
No known significant effect	**No known significant effect**

The TAYplan area is vulnerable to increased flooding and sea level rises as a result of climate change. This option offers a forward looking approach to meet this challenge. This option offers greater flexibility than the existing policy principle to respond to serious environmental and infrastructure constraints whilst meeting the housing needs of the market area.	This option continues the existing policy principle and provides LPAs with an opportunity to respond to serious environmental and infrastructure constraints within their areas whilst meeting the housing needs of the market area.
Material Assets	
Positive	**Positive**
The effective and efficient stewardship of infrastructure and the conservation of the region"s resources is a key aim of TAYplan. This option recognises the challenges faced in responding to local infrastructure and environmental constraints. It offers a more forward looking approach than the existing policy principle to respond to this challenge and deliver new homes.	This option continues the existing policy principle and provides LPAs with an opportunity to respond to serious environmental and infrastructure constraints within their areas whilst meeting the housing needs of the market area.
Cultural Heritage	
Positive	**Positive**
The effective and efficient stewardship of infrastructure and the conservation of the region's resources is a key aim of TAYplan. This option recognises the challenges faced in responding to local infrastructure and environmental constraints. It offers a more forward looking approach than the existing policy principle to respond to this challenge and deliver new homes.	This option continues the existing policy principle and provides LPAs with an opportunity to respond to serious environmental and infrastructure constraints within their areas whilst meeting the housing needs of the market area.
Landscape	
Negative	**Negative**
This option is likely to have a neutral impact. The policy change is focused on the approach to allocating housing rather than the allocation of locations for development. The effect of the policy change would be to manage the location of new housing to less sensitive landscapes. The siting, design and layout of new development is important and should take account of the sensitivity and capacity of the receiving environment. This option offers a forward looking approach to respond to the challenge of delivering new homes where serious infrastructure and environmental constraints have been identified. The proposed green network strategy should mitigate any adverse effects as well as offer an opportunity to enhance the landscape and visual aspect of certain areas.	This option could have both positive and negative impacts on the landscape character in areas of TAYplan where many settlements can be considered „rural" and a distinctive feature of certain parts of the region. This settlement character could be lost through extensions. The siting, design and layout of new development is important and should take account of the sensitivity and capacity of the receiving environment. This option offers an approach to respond to the challenge of delivering new homes where serious infrastructure and environmental constraints have been identified. The proposed green network strategy should mitigate any adverse effects as well as offer an opportunity to enhance the landscape and visual aspect of certain areas.

Comparative Analysis: Housing Assessment

The Housing assessments have considered the potential environmental effects that may occur as a result of implementing change in the number and distribution of project housing developments. Greater flexibility in meeting projected housing need and demand is proposed in the Main Issues Report with the environmental implications of proposed change summarised below.

Biodiversity

Development alongside or in close proximity to designated sites could potentially lead to loss of habitat and reduce their ecological connectivity in all Housing Market Areas. The impact could however be mitigated or positively improve the conditions for biodiversity through creation of wildlife corridors, green space and landscaping. The significance of the impacts and whether they are positive or negative depends on the extent of loss or creation of habitat and their cumulative impact.

Local Development Plans will continue to allocate specific sites to meet the land requirement and it is through implementation of development proposals that the type and scale of impact will be realised. As in the assessed change to Policy 6 of the Energy Chapter, monitoring and consideration of the cumulative impact of development on Biodiversity would help to control negative impacts and give early indication of whether further measures are required. The potential for negative impacts cannot at this stage be ruled out, however increasing the flexibility for allocating housing land within Local Authority areas will provide a means of avoiding loss of important habitats.

Population and Human Health

It is considered that additional new development in itself could impact negatively on the housing spatial strategy if a significant amount of development were to occur in the Firth lowlands. Assessment of the rural housing market areas of Perth and Kinross also point to a potential negative impact on water quality particularly in sensitive areas and consequently human health. Secondary impacts are also identified for human health in terms of negative impact on air quality.

Development at a scale that promotes community focus will however improve the quality of life for people in the Region, potentially contributing to better services and diverse communities. Additional development absorbed in the Dundee Housing Market Area would benefit from accessibility to services and facilities, as well as promoting brownfield development, if supported by the Strategic Development Area and Energy environmental assessments preferred options discussed later in this report. Assessment of proposed changes to flexibilities for allocating housing land also record potential positive environment implications.

Soil and Land

It is noted that greenfield development will alter the character of the ground and soil together with a potential loss of prime agricultural land. Options for proposed changes to flexibilities for allocating housing land will serve to mitigate this outcome.

Water

Development in sensitive areas could result in increased pressure on water bodies particularly where no adequate facilities are available for water treatment facilities. Conversely however the assessments also record potential positive effects on water quality, depending on the implementation of strategies in a way which promotes provision of new water treatment facilities. It is also noted that the development of sustainable flood management strategies will avoid development in the flood plains and thereby any negative environmental implications. The use of sustainable drainage systems will also mitigate the effects of development

Air

Increased development could have an effect on air quality and lead to an increase in population living in an Air Quality Management Area (AQMA). This can be avoided through locating the majority of development in areas which are well served in terms of a variety of modes of transport and ease of accessibility to facilities and services. Most of the additional development would occur outside of any AQMA.

Climatic Factors

Additional housing development adjacent to inland waters and coastal areas could result in negative environmental effects especially if located in a flood plain. Ensuring development is located outwith areas of flood risk should help mitigate the effects of climate change and allow areas to adapt to a changing climate

Material Assets

The potential for regeneration will include opportunities to incorporate green spaces and enhance the accessibility of open spaces as well as promoting higher density development and reuse of derelict land. Expanding and upgrading the housing stock will also occur through new housing development. These will add to the material asset base of the Region.

Landscape

There is a potential for negative environmental landscape impacts as a result of new housing development. Generally however additional development at the proposed scale is not likely to have significant landscape impacts. Allowing greater flexibility for allocating housing land will mitigate any impacts which might occur.

Cultural Heritage

Additional housing development gives an opportunity to improve the historic environment through investment in old buildings and management of Gardens and Designed Landscapes. Negative impacts are also possible if development is insensitively located. Some, although not all, archaeological and architectural heritage is protected through legislation. The greatest risk is to unfound archaeology consequently there is potential loss of the cultural heritage if policies are not in place to protect it.

Conclusions

Overall the level of development and opportunities for protection and enhancement of the environment mean that the impact of additional housing should be minimised. The proposed changes in the Main Issues Report offer options for managing the scale of new housing growth and where that growth is met. The greater the flexibility through such potential policy changes, the greater the opportunity to protect, manage and enhance the environment in meeting housing need and planning for the most sustainable development strategy.

Small Sites Contribution

In the Highland HMA small sites are considered a critical part of the housing land supply. Within the Highland HMA the identification of effective and sustainable larger scale sites is severally constrained by topography and various conservation designations, because of this the MIR suggests increasing the contribution of small site in the Highland HMA from 15% to 20%.

Alternative 1- Increasing the contribution of small sites in the Highland HMA from 15% to 20%

Alternative 2 – Keeping the contribution of small sites in the Highland HMA at 15%

Table 27: Assessment of Small Sites Contribution

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	-		--	
	By increasing the contribution of small sites in the Highland area we will be decreasing the number of large scale allocations. However there is likely to be negative effects on biodiversity flora and fauna as it will allow for smaller housing developments within settlements which could increase habitat fragmentation and result in loss of potential biodiversity in settlements where the levels are already low.	Green infrastructure policies could help reduce habitat fragmentation and encourage links between existing green areas.	If the contribution of small sites within the Highland HMA is kept at 15% there will be significantly negative environmental effects. The area is already highly constrained and so there may be a need to allocate housing land in areas where there could be a significantly negative impact on biodiversity (e.g. designated sites). It is also likely to result loss of habitat which will have a negative impact on wildlife.	Policies promoting green infrastructure may reduce the impact on biodiversity flora and fauna.
Population	+		+	
	By increasing the number of small sites more people will be able to live in their local area which will have positive impacts on the population as it will help sustain communities. By allowing a 20% contribution the number of large sites will be reduced which will allow development to focus in the areas where there is greatest demand which will help sustain more, smaller communities within the Highland area.		Allowing for a 15% contribution from small sites will create an opportunity for limited small scale development within settlement which could have a positive impact in terms of sustaining communities.	
Human	+		+/-	

Health	Increasing the contribution from small sites could result in less pollution as more people within the Highland areas could choose to live within the village where they work. It is also likely to help sustain local facilities including health services.		If a lower proportion of the housing figures come from small sites more large scale allocations will be needed in the highland area. This could result in more pollution as larger development sites will be needed which could result in an increase in car users on local roads. However these larger developments will help support existing facilities and could result in new facilities for communities.	
Soil	+		-	
	A higher proportion of housing coming from small sites will lead to more development within existing settlements. This will have a positive impact on soils as it will reduce the need for development on previously undeveloped land and is likely to result in the use of brownfield land within settlements.		With a lower proportion of the housing numbers coming from small sites there will be a need to allocate additional land outwith settlements. This greenfield development could have a negative impact on soils as it could result in the possible loss of prime agricultural land or areas of carbon rich soil.	This could be mitigated against by the use of policies within the LDP which will protect high value agricultural land and carbon rich soils.
Water	+/-		-	
	Small scale nature of development proposed is unlikely to result in significant environmental effect.		By allowing for a smaller number of small sites to come through there will be a need for more large sites to be allocated within the Highland area. This could increase pressure on the water environment resulting in a potentially negative impact.	Policies within the LDP should ensure that new development does not have a negative impact on the water environment.
Air	-		-	
	This alternative could result in an increase in new housing which could increase private car usage which could have a negative impact on air quality.	New development should encourage sustainable travel methods. This is will be encouraged through policies within the LDP.	This alternative could result in an increase in new housing which could increase private car usage which could have a negative impact on air quality.	New development should encourage sustainable travel methods. This is will be encouraged through policies within the LDP.
Climatic Factors	-		-	
	This alternative could result in an increase in new housing which could increase private car usage which could have a negative impact on air quality.	New development should encourage sustainable travel methods. This is will be encouraged through policies within the LDP.	This alternative could result in an increase in new housing which could increase private car usage which could have a negative impact on air quality. It could also result in large sites being allocated in areas that are not necessarily sustainable which could exacerbate the impacts of climate change.	New development should encourage sustainable travel methods. This is will be encouraged through policies within the LDP. As well as this policies within the LDP should encourage the sustainable design and construction of new developments.
Material Assets	+		-	
	Allowing for a higher proportion of smaller site could be a more sustainable approach as it will result in more development within the settlement boundaries. This could result in the reuse of brownfield land and in some cases existing buildings which will have a positive impact on material assets.		Allowing for a lowering number of smaller sites in the highland area could have a negative impact on material assets. It could lead to the unsustainable allocation of larger sites where there may not be capacity within the existing service infrastructure.	Policies within the LDP should encourage the sustainable design and construction of new developments.
Cultural Heritage	-		-	
	Potential for negative impact on cultural heritage as it will result in more development within settlements which could detract from the historic environment, particularly in village which have conservation areas or may listed buildings.	Policies within the LDP will protect cultural heritage and the historic environment.	Large scale settlement expansion (which could result if the contribution for small sites remains at the lower level) could change the character of the area and have a negative impact on historic environment.	Policies within the LDP will protect cultural heritage and the historic environment.
Landscape	-		--	

	Small infill development could help improve townscape and strengthen the settlement edge which will have a positive impact on landscape.		Having a lower proportion of the housing land supply coming from small sites will have a significantly negative impact on the landscape. It will result in more sites being allocated within the Highland areas which could impact the existing townscape as it is unlikely to be of an appropriate scale and will affect the pattern of existing settlement. As well as this there is potential for there to be a negative impact on landscape designations in the highland area.	There will be policies within the LDP which will protect designated landscape areas.

Comparative Analysis: Small Sites Contribution

Biodiversity, Flora and Fauna

Both alternatives are likely to result in negative impacts on biodiversity, flora and fauna. However with alternative 2 there will be a more significantly negative effect as this alternative will result in the need for more housing sites to be allocated within the highland area. In terms of biodiversity flora and fauna alternative one will have the least significant impact on the environment and so is the preferred alternative.

Population

Both alternatives will have a positive impact on the population as they will allow more people to live in the highland area and will help support local communities. There is no preferred option in this instance.

Human Health

Alternative 2 could increase the need for private car usage as it will result in more allocations outwith the settlement boundary, this could increase pollution which will have a negative impact on human health. However both alternatives will support local services and so could have positive impacts on human health. Alternative 1 would be the preferred option in terms of human health as there is less likely to be a negative impact.

Soil

Alternative 2 is likely to result in more greenfield land being released with a potentially negative impact on soil. Alternative 1 would be the preferred alternative in terms of soils as it is likely to make greater use of brownfield sites and land within settlements.

Water

Both alternatives are unlikely to have a significant impact on soils. However alternative 2 could have a negative impact as it will result in more land being allocated for housing which could increase pressure on the water environment with potentially negative effects. With regards to the water environment alternative 1 is the preferred option as it is less likely to result in negative impacts.

Air

Both alternatives have the potential to create negative impacts on air quality as they will increase development. However there are no AQMA in the highland area so it is unlikely these effects will be significant. There are no preferred alternatives with regards to the impact on air.

Climatic Factors

Both alternatives could have a negative impact on climatic factors as they will increase the number of people in the area which is likely to result in an increase in private car usage. However there are likely to be more negative impacts as a result of alternative 2 as it will result in more housing allocations outwit the settlement boundary which could have further negative impacts - but it is unlikely that these will be significant. Therefore alternative 1 is the preferred alternative as there is less potential for negative impacts on climate change.

Material Assets

Alternate 2 could have a negative impact on material assets as it will lead to greater numbers of housing allocations in potential unsustainable locations. Alternative 1 however could have positive impacts as it will allow for more development within existing settlements which could include the use of existing buildings and brownfield land. Alternative 1 is the preferred alternative in this case.

Cultural Heritage

Both alternatives have the potential for negative impacts on cultural heritage as the increase development. There is not preferred alternative in this instance.

Landscape

Both alternatives will have a negative impact on landscape as they allow for development which could have a negative impact on the settlements existing townscape. Alternative 2 however could have significantly negative impact as it will lead to more housing allocations in greenfield land which could negatively impact the landscape designations within the highland area. In this case Alternative 1 is the preferred option.

Conclusions

In terms of SEA the preferred alternative would be alternative 1 as it is less likely to result in negative environmental impacts.

Delivery Strategy

The MIR puts forward a proposed policy which will require each housing or mixed use site to produce a Delivery Strategy. It is argues that this will help ensure the predicted housing land supply is provided. The preferred option within the MIR is to add a new policy which will require a delivery strategy, this policy will be called: Delivery of Housing Sites.

Alternative 1- Policy Requiring a Delivery Strategy

Policy RD5: Delivery of Housing Sites
For each housing or mixed use site allocated in the LDP landowners and / or developers will produce a Delivery Strategy. This must be agreed with the Council and other essential infrastructure providers and demonstrate a realistic programme of delivery of the site through the plan period. Delivery Strategies should be prepared as soon as possible and within one year of Plan adoption. On sites of 300 houses or more the Delivery Strategy should demonstrate how delivery will be maximised, including proposals for involving a range of developers. **Note:** Supplementary Guidance will set out how landowners / developers can comply with this policy.

Alternative 2 –No new Delivery Strategy Requirement Policy

Table 28: Assessment if Delivery Strategy

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	+/-		+/-	
	There is potential for mixed impacts on biodiversity flora and fauna as a result of the proposed new policy. By bringing new sites forward there could be negative impacts as new development could destroy existing habitats deteriorate the existing environment. However new development could also provide green infrastructure links to existing habitats, which would reduce habitat fragmentation and improve the natural environment within the area.	Existing policies within the LDP will protect designated sights and promote green infrastructure.	There is potential that without this policy site may not be delivered. This will mean that sites will remain undeveloped and so there would be no negative effect on existing biodiversity flora and fauna. However without the proposed delivery strategy requirement the area could lose out on the benefits of any proposed enhancement measures e.g. green links.	Existing policies within the LDP will protect designated sights and promote green infrastructure.
Population	+		-	
	Alternative 1 will ensure that the housing land requirement is met. This will mean that more people have places to live, and the communities are able to sustain growth.		Alternative 2 could lead to some sites not being delivered in line with the timings set out in the LDP, which would mean that housing demand may not be met. This would have a negative impact on communities as the cant grow and develop. It could also result in people moving away from their community as they are unable to find a house in the area. This will have a negative impact on the population.	
Human Health	+		-	
	By considering infrastructure at an early stage there could be a positive impact on human health. This is because health services are more likely to be provided in appropriate locations and at appropriate times.		Alternative 2 could result in development taking place without the required infrastructure commitments in place which would have a negative impact on human health although it is unlikely that this will be a long term negative impact.	
Soil	0		0	
	There is unlikely to be an impact on soils as a result of this policy.	Other polices within the LDP will ensure the protection of soils.	There is unlikely to be an impact on soils without this policy.	Other polices within the LDP will ensure the protection of soils.
Water	0		0	
	There is unlikely to be an impact on the water environment as a result of this policy.		There is unlikely to be an impact on the water environment without this policy.	
Air	+		-	
	This alternative will encourage early consideration of infrastructure, including roads and public transport services, which reduce car dependency. This has the potential to reduce emissions which will have a positive impact on air quality.	Developer requirement could require the need for Road and Access improvements.	Without a Delivery Strategy Requirement the required infrastructure commitments may not be in place which could increase car dependency. This will increase emission resulting in negative impact on air quality. However it is likely that these effects will only be temporary until the required infrastructure is in place.	Developer requirement could require the need for Road and Access improvements

Climatic Factors	+		-	
	This alternative will encourage early consideration of infrastructure, including roads and public transport services, which reduce car dependency. This has the potential to reduce emissions which will have a positive impact as it could reduce the impacts of climate change.	Developer requirement could require the need for Road and Access improvements.	Without a Delivery Strategy Requirement the required infrastructure commitments may not be in place which could increase car dependency. This will increase emission resulting in negative impact on the climatic factors. However it is likely that these effects will only be temporary until the required infrastructure is in place.	Developer requirement could require the need for Road and Access improvements
Material Assets	+		-	
	This alternative will encourage early consideration of infrastructure, waste disposal, which is likely to result in the safe treatment and disposal of waste which will have a positive impact on material assets.		Without a Delivery Strategy Requirement, the required waste infrastructure commitments may not be in place. This could have a negative impact on material assets as the safe disposal of waste may not be considered. However it is likely that these effects will only be temporary until the required infrastructure is in place.	
Cultural Heritage	0		0	
	There is unlikely to be an impact on cultural heritage as a result of this policy.	Other polices within the LDP will ensure the protection of cultural heritage.	There is unlikely to be an impact on cultural heritage without this policy.	Other polices within the LDP will ensure the protection of cultural heritage.
Landscape	0		0	
	There is unlikely to be an impact on the landscape as a result of this policy.	Other polices within the LDP will ensure the protection of the landscape.	There is unlikely to be an impact on the landscape without this policy.	Other polices within the LDP will ensure the protection of the landscape.

Comparative Analysis: Delivery Strategy Requirement

Biodiversity, Flora and Fauna

There is potential for positive and negative impact on biodiversity, flora and fauna as a result of both polices. Alternative 1 is the preferred option however as it will ensure green infrastructure is considered at an earlier stage in development proposals.

Population

Alternative 1 will have a positive impact on the population it will ensure the housing land requirement is met. Alternative 2 could have negative impacts as it could lead to sites not being delivered which would mean that the housing requirement is not met resulting in an housing shortfall within Perth and Kinross. Therefore alternative 1 is the preferred option as it is more likely to have a positive impact on the population.

Human Health

A delivery strategy requirement would ensure infrastructure and key services including health care would be considered at an early stage, which would have a positive impact on human health. Without the delivery strategy requirement development could take place without the necessary infrastructure commitment having been agreed. Therefore in terms of human health alternative 1 is the preferred alternative.

Soil

There is likely to be no impact on soils as a result of either alternative.

Water

There is likely to be no impact on soils as a result of either alternative.

Air

Alternative 1 is the preferred option in terms of potential impacts on air. Alternative 1 will ensure infrastructure is considered at an early stage and so is likely to result in positive impacts on air quality. Alternative 2 however could have negative effects as infrastructure may not be considered at an early stage which could increase car dependency which would increase emissions.

Climatic Factors

Alternative 1 will encourage early consideration of infrastructure which is likely to result in a reduction in emissions which could reduce the impacts of climate change. Alternative 2 could result in increase in car dependency which would have negative effects, particularly in the short term. The preferred option in terms of the impact on climate change is alternative 1.

Material Assets

As alternative 1 is likely to encourage the early consideration of waste infrastructure the preferred alternative in terms of material assets. Alternative 2 could result in short term negative impacts as necessary waste infrastructure requirements may not be in place.

Cultural Heritage

There is likely to be no impact on soils as a result of either alternative.

Landscape

There is likely to be no impact on soils as a result of either alternative.

Conclusions

Alternative 1 encourages the early consideration of infrastructure and helps ensure sites will be delivered. This is likely to result in positive impact on the environment and will encourage the sustainable development of sites. Alternative 1 is the preferred alternative as it will have the greatest environmental benefit.

Assessment of Main Issue - Settlement Envelopes

The MIR considers the Settlement boundary policy and suggests a change to the wording which will address issues that were raised through the monitoring of the LDP. The preferred option put forward in the MIR is Alternative 2.

Alternative 1 – Keep the policy wording the same as in the Adopted LDP which is shown below.

Policy PM4: Settlement Boundaries
For settlements which are defined by a settlement boundary in the Plan, development will not be permitted, except within the defined settlement boundary.

Alternative 2 – Amend the Policy wording, to increase clarity, as shown below.

Policy PM4: Settlement Envelopes
Built development should not be located adjoining and outwith those settlements which have defined settlement boundaries, unless the proposal is in accordance with policy ED3: Rural Business and Diversification, or the proposal is justifiable on the basis of a specific operational or locational need and it can be demonstrated that a suitable site is not available within the settlement envelope. Notes: The Policy ED3 exception only applies to those settlements which are not listed as principal settlements in TAYplan. Examples of specific operational or locational need could include a new house for an agricultural worker, or essential infrastructure works where it can be demonstrated that the development must be located on a particular site.

Table 29: Assessment of Settlement Envelopes Policy

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	++		+	
	The policy restricts development outside settlement boundaries. This will ensure previously undeveloped land is protected and will reduce the potential for sub-urbanisation. This will have a positive impact on biodiversity as it will protect existing habitats and reduce habitat fragmentation.		The proposed policy restricts development outside settlement boundaries. This will ensure previously undeveloped land is protected and will reduce the potential for sub-urbanisation. This will have a positive impact on biodiversity as it will protect existing habitats and reduce habitat fragmentation. However the policy does allow for essential development which could have a slight negative impact on the environment.	
Population	+/-		+	
	There is potential for both positive and negative impacts on the population as a result of the existing policy. By restricting development to areas within settlement boundaries the policy will ensure that land within settlements will be developed which could help create more vibrant community. However, a community will be unable to expand and grow which may be needed in order to sustain the community.	To ensure that the settlement can support the population the policy could be redrafted to allow key infrastructure development outside settlement boundaries.	There is potential for both positive and negative impacts on the population as a result of the existing policy. By restricting development to areas within settlement boundaries the policy will ensure that land within settlements will be developed which could help create more vibrant community. By allowing rural business to grow the proposed policy will help sustain the communities.	
Human	+/-		+	

Health	The policy has potential positive and negative impact. As it does not allow development outwit settlements it will ensure service remain accessible, this could however result in negative impact where there are no possible sites within the settlement boundary to locate key services. The existing policy could also have positive impact in terms of air pollution as it is likely to reduce travel times by encouraging development within existing settlements.		The policy has potential positive and negative impact. As it does not allow development outwit settlements it will ensure service remain accessible. The proposed policy allows for essential infrastructure to be located outwith settlement boundaries which would have a positive impact on human health as key services will be located in accessible locations. The existing policy could also have positive impact in terms of air pollution as it is likely to reduce travel times by encouraging development within existing settlements.	
Soil	+		+	
	The existing policy will have a positive impact on soils as it encourages development within settlement where there is a higher likelihood that it will be on previously developed land. The policy also prevents development outwith settlement boundaries which would be areas of previously undeveloped land.		The proposed policy will have a positive impact on soils as it encourages development within settlement where there is a higher likelihood that it will be on previously developed land. The policy also prevents development outwith settlement boundaries which would be areas of previously undeveloped land.	
Water	+		+	
	The existing settlement boundary policy could have slightly positive effects on the water environment by reducing development which has the potential to impact on the water		The proposed settlement boundary policy could have slightly positive effects on the water environment by reducing development which has the potential	
	environment.		to impact on the water environment.	
Air	+		++	
	The existing policy could also have positive impact in terms of air pollution as it is likely to reduce travel times by encouraging development within existing settlements.		The proposed policy could also have positive impact in terms of air pollution as it is likely to reduce travel times by encouraging development within existing settlements. The proposed policy also allows for essential rural businesses to be located outside settlement a boundary which has the potential to reduce the need for commuting which could improve air quality.	
Climatic Factors	+		+	
	By restricting development outwith existing settlements this policy is likely to reduce dependency on cars which could have a positive impact in lowering emissions.		By restricting development outwith existing settlements this policy is likely to reduce dependency on cars which could have a positive impact in lowering emissions.	
Material Assets	+		+	
	The existing policy could have a positive impact on material assets. By encouraging development within settlement boundaries the policy limits the land available for development. This could encourage the re-use of		The proposed policy could have a positive impact on material assets. By encouraging development within settlement boundaries the policy limits the land available for development. This could encourage the re-	

	existing buildings.		use of existing buildings.	
Cultural Heritage	0		0	
	The existing policy is unlikely to have an impact on cultural heritage.	Other polices within the LDP will ensure that cultural heritage is protected and where possible enhanced.	The proposed policy is unlikely to have an impact on cultural heritage.	Other polices within the LDP will ensure that cultural heritage is protected and where possible enhanced.
Landscape	++		++	
	The policy is likely to have a significant impact on the landscape on Perth and Kinross. It will reduce sub urbanisation wand protect the existing townscape. As well as this it will help maintain the landscape character of the area by reducing development.		The policy is likely to have a significant impact on the landscape on Perth and Kinross. It will reduce sub urbanisation wand protect the existing townscape. As well as this it will help maintain the landscape character of the area by reducing development.	

Comparative Analysis: Changes to Policy PM4: Settlement Boundaries

Biodiversity Flora and Fauna

Both alternatives are likely to have a positive impact on biodiversity flora and fauna as they restrict development out with settlement boundaries. This is likely to protect habitats in the countryside by reducing sub-urbanisation. Alternative 1 is the preferred alternative as it restricts all development and so is likely to have significant positive impacts on biodiversity flora and fauna.

Population

By restricting growth outwith settlements both alternatives are likely to have a positive impact on the population. By encouraging development in the existing towns the existing and proposed policies are likely to contribute to the sense of community within a settlement. However Alternative 2 is likely to have a more positive impact as it allows for essential businesses to be located outwith the settlement boundaries (when it can be demonstrated that there is not a suitable site within the settlement boundary) which will ensure that they are still accessible and can serve the community.

Human Health

Both alternatives will have a positive impact on human health as they are likely to reduce air pollution by encouraging development within existing settlements. This may also allow people to walk to work rather than drive which again will have a positive impact on human health. Alternative 2 will have more significant effects as it allows essential businesses to develop outwith settlement boundaries and so could reduce commuting times which will contribute towards a reduction in pollution levels.

Soil

Both polices will have the same positive impacts on soil. As they encourage development within settlement boundaries they protect existing undeveloped soils and they will encourage the development of brownfield sites within settlements.

Water

Both alternatives could have slightly positive impacts on the water environment. By restricting development outwith settlements the policy reduces the potential for water environments that are currently not effected by development to become negatively influenced.

Air

Both alternatives will have a positive impact on air quality. They will reduce the need for travel by ensuring development located within settlements which will reduce emissions. Alternative 2 is the preferred option in this alternative as it essential rural business development outwith settlement boundaries which could reduce commuting and therefore emissions.

Climatic Factors

As with air, both alternatives will have a positive impact on climate change by reducing emissions.

Material Assets

Both alternatives are likely to result in an increase in the use of existing buildings within settlement although this is unlikely to be significant. There is no preferred alternative in terms of material assets.

Cultural Heritage

Neither alternative will have a significant impact on cultural heritage.

Landscape

By only supporting development within existing settlement both polices will protect the existing townscape and character setting of the town or village. As well as this rural landscapes will be protected as the policy limits development. Both alternatives will have a significantly positive effect and so there is no preferred alternative in terms of landscape.

Conclusions

Overall the SEA supports Alternative 2 as it is most likely to result in significantly positive effects.

Assessment of Main Issue - Perth City Plan

The Perth City Plan sets out the Perth City Development Board's aspirations and a framework for action by the public and private sector to grow the city of Perth and its economy. It draws and builds on plans already adopted or under consideration by Perth & Kinross Council and other partners in the TAYplan Strategic Development Plan area. The City Plan is a non-statutory document which covers issues which extend beyond the scope of an LDP which is primarily a land use planning document. Nevertheless it is important that the LDP looks at how it supports the aspiration contained in the draft City Plan.

The MIR sets respond the City Plan and established appropriate actions that are required within the LDP to deliver the City Plan.

To support the City Plan the MIR proposes that non statutory guidance is prepared in the form of a prioritised action programme for enhancements to the key routes into the City Centre to enhance walking, cycling, and public transport. This will also identify the potential for further pedestrian/cycle bridges across the Tay and key actions to enhance the attractiveness of the gateways to the City.

Alternative 1- Prepare non statutory guidance in the form of a prioritised action programme for enhancements to the key routes into the City Centre to enhance walking, cycling, and public transport.

Alternative 2 – The Perth City Plan will be a standalone document supported by the existing policies in the LDP.

Table 30: Assessment of Perth City Plan Delivery Guidance

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	+/-		-	
	Preparing guidance will allow for more consideration of the location of development which will help avoid designated sites and protected habitats. It will also encourage the early consideration green networks, which will have a positive impact. However it is likely that new transport proposals will be on greenfield land which is likely to have a negative impact on biodiversity flora and fauna.	The guidance document should promote green networks to ensure a greater positive impact on biodiversity flora and fauna.	Dependant on location of the proposal however it is likely that transport enhancements will be on greenfield land and without early consideration of the potential for creating green networks could result in a negative impact on biodiversity flora and fauna.	Other policies within the LDP will promote green networks protect designated sites.
Population	+		+/-	
	Consideration of sustainable travel at an early stage will help ensure deliverability.	The guidance document should ensure	The ideas put forward in the City Plan are likely to have positive effects on the	
	This will ensure it serves the local communities which will have a positive impact on the population.	that any proposals support local communities.	population however, without supporting guidance document there may not be a delivery plan and so communities could miss out on the improvements, which could have a negative impact.	
Human Health	+		+/-	
	The guidance document will encourage public transport more sustainable transport including walking and cycling positive impact on human health.		The objectives of the Perth City Plan are likely to have positive impacts on human health and generally policy within LDP will support this. However, deliverability could be questioned without supporting guidance. It is also possible that large scale infrastructure projects could take priority over walking/cycling routes without the guidance document which could have negative impact on human health.	
Soil	+/-		+/-	
	Some enhancement measures are likely to be on greenfield land which could have a negative impact on soils however a forward thinking guidance document and delivery plan should consideration soil types at early stage avoiding any negative impacts. It is also possible that the delivery plan could encourage the use of brownfield land which will have a positive impact on soils.	The guidance document should aim to promote development on brownfield land and avoid areas with carbon rich soils or prime agricultural land.	Dependent on location however there is likely to be both positive and negative impacts as a result of the proposals in the Perth City Plan. There will be possible negative impacts, if development is proposed on greenfield land but there could be positive impacts through the use of brownfield land near roadsides.	Where possible transport enhancements should occur on brownfield land and avoid areas of carbon rich soils or prime agricultural land.
Water	0		0	
	No likely impact on the water environment however this is dependent on location of proposals.	Policies within the LDP will ensure that the water environment is protected.	No likely impact on the water environment however this is dependent on location of proposals.	Policies within the LDP will ensure that the water environment is protected.
Air	+		+	

	The proposed guidance document will encourage more sustainable travel methods which will reduce emissions. This will have a positive impact on air quality in Perth which is an Air Quality Management Area.		The objectives of the Perth City Plan could have a positive impact on air quality as they will encourage sustainable travel. The proposals are generally supported by policy within LDP but deliverability could be questioned without the supporting guidance and action plan.	
Climatic Factors	+		+	
	The proposed guidance document will have appositive impact on climatic factors as it well encourage more sustainable travel methods which will reduce emissions.		The objectives of the Perth City Plan could have a positive impact on climatic factors as they will result in a reduction in emissions. The proposals are generally supported by policy within LDP but deliverability could be questioned without the supporting guidance and action plan.	
Material Assets	+		+	
	The proposals within the Perth City Plan which will be developed in the support guidance support the sustainable development principles which are likely to have a positive impact on material assets.		The proposals within the Perth City Plan support the sustainable development principles which are likely to have a positive impact on material assets.	
Cultural Heritage	0		0	
	No likely impact on cultural heritage however this is dependent on location of proposals.	Policies within the LDP will ensure that cultural heritage is protected.	No likely impact on cultural heritage however this is dependent on location of proposals.	Policies within the LDP will ensure that cultural heritage is protected.
Landscape	0		0	
	No likely impact on the landscape however this is dependent on location of proposals.	Policies within the LDP will ensure that the landscape is protected.	No likely impact on the landscape however this is dependent on location of proposals.	Policies within the LDP will ensure that the landscape is protected.

Comparative Analysis: Preparation of Supplementary Guidance to Support the Transport Enhancements set out in the Perth City Plan

Biodiversity, Flora and Fauna

Both alternatives could have negative impacts on biodiversity flora and fauna as they could result in the loss of greenfield land and the loss of habitats. However alterative one which proposes a guidance document will encourage the early consideration of sustainable transport developments and could result in positive impacts through the promotion of green networks. Therefore alternative 1 is the preferred alternative.

Population

Alternatives 1 and 2 will support the development of sustainable transport measures which will have appositive impact on communities. However alternative 1 is likely to result in a strategic approach being taken which will ensure deliverability and promote suitable locations, resulting in positive an impact on the population.

Human Health

Alternatives 1 is likely to have a positive impact on human health as it will promote sustainable travel methods such as walking and cycling. Alternative 2 also promotes these objectives however there is not an emphasis on delivery. This could result in proposals being side lined in favour of large scale infrastructure budgets. Therefore alternative 1 is the preferred alternative as the proposed supporting guidance document will emphasise the importance of sustainable transport methods and so the positive impact on human health are more likely to be realised.

Soil

Neither alternative is likely to have a significant impact, either positive or negative, on soils, any impacts would be dependent on the location of proposals.

Water

Neither alternative is likely to have a significant impact, either positive or negative, on soils; any impacts would be dependent on the location of proposals.

Air

Both alternative will have a positive impact on air quality as encourage sustainable travel methods is likely to result in a reduction in emissions. However Alternative 1 will include an action programme which will help ensure these benefits are delivered.

Climatic Factors

Both alternative will have a positive impact on air quality as encourage sustainable travel methods is likely to result in a reduction in emissions. However Alternative 1 will include an action programme which will help ensure these benefits are delivered.

Material Assets

Both alternatives are likely to have an impact on material assets as they support sustainable development principles. There is not preferred alternative in this instance.

Cultural Heritage

Neither alternative is likely to have a significant impact, either positive or negative, on cultural heritage; any impacts would be dependent on the location of proposals.

Landscape

Neither alternative is likely to have a significant impact, either positive or negative, on the landscape; any impacts would be dependent on the location of proposals.

Conclusions

Both alternatives have the same overall aim, to encourage sustainable travel and enhance the existing facilities within Perth. Overall there is likely to be positive effects from this however consideration needs to be given to the location of these proposals.

Alternative 1 is the preferred alternative in terms of environmental impact. By supporting an action programme alternative 1 will allow for early consideration on the siting of the various enhancement proposals. It will also allow for greater consideration of green networks. As well as this the action programme will help ensure proposals are delivered which will ensure the environmental benefits are delivered.

Assessment of Main Issue - The Green Belt

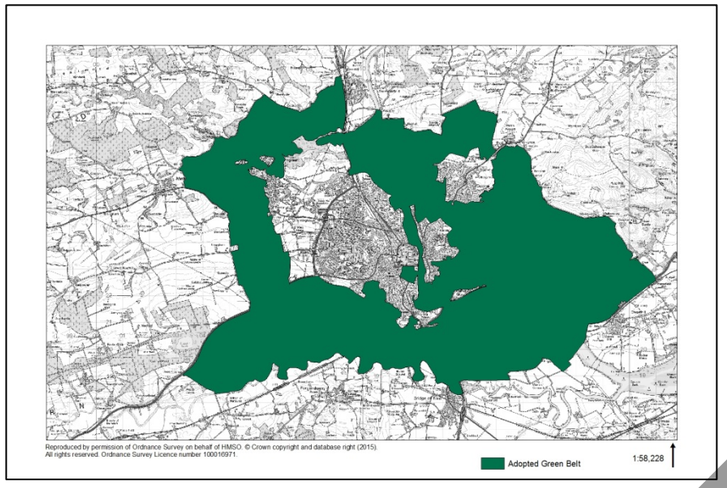
The Adopted LDP identifies a Green Belt around Perth sets the policy context in Policy NE5: Green Belt. The MIR proposes changes to both the boundary and the policy.

Changes to the Green Belt Boundary

The MIR suggests changing the Green Belt boundary in light of significant changes which have occurred during the Plan period. The preferred option put forward in the MIR is Alternative 2.

Alternative 1 – Keep the Green Belt boundaries as established in the Adopted LDP (see figure 34).

Figure 44: Green Belt Boundary in the Adopted LDP



Alternative 2 – Make the proposed boundary alterations as highlighted in the MIR (see figure 35).

Figure 45: Proposed Green Belt Boundary

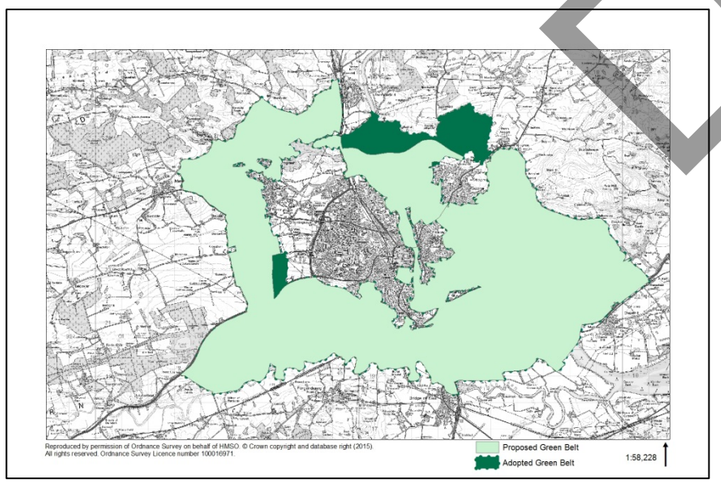


Table 31: Assessment of the Green Belt Boundary

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	++		++	
	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.	The proposed green belt boundary will have a positive impact on biodiversity flora and fauna s it will protect the area around Perth from Development. However it covers less of the River Tay SAC and less ancient woodland especially around Muirward woods which is home to protected species so the impacts are less significant.	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.
Population	0		0	
	The Green Belt boundary is unlikely to have an impact on the population.		The Green Belt boundary is unlikely to have an impact on the population.	
Human Health	0		0	
	The Green Belt boundary is unlikely to have an impact on human health.		The Green Belt boundary is unlikely to have an impact on human health.	
Soil	++		+	
	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 proposed green belt boundary will protect the soils, including areas of carbon rich soil, surrounding Perth from development. However 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	There will be policies within the LDP which will protect carbon rich soils and areas of prime agricultural land.

			change will also mean areas of prime agricultural land are removed from the green belt.	
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.	
Air	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.	
Climatic Factors	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.	
Material Assets	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.	
Cultural Heritage	++		+	
	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 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 and The 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.
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 green belt will also reduce urban sprawl and help ensure the existing townscape of Perth is protected.	

			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 resulting in positive impact on the landscape of the area.	

Comparative Analysis: Changes to Policy NE5: Green Belt

<u>Biodiversity Flora and Fauna</u>

Both boundary proposals will protect large areas of land surround Perth from development. However the proposed change will mean areas of ancient woodland and part of a SAC will be removed from the Green Belt. However these designations are already protected under national legislation and so the impact will be less significant. 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.

<u>Population</u>

The Green Belt boundary is unlikely to impact the population.

<u>Human Health</u>

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

<u>Soil</u>

Both alternatives will have a positive impact on soils as the green belt will protect them from future development. However the proposed change to the boundary will remove areas of prime agricultural land and carbon rich soils from the green belt. Therefore based on this assessment Alternative 1 is the preferred alternative as it protects a larger area of land from development.

<u>Water</u>

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

<u>Air</u>

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

<u>Climatic Factors</u>

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

Both alternatives will have a positive impact on cultural heritage they will protect the area surrounding Perth form development. Alternative 2 however covers a smaller area and parts of Tippermuir Battlefield and Scone Palace's Designed Garden are removed from the green belt. Although the negative impact on these sites can be mitigated against through national policy the preferred alternative is alterative 1 as it allows for greater protection covering a larger area.

Landscape

Alternative 1 and 2 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 of the Cross Tay Link Road and the rout for the A9 junction into Perth West. This provides a more logical edge to the green belt and will have a significantly positive impact on the environment.

Conclusions

Both alternatives are likely to have a positive impact on the environment. Overall alterative 1 has more positive impact based on the larger area covered. However when you consider mitigation measures, including the implications of national polices, it is unlikely that the boundary change will have a significant effect on the environment.

However the proposed boundary change will result in significantly positive effects the landscape of the area. Therefore is suggested that Alterative 2 is the preferred alternative as, based on national policy and the proposed mitigation is considerations, it is likely to result in the most significant effects.

Changes to Policy NE5: Green Belt

The MIR proposes changes to the policy wording of NE5 which will allow for more scope for development within the Green Belt. The preferred option put forward in the MIR is Alternative 2.

Alternative 1 – Keep the policy wording the same as in the Adopted LDP which is shown below.

Policy NE5: Green Belt
Within the area designated as Green Belt, development will only be permitted where: (a) It can be demonstrated that the development is essential for agriculture, horticulture (including allotments) or forestry operations that are appropriate to the Green Belt; or (b) It constitutes woodlands or forestry, including community woodlands; or (c) It constitutes uses which advance the Council's aims of improving public access to the countryside around Perth and are appropriate to the character of the Green Belt, including recreational, educational and outdoor sports development including modest related buildings which are located and designed in such a way as not to detract from the character of the Green Belt; or (d) For buildings, where it involves alterations, extensions and changes of use to existing buildings these must not detract from the character of the Green Belt, (in the case of changes of use to residential property, these will only be permitted where the building is of suitable architectural quality); or (e) For essential infrastructure such as roads and other transport infrastructure, masts and telecom equipment it must be demonstrated that they require a Green Belt location; and (f) For all development within the Green Belt appropriate measures may require to mitigate any adverse impact on the character of the Green Belt. **Notes:** 1. The Housing in the Countryside Policy RD3 does not apply in the Green Belt. 2. The Council, in partnership with landowners and others, will seek to prepare Supplementary Guidance which will take the form of a management plan for the Green Belt with the aim of developing the following: A sustainable rural economy Increased recreational usage Landscape enhancement where appropriate Improved path network providing links to the wider countryside Links to relevant Green Networks within settlements

Alternative 2 – Amend the policy wording to allow more scope for development in the Green Belt as shown below.

Policy NE5: Green Belt
Within the area designated as Green Belt, development will only be permitted where: (a) It can be demonstrated that the development either supports an established use, or develops a new business within the Green Belt which has a direct relationship to the land; or (b) It can be demonstrated that the development is essential for agriculture, horticulture (including allotments) or forestry operations; or (c) It constitutes woodlands or forestry, including community woodlands; or (d) It constitutes uses which advance the Council's aims of improving public access to the countryside around Perth, including recreational, educational and outdoor sports; or (e) It complies with criteria d) or e) of the Housing in the Countryside Policy RD3 and associated Supplementary Guidance, and a positive benefit to the Green Belt can be demonstrated; or (f) It constitutes essential infrastructure such as roads and other transport infrastructure, masts and telecom equipment, or renewable energy. The primary consideration will be whether the infrastructure could instead be located on an alternative site which is outwith the Green Belt and a statement may be required identifying the search area and the site options assessed, and the reasons as to why a Green Belt location is essential. For all proposals development must be appropriate to the character of the Green Belt. All proposals for new buildings or extensions to existing buildings must be of a suitable scale and form, located and designed in such a way so as not to detract from the character of the Green Belt. Appropriate measures may be required to mitigate any adverse impact on the character of the Green Belt.

Table 32: Assessment of the Green Belt Policy

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	++		+	
	The green belt policy protects a large area of land from development and so is likely to have a positive impact on the environment as it will protect many different habitats surrounding Perth. This is particularly important as there are three SSSIs within the Green Belt as well as areas of protected woodland. The River Tay SAC runs through the Perth and so the Green Belt will provide extra protection to this site. The existing policy also encourages connection to green networks which is likely to reduce habitat fragmentation resulting on a positive effect on biodiversity.		The principle aim of the proposed policy is to protect the green belt. It only allows development where it can be demonstrated that it is appropriate or essential to this area. This level of protection is likely to have a positive impact as it will protect biodiversity flora and fauna in the area. This is particularly important as there are three SSSIs within the Green Belt as well as areas of protected woodland. The River Tay SAC runs through the Perth and so the Green Belt will provide extra protection to this site.	The proposed policy could rewritten to emphasise the importance of connecting to Green Networks.
Population	++		++	
	The existing green belt policy could have a significant impact on the population as it will supports the development of paths and links to green networks within settlements which will make open space more accessible. This will help improve the sense of place thus having a positive impact on the population.		The proposed green belt policy could have a significant impact on the population as it will supports improvement of public access to the countryside around Perth, including recreational, educational and outdoor sports. This will help improve the sense of place thus having a positive impact on the population.	
Human Health	++		++	
	There will be positive effects as a result of the exiting green belt policy as it will reduce development which could help reduce air pollution in the area surrounding Perth (there is already an AQMA within Perth) which will have a positive impact on human health. The green belt policy also encourages the improvement of links to the countryside and core paths which will make the countryside more accessible which could potentially have a positive impact on human health.		There will be positive effects as a result of the proposed green belt policy as it will reduce development which could help reduce air pollution in the area surrounding Perth (there is already an AQMA within Perth) which will have a positive impact on human health. The green belt policy also encourages the improvement of links to the countryside and core paths which will make the countryside more accessible which could potentially have a positive	

			impact on human health.	
Soil	+		+	
	The green belt policy encourages the reuse of buildings which will have a positive impact (Particularly where redevelopment occurs in areas of contaminated land.	The Green Belt policy emphasise the importance of protecting areas of prime agricultural land and carbon rich soils.	The green belt policy encourages the reuse of industrial buildings which will have a positive impact (Particularly where redevelopment occurs in areas of contaminated land.	The Green Belt policy emphasise the importance of protecting areas of prime agricultural land and carbon rich soils.
Water	+		+	
	By protecting the Green Belt from the majority of development the green belt policy will be protecting the water environment from any potential damage as a result of development.	The water environment will be protected through other polices which will appear within the LDP.	By protecting the Green Belt form the majority of development the proposed green belt policy will be protecting the water environment from any potential damage as a result of development.	The water environment will be protected through other polices which will appear within the LDP.
Air	+		+	
	The green belt policy restricts development in the area surrounding Perth. This will have positive impact on air quality as there will be less development which will reduce the likelihood of air pollution. However it is unlikely that these positive impacts will be significant.		The proposed green belt policy restricts development in the area surrounding Perth. This will have positive impact on air quality as there will be less development which will reduce the likelihood of air pollution. However it is unlikely that these positive impacts will be significant.	
Climatic Factors	+		+	
	The green belt policy is unlikely to have a significant impact on climatic factors. It may have a slightly positive impact as it reduces development and so avoids exacerbating the	Other polices in the LDP should ensure new buildings are built using sustainable construction methods and	The proposed green belt policy is unlikely to have a significant impact on climatic factors. It may have a slightly positive impact as it reduces development and so	Other polices in the LDP should ensure new buildings are built using sustainable construction methods and are out with areas of

	impacts of climate change but this will not be significant.	are out with areas of known flood risk.	avoids exacerbating the impacts of climate change but this will not be significant.	known flood risk.
Material Assets	+		+	
	The Green Belt policy encourages the reuse of existing buildings which could have a positive impact but it is unlikely this will be significant.	Polices within the LDP will ensure that material assets are protected.	The Green Belt policy encourages the reuse of existing buildings which could have a positive impact but it is unlikely this will be significant.	Polices within the LDP will ensure that material assets are protected.
Cultural Heritage	0		0	
	There is unlikely to be significant environmental impacts on cultural heritage as a result of the green belt policy.	Other policies within the LDP will require the protection of cultural heritage assets.	There is unlikely to be significant environmental impacts on cultural heritage as a result of the proposed green belt policy.	Other policies within the LDP will require the protection of cultural heritage assets.
Landscape	++		++	
	The green belt policy will have significant positive impacts on landscape. It encourages landscape enhancement and ensures that and new development mitigates and adverse impact on the character of the green belt. This is particularly import and the Green Belt encompasses pert of the Sidlaws Special Landscape Area. As well as this the existing policy will restricts development around Perth protecting the existing townscape.		The proposed green belt policy will have significant positive impacts on landscape. It encourages landscape enhancement and ensures that and new development mitigates and adverse impact on the character of the green belt. This is particularly import and the Green Belt encompasses pert of the Sidlaws Special Landscape Area. As well as this the proposed policy will restricts development around Perth protecting the existing townscape.	

Comparative Analysis: Changes to Policy NE5: Green Belt

Biodiversity Flora and Fauna

Both policy options will have a positive effect on biodiversity, flora and fauna as they protect the land. However, the existing policy will have a more significant impact, as it encourages links to green networks. The preferred option in this instance would be Alternative 1.

Population

Alternatives 1 and 2 will have a positive impact on the population by improving access to the countryside and supporting the development and improvement of core paths. The impact from both alternatives will be the same and so there is no preferred option in terms of the impact on the population.

Human Health

Again both alternatives will have equal impact on the environment in terms of human health. They are both likely to improve access to the countryside and could reduce air pollution resulting in a potential improvement to human health. Therefore there are no preferred alternatives.

Soil

Alternative 1 and Alternative 2 both encourage the reuse of existing building. This could have a positive impact on the soil as it could result in improvement to previously contaminated land. The policies also restrict development which will protect existing soils. There are no preferred alternatives as both will have equal impact on soils.

Water

Neither alternative will have a significant impact on the water environment. Positive impacts may occur as a result of the restriction on development but this will not be significant.

Air

By reducing development both alternatives could have a positive impact on air quality however this is unlikely to be significant. Again there are no preferred alternatives in term of the impact on air.

Climatic Factors

There are no likely significant effects as a result of either alternate on climate change. By reducing development they are likely to have appositive impact as they will not contribute to existing carbon levels but this will not be significant. Both alternatives could be supported as they have minimal environmental impact with regards to climate change.

Material Assets

Again both alternatives could be supported. Both policy options encourage the reuse of existing buildings and so a positive impact on the environment is predicted.

Cultural Heritage

There is unlikely to be an impact on cultural heritage as a result of either green belt policy.

Landscape

Both the existing green belt policy and the proposed policy will have a significantly positive impact on the landscape. By restricting development around Perth they will protect the existing character of the town and both policies encourage the enhancement of the landscape. There are no preferred alternative in terms of landscape as both will have significantly positive impacts.

Conclusions

It can be concluded that both alternative are likely to result in a positive impact on the environment. However the preferred alternative in terms of environmental impact would be Alternative one as it encourages links to green networks.

Assessment of Main Issue - District Heating

Scottish Planning Policy (SPP) 2014 provides a policy framework within which district heating systems are strongly encouraged across all local authorities. Policy ER1 (Renewable & Low Carbon Energy) of the Adopted Local Development Plan is currently the key policy for the assessment of renewable energy development proposals, however this does not make specific reference to district heating/cooling systems and/or identify specific areas where these developments could be deployed.

The MIR proposes a change to Policy ER1 in line with SPP which will make specific reference to district heating.

Alternative 1 - Keep the policy wording the same as in the Adopted LDP which is shown below.

Policy ER1: Renewable and Low Carbon Energy Generation

Policy ER1A: New proposals

Proposals for the utilisation, distribution and development of renewable and low carbon sources of energy will be supported subject to the following factors being taken into account:

(a) The individual or cumulative effects on biodiversity, landscape character, visual integrity, the historic environment, cultural heritage, tranquil qualities, wildness qualities, water resources, aviation, telecommunications and the residential amenity of the surrounding area.
(b) The contribution of the proposed development towards meeting carbon reduction targets.
(c) The effects on the elements listed in criterion (a) of the connection to the electricity distribution or transmission system.
(d) The transport implications, and in particular the scale and nature of traffic likely to be generated, and its implications for site access, road capacity, road safety, and the environment generally.
(e) The hill tracks and borrow pits associated with any development.
(f) The effects on carbon rich soils.
(g) Any positive or negative effects they may have on the local or Perth & Kinross economy including tourism and recreation interests either individually or cumulatively.
(h) In the case of large-scale onshore wind energy developments, their fit with the spatial framework for wind energy developments.

Proposals for the development of renewable and low carbon sources of energy by a community will be supported provided it has been demonstrated that the factors (a) - (h) itemised above have been fully considered.

Policy ER1B: Extensions of Existing Facilities

Proposals for the extension of existing renewable energy facilities will be assessed against the same factors and material considerations as apply to proposals for new facilities.

In all cases the Council will require the removal of the development and associated equipment and the restoration of the site whenever the consent expires or the project ceases to operate for a specific period.

Note: Supplementary Guidance will provide a spatial framework for large-scale wind energy developments, and further explain the locational, technological, environmental, and design requirements for developers to consider in making their applications for a range of other renewable and low carbon energy generating developments, including: small-scale wind energy developments and single turbines, hydro-schemes, woody biomass, landfill gas, energy from waste, anaerobic digestion, energy storage, large photovoltaic arrays, and micro-generation.

Alternative 2 – Amend the policy wording to require all new development to considered heat networks as shown below.

The **preferred approach** is to amend Policy ER1 (Renewable & Low Carbon Energy) of the Adopted Local Development Plan to provide a policy framework to encourage renewable heat opportunities and to enable their detailed assessment, including text changes to make reference to detailed guidance which is being prepared in the forthcoming SG on Renewable and Low Carbon Energy.

In line with SPP, it is considered the amended Policy ER1 should require all new major developments within identified district heating/cooling opportunity areas to investigate the feasibility of linking in to existing/planned, and/or creating new, heat networks. Out-with the identified district heating/cooling opportunity areas, those major developments which have significant identified heat/cooling demand requirements and/or heat generation capacity shall also require to investigate the feasibility of connecting to an existing/planned, and/or creating a new, heat network.

Where it has been demonstrated that a connection can be made, the development should include infrastructure for connection, providing the option to use heat from, and/or supply heat to, an existing/planned/future network. Where it is not feasible to connect, micro-regeneration and heat recovery technologies are to be provided, including infrastructure to enable future connection to an existing/planned/future network.

Table 33: Assessment of the District Heating Policy

SEA Topic	Alternative 1	Mitigation/ Enhancement	Alternative 2	Mitigation/ Enhancement
Biodiversity, Flora and Fauna	-		-	
	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on biodiversity, flora and fauna depending on type scale and location of proposals.	Policies within the LDP will protect biodiversity, flora and fauna and encourage green infrastructure.	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on biodiversity, flora and fauna depending on type scale and location of proposals.	Policies within the LDP will protect biodiversity, flora and fauna and encourage green infrastructure
Population	0		0	
	No likely impact		No likely significant impact	
Human Health	0		0	
	No likely significant impact		No likely significant impact	
Soil	-		-	

	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on soils depending on type scale and location of proposals.	Policies within the LDP will protect prime agricultural land and carbon rich soils.	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on soils depending on type scale and location of proposals.	Policies within the LDP will protect prime agricultural land and carbon rich soils.
Water	-		-	
	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on the water environment depending on type scale and location of proposals.		This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on the water environment depending on type scale and location of proposals.	
Air	+		++	
	The existing policy encourages renewable energy generation which will reduce greenhouse gas emissions resulting in positive impacts on air quality.		The proposed policy will encourage renewable energy generation and the consideration of opportunities to connect to heat networks. This will result in a greater reduction of emissions and could result in a significantly positive impact on air quality.	
Climatic Factors	+		++	
	The existing policy will encourage renewable energy generation which will have a positive effect on climatic factors as it will reduce greenhouse gas emissions and help build resilience to climate change.		The proposed policy will encourage renewable energy generation which will have a positive effect on climatic factors as it will reduce greenhouse gas emissions. Greater encouragement for heat networks will reduce areas vulnerability to climate change. It will ensure buildings are more sustainable furthering the positive impact on climatic factors.	
Material	-		-	
Assets	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on material assets (in terms of re-use of land) on type scale and location of proposals.		This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on material assets (in terms of re-use of land) depending on type scale and location of proposals.	
Cultural Heritage	0		0	
	No likely significant impact		No likely significant impact	
Landscape	-		-	
	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on landscape and townscape depending on type scale and location of proposals.	Policies within the LDP will protect important landscapes.	This policy does not direct development to certain locations however its likely hat renewables will be developed on greenfield sites. This could result in a negative impact on landscape and townscape depending on type scale and location of proposals.	Policies within the LDP will protect important landscapes.

Comparative Analysis: Small Sites Contribution

<u>Biodiversity, Flora and Fauna</u>

Both alternatives could potentially have a negative impact on biodiversity flora and fauna as they will encourage the use of greenfield land. There is no preferred alternative in terms of biodiversity flora and fauna.

<u>Population</u>

Neither alternative is likely to have an impact on the population.

<u>Human Health</u>

Neither alternative is likely to have an impact on human health.

<u>Soil</u>

There is no preferred alternative in terms of the impact on soils. Both alternatives are likely to have a negative impact as they are likely to result in loss of greenfield land.

<u>Water</u>

Neither alternative is likely to have a significant impact on the water environment. However both alternatives could result in negative impact through the release of greenfield land.

Air

In terms of the impact on air alternative to is likely to have a significantly positive impact. Both alternatives will result in enhancement of air quality by encouraging renewables; however alternative 2 will have a more significant impact as it will include a requirement to consider heat networks. Alternative 2 is therefore the preferred alternative.

Climatic Factors

Alternative 2 is likely to result in the most significant impact on climate change as it will require the investigation of district heating opportunities which will result in a reduction in emissions. Alternative 2 is the preferred alternative.

Material Assets

Both alternatives could have a negative impact on material assets at they are likely to result in development on greenfield land.

Cultural Heritage

Neither alternative is likely to have an impact on the population.

Landscape

Again both alternative could have a negative impact on the landscape as they will result in the development of greenfield land and so there are no preferred alternatives.

Conclusions

Based on the above assessment attentive 2 is the preferred option as it is likely to have a more positive impact on the environment. Both alternatives encourage renewables which will have a positive impact on climate change and air quality however they are likely to result in negative impacts on biodiversity, flora and fauna, water, soils and landscape though the release of greenfield land. Alternative 2 will have result in more significant impact on air quality and climate change by encouraging renewable and so is the preferred alternative.

Cumulative Assessment of other Policies, Programmes or Strategies

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 effects can be enhanced by similar actions in other areas. Table6 provides a summary of these outcomes.

Table 34: Cumulative Assessment of Plan Programmes and Strategies

TAYplan Proposed Plan 2015	Tay Area Management Plan 2009-15	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
Biodiversity, Flora and Fauna				
Pressures from increased, poorly implemented or inappropriate development impact on habitat networks and wildlife corridors, both designated and non-protected. Cumulative development pressure on the TAYplan coastline, impact on birds, fish and marine mammals that are part of the qualifying interests of Natura sites. There are indirect effects such as disturbance, sedimentation and nutrient enrichment in watercourses/ waterbodies such as River Tay, Loch Leven and Dunkeld-Blairgowrie Lochs. Non-native species can have long term impacts on ecological communities, impacting watercourses in the TAYplan area. 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.	Measures to address diffuse pollution and point source pollution will improve water quality, reduce Eutrophication and therefore have benefits for aquatic ecosystems. Water efficiency measures could potentially result in more water being available for aquatic ecosystems and for greater dilution of pollutants. 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. Measures to improve morphology will lead to direct improvements for aquatic and riparian habitats. Measures to deal with non-native invasive species will likely lead to direct biodiversity benefits in the affected areas.	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). 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. 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.	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).	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. 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. Overall, the Plan has potentially significant cumulative adverse effects that would not be mitigated by other plans.
Population and Human Health				
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 Overall, the spatial strategy has a framework	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.	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.	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	Overall, the Plan would have significant positive cumulative effects when acting with other plans.

TAYplan Proposed Plan 2015	Tay Area Management Plan 2009-15	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
that would guide development in a positive manner that would improve the quality of life for the TAYplan population. 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.	Water efficiency measures could potentially result in more water being available for the dilution of pollutants and hence provide additional protection for protected areas. 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. Water improvements may increase amenity value of water bodies in the river basin district.	NPF can support improvements to environmental quality. This includes 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. 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. NPF could consider scope for future proofing new development from climate change through location, layout and building design. Planning can support outdoor recreation including walking and cycling access around and between communities.	then negative 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. 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.	
Soil & Water				
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. 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. 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.	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. 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. Measures relating to abstraction and flow regulation may also lead to benefits for soils by reducing erosion by floods or soil loss through drought. 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 erosion.	Potential effects on water quality from economic development in and around cities and in accessible areas. Effects on water supplies arising from economic development in and around cities and in accessible areas. Potential for soil sealing arising from green-field site development to accommodate strategic economic development on edge of cities and in accessible areas. Impacts on coastal waters arising from an emphasis on shipping sector. Increased risk of water pollution and damage or loss of soils, arising from processes of derelict land remediation.	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.	Possible flooding and water management issues arising in the Tay and Earn catchments. The potential significant adverse effects could be mitigated to some extent by other plans.

TAYplan Proposed Plan 2015	Tay Area Management Plan 2009-15	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
	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.			
Air				
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. 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. 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.	Does not propose measures that will affect, either positively or negatively, the air quality of the region.	Potential impacts on air quality as a result of national transport developments and economic development. Effects of renewable and mixed use energy infrastructure support depend on the performance of energy sectors.	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.	Overall, the Plan has potentially significant adverse effects.
Climatic Factors				
The spatial strategy will promote a large amount of development in coastal areas and areas at risk from flooding. The majority of these areas are low-medium risk.	Many measures will result in positive effects, particularly in relation to sustainable flood management, mitigation of floods and droughts, and climate change adaptation. 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. Measures relating to abstraction and flow regulation in particular may have positive benefits for the management of floods and droughts.	Does not propose measures that will affect, either positively or negatively, the climate quality of the region.	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 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.	Conflicts arising from long-term development aspirations and climate change impacts on capacity. Potential conflicts between settlement patterns that build in climate change adaptation and more traditional environmental constraints including biodiversity, cultural heritage, and landscape. Overall, other plans would mitigate the potential negative impacts of the Plan.
Material Assets				
The strategy has the potential to promote and ensure high standards of sustainable design and construction, the effects will largely depend on	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	Potential impact on natural resources and increased waste as a result of economic development.	The RTS includes measures that would help to maintain the quality of transport infrastructure and also introduce measures to encourage more	The Plan's impact is uncertain as it will depend on implementation.

TAYplan Proposed Plan 2015	Tay Area Management Plan 2009-15	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
implementation as well as spatial allocation. This highlights the importance of design quality. There is the potential to have cumulative negative impacts associated with rising sea-levels and infrastructure security, in the Perth Core Area. 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.	a result of the above, it is possible that this could delay the need for additional new infrastructure.	Requirement to consider strategies for waste reduction will depend on implementation, technology and sector growth	sustainable design and construction techniques and use of recycled materials.	
Cultural Heritage				
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. Current and predicted development areas place significant pressure on many of the region's cultural assets. Overall, the spatial strategy proposes development that could have negative impacts on the historic environment through incremental losses if protection is not properly given.	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.	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.	Negative impacts on the historic character or setting of small and medium sized towns as a result of development/diversification. Potential for loss or damage to the historic environment arising from development and associated visitor activity. Overall, the impact of the Plan is uncertain as it depends on how all plans are implemented.
Landscape				
The proposals under the spatial strategy provide the opportunity to positively impact on landscape through the regeneration of Dundee. 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.	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.	Potential for cumulative effects of economic growth on landscape quality and character. 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.	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	Impacts on urban fringe landscapes arising from reallocation of industrial land for mixed use development. Potential conflict between commitments to renewable energy development and emphasis on protecting and enhancing landscapes. Possible effects on landscape arising from requirements for new waste and road infrastructure. The impact of the Plan is uncertain as it is dependent on how all plans are implemented.

TAYplan Proposed Plan 2015	Tay Area Management Plan 2009-15	National Planning Framework 3	TACTRAN Regional Transport Study	Overall Effects on the LDP Area
			identified to reduce the negative impacts of these schemes (which do also have potential to reduce congestion with subsequent environmental benefits).	

CONCLUSIONS AND RECOMMENDATIONS

Assessment of the Vision

The assessment of the vision showed that 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.

Site Assessments

The site assessments highlighted the potential issues with each site and highlighted site specific mitigation measures that could address these issues. It is **recommended** that these are considered when allocating sites. The mitigation measure will include developer requirements which will reduce the negative environmental impact.

Cumulative Assessments for each Settlement

The cumulative assessment was used to highlight the Environmental Impact of each alternative highlighted within the MIR. The following conclusions could be made for each settlement.

Alyth

It is suggested that there is only one reasonable alternative for Alyth, which is to allocate an area of housing on what is currently white land at Annfield Place. Based on the cumulative assessment, the level of development proposed in Alyth could have could have a negative impact particularly on the water environment as flooding is a risk. It is **recommended** that a flood risk assessment is required as a developer requirement for sites within Alyth to mitigate these negative impacts. It is expected that policies within LDP2 will help minimise the negative impacts on other areas of the environment for example landscape and biodiversity flora and fauna. To conclude there is potential for negative environmental impacts as a result of development in Alyth but through the use of developer requirements and LDP2 policies these could be minimised and potentially outweighed by the potential for positive impact on the population.

Blairgowrie and Rattray

There are two alternatives proposed for Blairgowrie and Rattray with the preferred alternative in the MIR including an eastern expansion to Blairgowrie. The increased level of development which would occur with the proposed eastern expansion could have a significantly negative impact on the landscape and cultural heritage. It is **recommended** that these are mitigated through developer requirements which will include the protection of scheduled monuments and archaeological sites as well as a requirement for a landscape framework. To conclude the benefits to the population as a result of development in Blairgowrie, and the ability to mitigate against the negative impacts of such development means that there is unlikely to be a significantly negative impact. However, it is **recommended** that the preferred alternative should exclude the eastern expansion to Blairgowrie (if additional housing numbers are not required) as this will help reduce environmental impact.

Coupar Angus

As there are no new sites proposed in Coupar Angus, the preferred option is to continue with the sites allocated with LDP1. Overall there is likely to be a negative environmental impact, which would be expected with an increase in development, however it is unlikely to result in a significantly negative impact. It is **recommended** that any negative impacts are reduced by developer requirements and the application of policies within LDP2 that will protect the cultural heritage the water environment, detailed recommendations for which can be found tin the site assessments.

Meigle

There are no new sites prosed for Meigle, therefore the preferred alternative is to continue with the existing LDP1 allocations. The cumulative assessment has shown that although there is potential for negative impacts it is unlikely that this will be significant. It is **recommended** to carry forward the existing sites along with any site specific developer requirements highlighted in the site assessments.

Aberfeldy

Three alternatives are proposed for Aberfeldy. The preferred option within the MIR is to continue with the existing allocation in the adopted LDP. Alternative 1 proposes the inclusion of an additional site at Amulree Road and alternative 2 includes this site but proposes the removal of H73. Based on the cumulative assessment it can be concluded that the preferred option is least likely to have a significantly negatively impact on the environment, as the site at Amulree Road will result in a significantly negative impact on the environment. However it is **recommended** that due to the cumulatively negative impact on the water environment, particularly in terms of flooding, a developer requirement should be included for these sites.

Dunkeld and Birnam

There are no alternatives within Dunkeld and Birnam; it is proposed to carry forward the existing LDP allocations. 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 requirement. However the increase in development in the area will result in significantly negative impact on the landscape. It is **recommended** that developer requirement be included for all sites within Dunkeld and Birnam to ensure consideration of appropriate landscaping to reduce the adverse impacts.

Pitlochry

There are two alternatives in Pitlochry. The preferred alternative is to extend the sites within the adopted LDP and the other alternative is to carry on with the allocations as they appear in the adopted LDP. It is **recommended** that the preferred alternative should be to extend the sites due the minimal comparative impact on the environment and the potential for the extensions to result in positive impact on material assets. However further investigation is required through the HRA to ensure there is no adverse impact on the River Tay SAC.

Perth

There is a high level of development proposed within Perth which will result in negative impact. However, based on the cumulative assessment it is unlikely that additional sites proposed will result in a more significantly negative environmental impact as the majority of sites are within the existing built up area. The proposed additional site will have a positive impact on the landscape, population and human health but it is **recommended** that to avoid and adverse environmental effects the mitigation and enhancement measures highlighted in the site assessments are considered.

Abernethy

There are no new sites prosed for Abernethy, therefore the preferred alternative is to continue with the existing LDP1 allocations. The cumulative assessment has shown that although there is potential for negative impacts it is unlikely that this will be significant. It is **recommended** to carry forward the existing sites along with any site specific developer requirements highlighted in the site assessments.

Bridge of Earn/Oudenarde

There are no new sites proposed in Bridge of Earn/Oudenarde and so the preferred alternative is to continue with the allocation from LDP1. H15 is a strategic expansion site and will result in negative environmental effects, particularly on solids and the water environment. It is **recommended** that measures proposed through the site assessment to mitigate against this are carried forward into site specific developer requirements. This will result in an overall reduction on the potential adverse environmental impacts within Bridge of Earn/Oudenarde.

Dunning

There are no new sites prosed for Dunning, therefore the preferred alternative is to continue with the existing LDP1 allocations. The cumulative assessment has shown that although there is potential for negative impacts it is unlikely that this will be significant. It is **recommended** to carry forward the existing sites along with any site specific developer requirements highlighted in the site assessments.

Scone

The preferred alternative for Scone is to extend site H29 to allow for better access and the preferred option is to keep the sites as established in the adopted LDP. The extension proposed will result in significantly negative impact on biodiversity, flora and fauna and cultural heritage as it is likely to result in the loss of ancient woodland and habitats where protected species have been recorded and there are sensitivities from listed building and archaeological interest. However it is not felt that these negative impacts will have a cumulative impact on the settlement. Therefore it is **recommended** that site specific requirements protect and retain areas of important trees, planting and hedgerows to reinforce biodiversity value and that areas of high value ancient woodland are protected.

Stanley

There are no new sites prosed for Stanley, therefore the preferred alternative is to continue with the existing LDP1 allocations. The cumulative assessment has shown that although there is potential for negative impacts it is unlikely that this will be significant. It is **recommended** to carry forward the existing sites along with any site specific developer requirements highlighted in the site assessments.

Balado

There are no new sites prosed for Balado, therefore the preferred alternative is to continue with the existing LDP1 allocations. The cumulative assessment has shown that although there is potential for negative impacts it is unlikely that this will be significant. It is **recommended** to carry forward the existing sites along with any site specific developer requirements highlighted in the site assessments.

Blairingone

There are no new sites prosed for Blairingone, therefore the preferred alternative is to continue with the existing LDP1 allocations. The cumulative assessment has shown that although there is potential for negative impacts it is unlikely that this will be significant. It is **recommended** to carry forward the existing sites along with any site specific developer requirements highlighted in the site assessments.

Kinross

The preferred option for Kinross is to continue with the exiting LDP1 sites but remove OP15, the alternative is for OP15 to become a housing site. There is potential for significantly negative impact on soils as a result of the proposed development in Kinross, which is worsened with the inclusion of OP15 as it will result in the loss of more agricultural land. Therefore it is **recommended** that OP15 be removed and the preferred alternative should be to continue with the rest of the existing LDP1 sites as proposed in the MIR. There will be a need for site specific developer requirements and further investigation will be required through the HRA to make sure that development will not result in an adverse effect on the Loch Leven SAC.

Milnathort

The preferred alternative for Milnathort is to carry forward the existing LDP1 sites but to remove OP19 and amend the boundary to OP16. The alternative is to continue with the LDP1 sites including OP19 and amend the boundary to OP16. The cumulative assessment supports the removal of the site OP19 as it is likely to contribute towards a significantly negative impact on soils within the area. It is **recommended** that as set out in the MIR the preferred alternative should be to remove site OP19. As well as this further investigation will be required through the HRA to ensure there is no significant effect on the integrity of the Loch Leven SAC and developer requirements will be required for several sites to mitigate the impact with regards to flood risk.

Inchture

Within Inchture the preferred option is to continue with the LDP1 allocation and an alternative is proposed which includes a new site at Mains of Inchture as well as the existing LDP1 site. This additional site will have a negative impact on the environment with a significantly negative impact on soils. Although there is potential of these impacts to be mitigated against the preferred alternative from the SEA should be to continue with the existing LDP1 sites as highlighted in the preferred alternative in the MIR. Although there are potential negative impact as a result of this development in Inchture the cumulative assessment highlights that there is less potential for a negative environmental impact as a result of the preferred alternative.

Auchterarder

The preferred alternative within Auchterarder is to amend the site at Kirkton which was proposed through the development framework to include an area of housing rather than employment. The alternative is to keep this site as employment as agreed in the framework. Based on the cumulative assessment there is unlikely to be a significantly negative impact as a result of this change of use. It is **recommended** that to reduce the environmental impact as a result of development will require developer requirements for mitigation and enhancement as set out in the site assessment.

Crieff

Within Crieff the preferred alternative is to increase density within site MU7, keeping the allocations the same as within the existing LDP1. The alternative is to keep the sites and the densities the same as established in LDP1. There is already an air quality management area within Crieff and the cumulative assessment has shown that the increase in development is likely to exacerbate this issue. The increase in density within MU7 is likely to result in a significantly negative impact on the area which will be difficult to mitigate against. It is **recommended** that if it is possible to meet the housing numbers without increasing density within MU7 this should be the preferred alternative taken forward within the MIR.

Assessment of Main Issues

The following conclusions and recommendations could be made from the assessment of the Main Issues.

Assessment of Main Issue One – Housing

Housing Numbers

Both alternatives will have mixed impact on the environment. For both alternatives mitigation and enhancement measures have been suggested. The majority of these mitigation proposals can be achieved through the policies within the LDP which will encourage positive environmental effects.

The main difference between the two alternatives is that alternative one will allocate more housing. This will put greater pressure on the land and so there is potential for there to be greater negative impacts. From this we can conclude that the preferred alternation should be Alternative 1.

Flexibility Allowance

Overall the level of development and opportunities for protection and enhancement of the environment mean that the impact of additional housing should be minimised. The proposed changes in the Main Issues Report offer options for managing the scale of new housing growth and where that growth is met. The greater the flexibility through such potential policy changes, the greater the opportunity to protect, manage and enhance the environment in meeting housing need and planning for the most sustainable development strategy.

Small Sites Contribution

In terms of SEA the preferred alternative would be alternative 1 which allows for a larger proportion of the housing numbers to come through smaller sites as it is less likely to result in negative environmental impacts.

Delivery Strategy

Alternative 1 encourages the early consideration of infrastructure and helps ensure sites will be delivered. This is likely to result in positive impact on the environment and will encourage the sustainable development of sites. Alternative 1 is the preferred alternative as it will have the greatest environmental benefit.

Assessment of Main Issue Two – Settlement Envelopes

Overall the SEA supports Alternative 2 which allows for necessary infrastructure development to occur outwith the settlement envelopes as it is most likely to result in significantly positive effects, particularly in terms of population and human health.

Assessment of Main Issue Three – Perth City Plan

Both alternatives have the same overall aim, to encourage sustainable travel and enhance the existing facilities within Perth. Overall there is likely to be positive effects from this however consideration needs to be given to the location of these proposals.

Alternative 1 is the preferred alternative in terms of environmental impact. By supporting an action programme alternative 1 will allow for early consideration on the siting of the various enhancement proposals. It will also allow for greater consideration of green networks. As well as this the action programme will help ensure proposals are delivered which will ensure the environmental benefits are delivered.

Assessment of Main Issue Four - The Green Belt

Changes to the Green Belt Boundary

Both alternatives are likely to have a positive impact on the environment. Overall alterative 1 has more positive impact based on the larger area covered. However when you consider mitigation measures, including the implications of national polices, it is unlikely that the boundary change will have a significant effect on the environment.

However the proposed boundary change will result in significantly positive effects on the landscape of the area. Therefore is suggested that Alterative 2 is the preferred alternative as, based on national policy and the proposed mitigation is considerations, it is likely to result in the most significant effects.

Changes to Policy NE5: Green Belt

It can be concluded that both alternatives are likely to result in a positive impact on the environment. However the preferred alternative in terms of environmental impact would be Alternative one as it encourages links to green networks.

Assessment of Main Issue Five– District Heating

Based on the above assessment attentive 2 is the preferred option as it is likely to have a more positive impact on the environment. Both alternatives encourage renewables which will have a positive impact on climate change and air quality however they are likely to result in negative impacts on biodiversity, flora and fauna, water, soils and landscape though the release of greenfield land. Alternative 2 will have result in more significant impact on air quality and climate change by encouraging renewable and so is the preferred alternative.

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.

MITIGATION AND ENHANCEMENT

Schedule 3 of the Act requires that measure 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 and 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 alternatives, 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.

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 adaptions to the MIR 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.

Enhancement of the Proposed Plan

There has been extensive iteration between the SEA process and the preparation of the MIR. This has enabled the strength of the environmental weighting to be brought through in the context of the MIR. Discussions have sharpened the text of the MIR, 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. For each assessment table additional columns were included to ensure that consideration was given to mitigation and enhancement at the time of assessment so that these measures could be fed into the drafting of the Plan.

TAYplan Recommendations for Mitigation and Enhancement

As part of the environmental assessment we considered the recommendations and mitigation measures set out in the TAYplan SEA. 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 LPD policies, which will be published at proposed plan stage, will take account of this and ensure that environmental enhancement remains a priority during the writing of such polices. 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 Sirte Assessment tables, which have considered mitigation and enhancement measure 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.

Summary of the Mitigation 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 measure 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 Strategy, Economic Development, Retail and Commercial Development and other sections of the plan, the environmental protection policies 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 35 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.

Table 35: Proposed Mitigation Measure 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	**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. **Negative** The potential loss of habitats and biodiversity due to release of land for development.	**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. **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.
SEA 2	Accommodate population and household growth and direct that growth to appropriate locations	**Positive** Use of existing infrastructure thus minimising resource use. **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.	**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. **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.
SEA 3	Improve the quality of life for communities in Perth and Kinross	**Positive** Well designed places **Negative** Loss of quality of life due to overdevelopment, loss of green space, loss of local landscape quality and badly located and constructed development.	**Enhancement** Use greenspace to create integrated habitat networks. **Mitigation** Integration into local communities through sustainable construction, layout, public open spaces and integrated transport.

SEA 4	Maximise the health and wellbeing of the population through improved environmental quality	**Negative** Lack of employment opportunities, easily accessible green space and poor infrastructure provision.	**Enhancement** Human health, well-being and a balanced population structure would be promoted if employment opportunities arising from proposed developments are identified. **Mitigation** Where loss of green space is unavoidable, consideration should be given to reserving green space elsewhere as compensation.
SEA 5	Maintain, protect and where necessary enhance the fundamental qualities and productive capacities of soils	**Positive** Some benefits for soil may be achieved as a result of proposed wider environmental enhancement measures and commitments to reducing pollution **Negative** Loss of 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.	**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.
SEA 6	Protect and where possible enhance waterbody status	**Positive** Development concentrated in areas with public drainage systems. **Negative** Reduced water quality and habitat loss as a result of land use change and development.	**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. **Mitigation** Reduce diffuse pollution from run off and use of septic tanks in rural areas and ensure the use of SUDs in all new development.
SEA 7	Safeguard the functional floodplain	**Positive** Development encouraged in areas outwith functional floodplain. **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. **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.
SEA 8	Protect and enhance air quality	**Negative** New developments will result in traffic growth that is higher than the predicted “natural” increase leading to a potential reduction in air quality.	**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.

SEA 9	Direct development to sustainable locations which help to reduce journey lengths and the need to travel	**Negative** Issues linked with emissions associated with growth in car usage.	**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. **Mitigation** Develop 'no car' areas and developments.
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.
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.
SEA 12	Minimise waste per head of population	**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 policies 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	**Positive** Development proposals could provide finance to regenerate buildings and conservation areas. **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.	**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.
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	**Positive** Development provides opportunities to enhance landscape qualities and improve degraded areas. **Negative** Adverse impact upon important designated and non-designated landscape features due to the expansion of settlements and development.	**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.
SEA 17	Protect and enhance townscape character and respect the existing pattern, form and setting of settlements.	**Positive** Development provides opportunity to enhance townscape and correct past 'mistakes'. **Negative** Loss of townscape character. Lack of or loss of landscape capacity to accommodate development around settlements.	**Mitigation** The Green Infrastructure Strategy will help protect the landscape. Ensure landscape capacity studies, design briefs and masterplans are developed.

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 proposal.

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 36; alongside the SEA objectives which were used in the assessment. The SEA objectives and indictors 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 36: 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 environmental quality	-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
Soil	Maintain, protect and	% area of Geological SSSIs in favourable condition	SNH	SNH/PKC

	where necessary enhance the fundamental qualities and productive capacities of soils and protect carbon rich soils	No. of planning applications approved for development of prime agricultural land % change in the area of land recorded as vacant and derelict land % area of "potentially" contaminated land Total area of brownfield land rehabilitated	PKC - Planning & Development PKC/Scottish Vacant & Derelict Land Study PKC PKC/ Scottish Vacant & Derelict Land Study	PKC PKC/Scottish Government PKC PKC/Scottish Government
Water	Protect and where possible enhance the water environment	% of waterbodies at good status % of groundwater area failing to meet quality standards Mean daily peak river flows	SEPA SPEA SEPA	SEPA/PKC SEPA/PKC SEPA/PKC
	Safeguard the functional floodplain ad 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 No. of days air quality exceed legislative limits in AQMA	PKC – The Environment Service PKC – The Environment Service	PKC 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) Total domestic energy consumption per capita (kWh) Total domestic electric gas consumption per capita Number of new building reaching the gold or platinum sustainability requirement annually.	DEFRA/BERR BERR DECC PKC – The Environment Service	DEFRA/BERR/PKC BERR/PKC DECC/PKC 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 % area of land in P&K at medium to high risk of flooding which is developed Annual precipitation rates	PKC SEPA/PKC –Planning and Development SEPA	PKC PKC SEPA/PKC
Material Assets	Minimise waste per head of population to meet Zero Waste Plan Objectives	Total municipal waste arising % of household waste collected and treated by recycling, composting, energy from waste and landfilling Location and no. of waste treatment facilities	SEPA SEPA SEPA	SEPA/PKC SEPA/PKC SEPA/PKC
	Maximise the sustainable use/re-use of material assets (land and buildings)	Total area of land stock that is vacant and derelict 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 Vacant & Derelict Land Study	PKC/Scottish Government PKC/Scottish Government
	Promote and ensure high standards of sustainable design	Number of new building reaching the gold or platinum sustainability requirement annually. % of households within 200m of open space	PKC – The Environment Service PKC	PKC PKC

	and construction	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 % change of listed buildings and SMs at risk No. of planning approvals with Listed Building Consent or Conservation Area Consent.	PKC/Historic Scotland Historic Scotland PKC/ Historic Scotland	PKC/Historic Scotland PKC/Historic Scotland PKC/Historic 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 % change in land cover categories Change in no. of national designated landscape areas % change in areas of wild land	Forestry Commission James Hutton Institute SNH PKC/SNH	Forestry Commission/PKC James Hutton Institute/PKC SNH/PKC 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

NEXT STEPS

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 will be taken into account by the Council in Preparing the second Local Development Plan. This section also requires the responsible authority i.e. Perth and Kinross Council to take into account the finding 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 Strategic Environmental 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.

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:

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).

Proposed Timescales

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

Figure 46: SEA Milestones

Milestone	Anticipated Date
Publication of Environmental Report	23th December 2015
Publication of Main Issues Report	23th December 2015
Consultation period for Main Issues Report	23th December 2015 – 16th March 2016
Consideration of comments received	March – October 2016
Publication of Proposed Plan	September 2016
Publication of SEA Addendum	September 2016
Approval of the Plan and publication of the SEA Post-Adoption Statement	May 2018

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You can also send us a text message on 07824 498145.

All Council Services can offer a telephone translation facility.

Perth and Kinross Council

Local Development Plan 2
SEA Environmental Report

APPENDIX A: ANALYSIS OF OTHER
STRATEGIES, PLANS
AND PROGRAMMES

December 2015

DRAFT

PERTH & KINROSS COUNCIL

APPENDIX A: ANALYSIS OF OTHER STRATEGIES, PLANS AND PROGRAMMES

Name of Plan/Programme/Strategy	Main Requirements
Economy	
Scottish Government Economic Strategy 2015	Scotland's Economic Strategy reaffirms the Scottish Government's commitment to creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. It sets out an overarching framework for achieving the two mutually supportive goals of increasing competitiveness and tackling inequality in Scotland. It forms the strategic plan for existing and all future Scottish Government policy and prioritises boosting investment and innovation, supporting inclusive growth and maintaining our focus on increasing internationalisation.
Scottish Rural Development Programme 2014 - 2020	The key purpose of the SRDP 2014 - 2020 is to help achieve sustainable economic growth in Scotland's rural areas and the priorities remains broadly the same as the previous programme: The main priorities are: • Enhancing the rural economy • Supporting agricultural and forestry businesses • Protecting and improving the natural environment • Addressing the impact of climate change • Supporting rural communities
Scottish Spending Review and Draft Budget 2011	A Review of Scottish Spending Review in 2011 and Scottish Government Spending Plans for 2012-2013.
The Scottish Economic Recovery Plan: Accelerating Recovery February 2011	A report on Scottish Government actions and planned actions to ensure rapid and robust growth of the Scottish economy. This report considers: • Strengthening Scotland's Recovery • The Economy • Investing in Innovation and Industries of the Future • Supporting jobs and Communities • Strengthening Education and Skills
Perth & Kinross Economic Development Strategy 2009- 2014	This review reiterates the Scottish Government's five strategic objectives set out in their 2007 Economic Strategy, and it reflects the wider contribution of all Community Planning Partnerships and Partners in delivering sustainable economic growth for Perth and Kinross. The agreed starting point for the review was the existing Community Plan Vision. The current economic themes/drivers set out in the previous 2006-2010 Strategy have been re-evaluated, and the present local and national economic environments have been considered. As a result of that assessment six key themes and associated actions were developed to help achieve the overall vision. Through the development of the updated Strategy it was felt important to retain a long term perspective for the economy, but to recognise that shorter term actions will be required to address the existing downturn, strengthen the area to allow Perth and Kinross to take advantage of future opportunities and also to create sustainable economic growth. The recommended strategic themes for the revised Strategy and Action Plan are: • Connections and Development Infrastructure • Lifelong Learning at the heart of the economy • Encouraging a culture of Entrepreneurship • Supporting and Developing Businesses • Supporting key Industry Sectors • Supporting people through employability In response to the worsening economic climate an Early Action Economic Recovery Programme was drawn up which identifies six initial priority areas: 1. Maximising the benefits from public sector activity through procurement initiatives 2. Providing focussed, joined-up and appropriate business advice and support 3. Providing a pro-active response to redundancy, employability and re-skilling 4. Financial advice and support to individuals 5. Focus on growth opportunities (including tourism, renewable energy and the general insurance sector) 6. Perth City Centre – improved marketing and environmental improvements
General	
Perth and 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 an 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. 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.
Perth and Kinross Community Planning Partnership's 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.
Planning	
The Planning etc. (Scotland) Act 2006 The Town and Country Planning (Development Planning) (Scotland) Regulations 2008	This Act is the primary legislation for Planning in Scotland and amends The Town and Country Planning Act (Scotland) 1997. Part 2 Development Plans came into effect on 28th February 2009 and the majority of the remaining provisions followed in August of the same year. Part 2 introduced a new statutory basis for development planning in Scotland, including the replacement of structure plans and local plans with strategic development plans (SDP) and local development plans 9LDP). Within SDP Authority areas LDPs must be consistent with the relevant SDP. Section 3E of the Act requires planning authorities in carrying out their development planning functions to do so with the objective of contributing to sustainable development. The Act and accompanying Development Planning Regulations set out the detailed provisions on many of the procedures to be followed in the preparation of development plans, particularly in terms of the form and content of the Plan, and minimum requirements relating to publication and consultation. Planning authorities must review their LDPs at intervals of no more than 5 years.
Circular 6/2013: Development Planning	The Circular replaces Circular 1/2009: Development Planning and accompanies the 2008 Development Planning Regulations and Order and the 2009 Grounds for declining to follow recommendations Regulations, and contains Scottish Government policy on the implementation of the 2006 Act and the aforementioned regulations and order.
Third National Planning	National Planning Framework 3 was published by the Scottish

Framework (June 2014)	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 Governments 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 (June 2014)	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 equalities 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 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 if 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
TAYplan 2012	TAYplan covers Dundee City, Angus, Perth & Kinross (including the newly designated part of the Cairngorm National Park) and North Fife; it excludes the Loch Lomond and Trossachs and the Cairngorm National Parks under the pre-2010 boundaries. This Plan sets out policies for where development should be over the next 20 years and how to shape better quality places by the location, design and layout of development from the outset. At its heart are sustainable economic growth and a better quality of life through a stronger and more resilient economy, better quality places, reduced resource consumption and better resilience to climate change and peak oil. It sets the vision that: "By 2032 the TAYplan region 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.' It aims to achieve this through the following objectives: • Strengthen the economic base to support the renewable energy and low carbon technology sectors, the further and higher education sector including commercialisation and research, the region's ports, food research, forestry, life sciences, digital media and tourism. • Plan for an effective supply of land for housing and employment. • Provide for good quality, mixed housing type, size and tenure. • Promote and enhance places and landscapes as economic drivers and tourist destinations; and, support the region's town centres as accessible business and service locations. • Strengthen the critical mass of Dundee so that with Perth and other principal settlements they serve as major economic drivers supporting a more competitive, strong and stable economy for the region, to become more vibrant centres for commerce, learning, leisure and living. • Support an advanced, thriving and diverse economy occupying a competitive position within European and World Markets. • Promote prosperous and sustainable rural communities that support local services, including the provision of additional housing and related development

	proportionate to local need, available infrastructure and environmental capacity. • Ensure that regional inequalities in education, employment, health and environment are narrowed. • Continue to protect the important landscape settings and historic cores of St. Andrews and Perth with green belts. • Design-in at the outset; high resource efficiency standards; a mix of uses and facilities; green space, watercourse and infrastructure networks; and, adaptation measures to future proof places. • Locate most of the region's development in principal settlements to improve accessibility to jobs and services; reduce resource consumption and reduce the need to travel by car. • Protect and enhance the quality of the TAYplan area's built and water environments, landscape biodiversity and natural resources. • Ensure that new development makes best use of existing networks of infrastructure, movement corridors and ecosystems. • Enhance the condition and connectivity of the networks of green spaces and watercourses within and between the region's settlements to reduce flood risk, support cycling and walking, increase tree planting and carbon capture, support bio-diversity and provide better habitats, leisure opportunities, and agricultural and economic potential. • Promote transport linkages, infrastructure improvements and network improvements; and, support the delivery of infrastructure that promotes a shift towards non-car travel and transporting freight by rail and sea. • Support the switch to a low carbon and zero waste economy by providing for appropriate infrastructure and improvements in our resilience to climate change and other potential risks. • Support resource security by protecting finite resources such as minerals, soils and prime agricultural land.
Angus Local Plan Review 2009	The Local Plan Review provides the detailed policy framework to guide the future development and use of land, the protection of the environment and investment in Angus for the period to 2011. The Plan's vision, which comes from 'A Vision for Angus' set out in the Community Plan is that "Angus will be a place where a first class quality of life for all can be enjoyed, in vibrant towns and pleasant villages, set in attractive and productive countryside". In support of this vision, the Plan's Development Strategy is to: • Draw on the inherent strengths and synergy of the close

	network of Angus towns and villages, and consolidate the role of the seven towns as locally accessible centres serving a diverse rural hinterland; • Guide and encourage the majority of development, including local housing and employment opportunities, to locations within the larger settlements that have the capacity to accommodate new development well integrated with transport infrastructure. • Provide opportunities for diversification of the rural economy. • Maintain and protect the diversity and quality of the rural area and encourage local development which supports the population and services of local communities; • Support the protection and enhancement of the countryside; and • Maintain the quality of valued landscapes; the natural, built and historic environment; and biodiversity
Argyll and Bute Local Development Plan 2015	The Argyll and Bute Local Development Plan provides the local planning framework for the Council area, excluding the Loch Lomond and Trossachs National Park area. The plan sets out an overall vision for "Argyll and Bute is one of an economically successful, outward looking and highly adaptable area, which enjoys an outstanding natural and historic environment, where all people, working together, are able to meet their full potential and essential needs, locally as far as practicable, without prejudicing the quality of life of future generations." To achieve this vision it sets the following objectives: • To make Argyll and Bute's Main Towns and Key Settlements increasingly attractive places where people want to live, work and invest; • To secure the economic and social regeneration of our smaller rural communities; • To work in partnership with local communities in a way that recognises their particular needs to deliver successful and sustainable local regeneration; • To support the continued diversification and sustainable growth of Argyll and Bute's economy with a particular focus on our sustainable assets in terms of renewables, tourism, forestry, food and drink, including agriculture, fishing, aquaculture and whisky production; • To ensure the outstanding quality of the natural, historic and cultural environment is protected, conserved and enhanced; • To meet our future housing needs, including affordable,

	throughout Argyll and Bute; • To continue to improve Argyll and Bute's connectivity, transport infrastructure, integration between land use, transportation and associated networks; • To optimise the use of our scarce resources, including our existing infrastructure, vacant and derelict land and reduce consumption; • To address the impacts of climate change in everything we do and reduce our carbon footprint;
Dundee Local Development Plan 2013	The Dundee Local Development Plan sets out the land use strategy that will guide development across Dundee up to 2024 and beyond. It aims to deliver the visions set by Dundee City Council and the Dundee Partnership's Single outcome agreement through their spatial strategy. The key points of this strategy are that: • The quality of housing in Dundee will be improved. This will be done in a sustainable manner. Brownfield development will be a priority. Choice will be encouraged through design that ensures that new development is appropriate to the character of the area in which it is built. • Dundee will be better connected to its region, the rest of Scotland and beyond. It will be a City that encourages sustainable movement through the careful consideration of land use, planning and the promotion of active and sustainable travel. • A focus on providing a land use context that facilitates the delivery of jobs to support Dundee's population & the wider economy. Increased employment land will be available through Strategic Development and Enterprise Areas with existing land protected from inappropriate development. Policies will encourage existing & new businesses to invest with confidence in the City. Dundee will be increasingly recognised for tourism & cultural activity focused on the City Centre & Waterfront. • The quality of Dundee's environment is a vital ingredient in the quality of life for people living and working in the city. The impact of climate change challenges our duty to protect and enhance the environment for this and succeeding generations. The Local Development Plan encourages a lower carbon, sustainable City where development avoids, mitigates or adapts to the effects of climate change while protecting and enhancing the City's environmental assets. • Dundee will have a vibrant and thriving City Centre, ensuring its position as a regional shopping destination is maintained. High quality shops will be encouraged in

	accessible locations to support the vitality and viability of the existing network of retail locations throughout the City. Policies will protect and promote the City and District Centres as places to work, shop and visit. • Dundee's growing position as a City recognised for Tourism and Cultural activity will be promoted. We will seek to deliver an increased number and range of leisure related facilities by directing growth to the highly accessible central area.
FIFEplan (Proposed Plan) 2014	This proposed Local Development Plan – FIFEplan – sets out the policies and proposals for the development and use of land across Fife. The Local Development Plan contributes to making Fife the best place to do business. Growing business activity and employment will build the economy, offer more job opportunities, and allow more people to improve and maintain their living standards. The Plan strategy combines growth ambitions with improving Fife as a place to live and work in – keeping safe our rich environmental assets and improving and protecting the quality of our towns and villages as they change.
Fife Local Plans	These include the Mid Fife Local Plan (January 2012) St Andrews & East Fife Local Plan (October 2012) and the Dunfermline & West Fife Local Plan (November 2012). The Local plans describe where and how we will allow new developments to take place and show what we propose for your community. Local plans identify where change is proposed by describing the location and nature of development. Local Plans provide a basis for managing development and land use activities.
Loch Lomond and the Trossachs Local Plan	The Loch Lomond and the Trossachs Local Plan focuses on development proposed for the next five years, within a longer term strategic vision. The Plan identifies sites for development and policies to help guide development to the most appropriate locations, whilst still ensuring the safeguarding of the Park's natural and cultural heritage. The Local Plan is a major tool for enabling the delivery of the vision and outcomes identified in the National Park Plan 2007-2012 and the National Park aims. The main drivers for the Local Plan's Development Strategy are to provide the basis for the National Park's planning function to deliver new sustainable development that: • Contributes to creating more sustainable communities, particularly through more affordable housing to address existing and newly arising housing needs within the Park and to support the retention, expansion and establishment of businesses and opportunities for

	economic development. • Attracts and facilitates investment to grow the tourism sector in a sustainable manner, promoting higher quality facilities and experiences in keeping with the capacity of the Park's resource base and adhering to the principles of the National Park's recently attained European Charter for Sustainable Tourism. • Supports development that diversifies and grows a more robust rural economy and helps to retain important land management activities to help conserve the special qualities. • Responds to climate change by reducing energy requirements associated with new developments, encouraging more small-scale renewable energy schemes to meet energy needs in the Park and ensuring that new development responds appropriately to increasing flood risks.
Cairngorms National Park Local Development Plan 2015	The Cairngorms National Park Local Development Plan sets out policies and proposals for the development and use of land for the next 5-10 years, provides a broad indication of the scale and location of growth up to year 20, and provides the basis for the assessment of all planning applications made across the whole of the National Park. It sets the visions for: "An outstanding National Park, enjoyed and valued by everyone, where nature and people thrive together." This vision will be delivered through three long-term outcomes: • A sustainable economy supporting thriving businesses and communities • People enjoying the Park through outstanding visitor and learning experiences • A special place for people and nature with natural cultural heritage enhanced
Clackmannanshire Local Development Plan 2015	The Clackmannanshire Local Development Plan (LDP) seeks to place sustainable development at the heart of its vision, strategy and policies. The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations. It highlight a vision of "A community that has experienced a successful transition to a vibrant low-carbon economy, providing excellent educational, training and employment opportunities, job satisfaction, good quality homes for its population and a continually improving sense of well-being for its people in an area which delivers a high quality of life. Social and economic inequalities will have reduced dramatically and the environment and the services

	provided by nature will have been protected and enhanced for the benefit of current and future generations." It sets the following objective to achieve this vision: • A Clear Framework for Positive Change - To meet the future needs of Clackmannanshire's communities by providing a focused framework for change and growth • Sustainable Economic Growth - To continue the economic regeneration of Clackmannanshire and increase its economic potential for the benefit of its residents, by supporting business growth and improved employment opportunities • Environmental Sustainability - To deliver a sustainable pattern of development that supports community cohesion, reduces greenhouse gas emissions, supports waste minimisation and ensures that new development consistently contributes to environmental protection and enhancement • Meeting the Need for New Homes - To meet Clackmannanshire's housing needs based on the evidence provided by the Clackmannanshire Housing Need and Demand Assessment • Community Regeneration and Improving Health and Wellbeing - To work with partners to achieve social regeneration, revitalise those parts of the County which continue to be affected by deprivation and lack of opportunities, enable residents to lead active and healthy lifestyles and address health inequalities • Natural Environment - To protect and enhance Clackmannanshire's natural heritage, regenerate our natural environment and support the strategic objectives of the Central Scotland Green Network • Built Environment - To facilitate the creation of sensitively and well-designed places and enhance local distinctiveness and identity • Sustainable Transport and Accessibility - To facilitate improved movement and accessibility between homes, jobs and schools and reduce reliance on private cars
Stirling Local Development Plan 2014	The Local Development Plan Vision for the Stirling area in 2034 is that it will have maintained its high quality rural and urban environments, enhanced by well-designed and integrated new developments, by the evolving Green Network, and by the protection of the superb landscape setting. The interdependence of the City, the countryside and the attractive small towns and villages will have increased, and links to neighbouring areas improved. Stirling will still be a fine small 'walkable' city, well connected and drawing benefits from its relative proximity to the conurbations and other towns of Central Scotland and Tayside. While cherishing its magnificent historic heritage it will be a modern, vibrant and healthy city, a place where people choose to live, work, spend their leisure time and where tourists choose to visit. It will become a place that attracts more businesses and supports successful and expanding ones, so that more people are able to work close to and within their homes, and in the City Centre. It will be a 'learning city', known for its University, sharing in the Forth Valley College network, with an increased number of related businesses. It will be a key destination on the tourist map of Scotland, and business tourism will make a significant contribution to the economy. There will be more opportunities to access local affordable housing, and previous pockets of deprivation in urban and rural locations will have been alleviated, and levels of social polarisation reduced.
Aberdeenshire Local Development Plan 2012	The Aberdeenshire Local Development Plan sets out statements of the policies used for assessing planning applications and through the proposals confirms the principle of development on sites across Aberdeenshire. The aims of the Aberdeenshire Local Development plan area: • To grow and Diversify the Economy • To make sure the area has enough development land to provide for people, homes and jobs to support services and facilities • To protect and improve assets and resources • To promote sustainable mixed communities with the highest standards of design • To make efficient use of the transport network
Highland-wide Local Development Plan 2012	Sets out the overarching spatial planning policy for the whole of the Highland Council area, except the area covered by the Cairngorms National Park Local Plan. It puts forward a vision where: "By 2030, Highland will be one of Europe's leading regions. We will have created sustainable communities, balancing population growth, economic development and the safeguarding of the environment across the area, and have built a fairer and healthier Highlands." It aims to this by: • Enabling sustainable Highland communities • Safeguarding the environment • Supporting a competitive, sustainable and adaptive Highland economy • Achieving a Healthier highlands • Providing better opportunities for all

Strategic Environmental Assessment	
PAN 1/2010: Strategic Environmental Assessment of Development Plans	Planning Advice Notes (PAN) provides advice and information on technical planning matters. This PAN is aimed specifically at development planners who are preparing new development plans and their accompanying SEA, and who may already have some knowledge of the SEA process. It highlights that the following 3 key principles should underpin the SEA of development plans: 1. Integration 2. Proportionality 3. Efficiency
Sustainable Development and the Environment	
Choosing Our Future – Scotland's Sustainable Development Strategy 2005	This Strategy sets out the challenges that require to be met if Scotland is to evolve in a sustainable way. It is based on two founding principles, of 'living within environmental limits' and 'ensuring a strong, healthy and just society'. The Strategy is based on UK Shared Framework and includes 3 priorities: • Reduce the size of our global footprint; • Improve the quality of life of individuals and communities in Scotland, securing environmental justice for those who suffer the worst local environments; and • Protect our natural heritage and resources for the long term.
Natural Heritage Futures (update 2009)	The Natural Heritage Futures initiative promotes integrated management of the natural heritage and is based on three main outputs. "From National…" considers the natural heritage across 6 themes; "…to Local" considers the natural heritage in 21 areas each of which has its own distinctive identity resulting from the interaction of geology, landforms, landscapes, wildlife and land use. They are a suite of publications to guide the future management of the natural heritage towards 2025, within the wider context of sustainable development. Perth and Kinross falls within the following natural heritage futures zones: Cairngorm Massif, Northeast Glens, Loch Lomond, the Trossachs and Breadalbane, and the Eastern Lowlands.
PKC Sustainable Development Framework	Perth & Kinross Council is committed to using natural resources wisely in a way that enhances the environment, promotes social cohesion and inclusion and strengthens economic prosperity, now and for future generations. The main purpose of this Framework is to facilitate the integration and of sustainable development principles throughout the Councils organisational operation, service delivery and decision-making.
Tourism	
Perthshire Tourism Strategy and Action Plan 2014 -2016	Outlines the priorities for action by public and private sector partners to develop further the economic potential of the tourism sector in the area in line with the strategic objectives and local outcomes contained in the Community Plan / Single Outcome Agreement and in support of the national ambitions for growth in the value of tourism to the Scottish economy.
Design Quality	
Creating Places	Creating Places is Scotland's new policy statement on architecture and place and sets out the comprehensive value good design can deliver. Successful places can unlock opportunities, build vibrant communities and contribute to a flourishing economy. The document contains an action plan that sets out the work that will be taken forward to achieve positive change. The statement is in four parts: 1. The value of architecture and place, 2. Consolidation and ambition, 3. A strategy for architecture and place, 4. Resources, communications and monitoring. Part 4 includes a link to on-line information and resources relating to architecture and place at www.creatingplacesscotland.org. This website is the main means of communicating on policy implementation and charting on-going progress
Green Infrastructure: Design and placemaking.	This document is aimed at planners, landscape architects, developers, housebuilders and others involved in shaping our built and green environments. The content of the document builds on Designing Places and Designing Streets to give practical tips on incorporating green infrastructure in masterplans. It is split into two parts: Part 1 explains what green infrastructure is, who should be involved, when to think about it, and highlights the many advantages of taking an integrated approach to green infrastructure in designs. Part 2 focuses on masterplanning, in particular by showing how green infrastructure can contribute to each of the six qualities of successful places that have been identified throughout the Scottish Government's design policy.
Designing Streets.	Designing Streets is the first policy statement in Scotland for street design and marks a change in the emphasis of guidance on street design towards place-making and away from a system focused upon the dominance of motor vehicles. It has been created to support the Scottish Government's place-making agenda and is intended to sit alongside the 2001 planning policy document Designing Places, which sets out government aspirations for design and the role of the planning system in delivering these.

Biodiversity, Flora and Fauna	
EU Birds Directive 1979	Protection of wild birds and their habitats, including through designation of Special Protection Areas (SPAs).
EU Habitats and Species Directive 1992	Protection of habitats and species other than birds including through designation of Special Areas of Conservation as part of the Natura 2000 network (with SPAs).
Conservation (Natural Habitats etc.) Regulations (as amended) 1994	Implements the Birds and Habitats Directives in the UK
Natura 2000	Special Protection Areas (SPAs) and Special Areas of Conservation (SAC) together form a network of protected areas known as Natura 2000.
Scottish Biodiversity Strategy and the 2020 Challenge for Scotland's Biodiversity	Statutory role relating to biodiversity duty in the Nature Conservation (Scotland) Act. Scotland's contribution to meeting the Convention on Biological Diversity The 2020 Challenge for Scotland's Biodiversity is a supplement to the original Scottish Biodiversity Strategy and provides a focus for action to 2020, responds to new international targets, and updates elements of the 2004 document.
Convention on Wetlands, 1971	The Convention is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources, known as Ramsar sites.
European Species, Development Sites and the Planning system – Interim	This guidance clarifies the interim licensing arrangements which currently apply in cases where European protected species are present on any site which is the subject of a development proposal. In particular, it clarifies the role and responsibilities of planning authorities when determining planning applications in such cases and informs them of the advice and information that they will be asked to provide to the Scottish Ministers when a licence is required for a development site.
The Economic Impact of Scotland's Natural Heritage 2008	This analysis determines the extent to which sustainable use of the nation's environment supports Scotland's economy. Scotland's natural environment is important to business location; of thirty factors of potential importance in determining regional location of businesses in Scotland, 'quality of landscape', 'low levels of pollution', and 'proximity to natural areas' were all identified within the top ten factors. Two thirds of businesses believe that they benefit from Scotland's environment. • Overall, one fifth of the industry sectors in our economy significantly depend upon the natural environment (although many other industry sectors have some linkage). This proportion would be even higher if extractive industries making use of non-renewable natural resources were included. • The value to the economy of industry's sustainable use of the natural environment has been estimated at £17.2 billion (including all multiplier effects) for 2003. This output supports almost a quarter of a million full-time jobs (around 1 in 7 of all full-time jobs). • There are also a number of wider benefits that the environment provides Scotland's economy, such as branding, attracting individuals to live and work, as well as provision of ecosystem services. • The links between the environment and the economy will continue to grow over time as sustainability issues become dominant, for example in addressing climate change. • There are many sustainable economic activities that relay on the environment that have growth potential.
Tayside Biodiversity Action Plan 2002	The Tayside Biodiversity Action Plan has two main aims: to coordinate existing actions, as well as initiating and coordinating new ones; and to conserve and enhance the region's biodiversity, taking into account both local and national priorities.
Strategy for Wild Deer in Scotland	Sets out a vision in which management of the wild deer resource will contribute to a high quality environment, sustainable economic development, and social well-being.
Scottish Forestry Strategy 2012	A strategy for the future direction of Scottish forestry
Perth and Kinross Council Forestry and Woodland Strategy 2014	The Forest and Woodland Strategy was adopted on 12 November 2014 and becomes statutory supplementary guidance to the Adopted Local Development Plan. The Forest and Woodland Strategy seeks to address uncertainties for land managers by identifying areas where we will support proposals for woodland creation and woodland management. It also identifies priority activities that the Council will encourage and for which funding will be available from government agencies, and those areas where there may be sensitivities or constraints to woodland or forest expansion. Therefore, the purpose of the Perth and Kinross Forest and Woodland Strategy is to: • Provide a strategic framework for the development of forestry in the area • Provide a local interpretation of the Scottish Forestry Strategy • Ensure a balance of forestry with other land uses by identifying appropriate locations for a variety of types of woodland expansion and management practice • Ensure forestry activity contributes across the range of Council policy objectives • Ensure that the public benefits of managing and expanding the area's forest estate are optimised

Soil	
Proposal for a Directive of the European Parliament and of the Council establishing a framework for the protection of soil and amending Directive 2004/35/EC, September 2006	The Proposal aims to establish a common strategy for the protection and sustainable use of soil, based on the principles of integration of concerns regarding soils into other policies; the preservation of soil functions within the context of sustainable use; the prevention of threats to soil and mitigation of their effects, and the restoration of degraded soils to a level of functionality consistent at least with the current and approved future use.
The Scottish Soil Framework 2009	The Framework sets out the vision for soil protection in Scotland and formally acknowledges the importance of soils to society in terms of the services they provide and the socio-economic and environmental importance of their many functions, including: • Providing food, biomass and raw materials • Storing, filtering and transforming many substances including carbon • Serving as a platform for human activity and landscape, and as an archive of heritage • Playing a key role as a habitat and gene pool For these reasons it is important that Scotland's soils are managed sustainably. Protecting Scotland's soil is in line with the Government's National Outcome: 'We value and enjoy our built and natural environment and protect it and enhance if for future generations' and also support its aim of increasing sustainable economic growth. It is the principle aim of the Framework to promote the sustainable management and protection of soils consistent with the economic, social and environmental needs of Scotland. The underlying vision of the Framework is that: 'Soils are recognised as a vital part of our economy, environment and heritage, to be safeguarded for existing and future generations in Scotland.' The following threats to soils are identified in the Framework and ranked high to low: 1. Climate Change 2. Loss of organic matter 3. Sealing – through construction 4. Acidification and Eutrophication 5. Loss of biodiversity 6. Contamination by heavy metals 7. Soil erosion 8. Pesticides 9. Compaction and structure 10. Salinisation
Natural Resource Productivity 2009	A strategy for the future direction of agriculture in Scotland, aimed at optimising the sustainable use of our natural resources to deliver the maximum economic and public benefit. The Strategy highlights the benefits of the optimal use of Scotland's resource as being: • Wide use of its abundant clear water • Huge potential for renewable energy production • High carbon storage in soils • High quality habitats and landscapes But recognises that due to Scotland's geographical diversity and climatic conditions, farming will continue to need direct support
Choosing the Right Ingredients: The Future for Food in Scotland: Discussion Paper, January 2008	Sets out a vision for food in Scotland that should make the nation healthier, wealthier and smarter, with production making communities stronger and consumption respecting the local and global environment. • A healthier Scotland will result from changing individual behaviour and attitudes about diet and food choices; from improving the nutritional quality, safety and freshness of food on offer in institutions and the catering sector; to supporting Scottish food manufacturers and retailers to take the initiative in driving forward consumer demand for more affordable, healthier food options. Communities across Scotland will enjoy better access to affordable, safe, healthy and fresh seasonal food. • A wealthier and fairer Scotland will result from the sustainable economic growth of the food industry through greater co-operation and collaboration from primary production to final market, ensuring the long-term viability of primary producers, and increasing export markets for Scottish produce. • A safer and stronger Scotland will result from a thriving food industry where local communities will flourish and become better places to live through improved access to amenities and services. • A greener Scotland will result from reducing the environmental impact of food and drink production, processing, manufacturing and consumption by encouraging responsible behaviour throughout the supply chain through reduced emissions, unnecessary use of raw materials, waste, packaging, energy and water use. • A smarter Scotland will result from a highly-skilled and innovative food industry with consumers that are better

	informed about where their food comes from, how it was grown and the wider health, environmental, social and economic benefits of the choices they make.
The Contaminated Land (Scotland) Regulations (2005)	These regulations require local authorities to inspect their area to identify contaminated land, to ensure it is remediated, and to maintain a register of contaminated land which is available for public inspection.
Scotland's Land Use Strategy 2011	Scotland Land Use Strategy provides a strategic framework bringing together proposals for getting the best from Scotland's land resources. Published by the Scottish Government in March 2011 it: • sets out a new vision to guide thinking about the use of land and sets objectives relating to the economy, environment and communities; • provides a set of principles for sustainable land use to guide policy and decision making; • builds on the Government's current activities and includes further proposals to help meet the objectives.
Water Environment	
Water Framework Directive 2000/60/EC	The purpose of the Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. It will ensure all aquatic ecosystems meet 'good status' by 2015. The Directive requires river basin districts to be identified and river basin management plans (RBMPs) prepared.
EU Marine Strategy Framework Directive 2008	The Strategy aims to achieve good environmental status of the EU's marine waters by 2020 and to protect the resource base for those economic and social marine-related activities which depend upon it. It establishes European Marine Regions based on geographical and environmental criteria and requires each Member State to develop strategies for their marine waters. The Strategy's aims are in line with the Water Framework Directive's objectives which require surface freshwater and groundwater bodies to be ecologically sound by 2015 and for the first review of the RBMPs to take place in 2020.
EU Floods Directive	The purpose of this Directive is to prevent and limit floods and their damaging effects on human health, the environment, infrastructure and property. It requires Member States to take a long term planning approach to reducing flood risks.
River Basin Management Plan for Scotland 2009	This document details the strategy for River Basin Management Planning in each of Scotland's three River Basin Districts (RBDs). It sets out how the Scottish Environment Protection Agency (SEPA) plans to produce Scotland's first and subsequent River Basin Management Plan (RBMP) in an efficient and inclusive way. Implementation of the WRP has an influence over the functioning of 180 River Basin Districts. This Strategy describes planned actions within three key areas necessary for the development of effective river basin planning: • Establishing administrative arrangements and working principles to support RBMP production; • Delivering opportunities for participation and consultation; and • Integrating and coordinating the RBMP with other plans and planning
Tay Area Management Plan 2009–2015	The purpose of this plan is to set out the ways in which SEPA is seeking to protect high quality waters and where necessary implement improvements. It is one of eight area management plans that are supplementary plans to the draft Scotland River Basin Management Plan. These plans have been produced as part of Scotland's work to deliver the Water Framework Directive – European legislation introduced to protect and enhance our water environment. For the purposes of the river basin planning process, the water environment in the Tay area has been divided into 354 water bodies (rivers, lochs, estuaries, coastal waters and groundwater). Many are currently in good condition, with almost 50% considered to be currently achieving an overall status of good or high. By 2015 it is anticipated that almost 60% of the water bodies in the Tay area will be reaching high or good ecological status or potential. The key issues to be addressed in the Tay area are: • nutrient enrichment in our rivers and lochs and high levels of nitrates in groundwater; • changes to the physical habitat of rivers and burns (including artificial barriers to fish passage); • changes to river flow and water levels in rivers and groundwater
Forth Area Management Plan 2009-2015	The purpose of this plan is identical to the above and covers the water bodies in Kinross-shire and the southern part of Perth & Kinross (e.g. Strathearn)
Water Environment and Water Services (Scotland) Act 2003	The key aim of the Act is to achieve a balance between protecting and improving the water environment and supporting the social and economic needs of those who rely on it. It introduced two key systems for the protection of Scotland's

	water environment: • Water management through the creation of River Basin Management Plans (RBMPs), and • The regulatory control of a range of activities that can impact on the water environment under CAR.
Flood Risk Management (Scotland) Act 2009	This Act transposes the EC Floods Directive into national law. It simplifies the process that local authorities follow in preparing flood schemes and places a duty on the Scottish Government, SEPA, Scottish Waster and local authorities to better coordinate how flood risk is assessed and managed. The Act covers all sources of flooding, including river, coastal and overloaded sewers.
Marine (Scotland) Act 2010	The Act provides a framework which will help strike a balance between the competing demands on Scotland's seas. It establishes a duty to protect and enhance the marine environment and includes measures to help boost economic investment and growth in areas such as marine renewables. The main measures of the Act include: • Marine planning • Marine licensing • Marine conservation • Seal conservation • Enforcement
National Marine Plan, 2015	This Plan covers the management of both Scottish inshore waters (out to 12 nautical miles) and offshore waters (12 to 200 nautical miles). It also applies to the exercise of both reserved and devolved functions. This Plan has been prepared in accordance with the EU Directive 2014/89/EU which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process.
Aquaculture and Fisheries (Scotland) Act 2007	The purpose of the Act is to: • Provide a statutory basis for regulating previously unregulated practices in aquaculture; • Enhance emergency powers for controlling Gyrodactylus salaris, a parasite of salmon, and • Make a number of miscellaneous amendments to salmon, freshwater and sea fisheries legislation.
Bathing and Water Strategy for Scotland 2006	The Strategy sets out the Scottish Government's proposals to tackle the challenges under the revised Directive. It outlines key challenges to be met: • Meeting water quality standards – as Scottish Water investment reduces point source problems, the influence of diffuse sources of pollution on compliance, particularly from agriculture, becomes apparent. Measures such as General Binding Rules can help reduce these threats, but it is also important to continue working closely with the agricultural community. • Encouraging greater public participation in the Directive's implementation and better bathing water management, including increased provision of information on bathing water quality. Implementing the Directive requires an increased emphasis on partnership working between the Scottish Government, SEPA, local authorities, beach owners and operators, Scottish Water, Clean Coast Scotland and the farming community, among others.
Scottish Water Resource Plan 2015	Sets out Scottish Water's strategy to ensure a supply of clear, fresh and safe drinking water.
Scottish Water Strategic Asset Capacity And Development plan 2014	This report outlines Scottish Water's processes and systems for calculating capacity available at the waste water and water treatment works serving Scotland
Air	
Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2011	The Strategy: • Sets out a way forward for work and planning on air quality issues • Sets out the air quality standards and objectives to be achieved • Introduces a new policy framework for tackling fine particles • Identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The pollutants covered are: • Benzene • 1, 3-butadiene • Carbon Monoxide • Lead • Nitrogen Dioxide (NO2)

	• Ozone • Particles (PM10) • Sulphur Dioxide (SO2) Targets are set for each of these.
The Perth Air Quality Management Plan August 2009 Air Quality Management Area (No. 1) Order 2006 and Perth and Kinross Council Air Quality Management Area (No2) 2014	This document sets out the Council's Air Quality Action Plan for the area designated as an Air Quality Management Area (AQMA) in May 2006. The Plan's aim is to outline measures which the Council will take to reduce emissions of nitrogen oxides and fine particulate material within the city of Perth, contributing to the achievement of the Air Quality Strategy objectives as required by the Environment Act 1995. Both AQMAs (Crieff and Perth) were designated as a result of a series of air quality investigations, which predicted that at a number of locations the national objective for nitrogen dioxide would not be achieved. The Action Plans set out a range of measures that the Council believe are appropriate to achieving the following: • Improve local air quality, in pursuit of the Scottish air quality objectives for nitrogen dioxide and particulate material that are currently exceeded at several locations within the AQMA; • Contribute to improving the health and wellbeing of the local community by reducing air pollution in Perth; • Enable members of the community, where and when possible, to change their transportation mode to a more sustainable means; • Integrate air quality into the Council's decision making and relevant plans and strategies.
EU Biofuels Directive 2003	Promotes the use of biofuels or other renewable fuels for transport as one of the tools by which the European Community can reduce its dependence on imported energy and influence the fuel market for transport, and hence the security of energy supply in the medium and long term.
Climate Change (Scotland) Act 2009	The Act places three climate change duties on a wide range of public bodies in Scotland and contains powers to enable the Scottish Ministers, by order, to create further duties. The duties on the face of the Act require that a public body must, in exercising its functions, act: • In the way best calculated to contribute to delivery of the Act's emission reduction targets; • In a way best calculated to deliver any statutory adaptation programme; and • In a way that it considers most sustainable. <u>Adaptation Programmes</u> The Scottish Government is developing a Climate Change Adaptation Framework to build Scotland's resilience to the unavoidable consequences of a changing climate. <u>Land Use Strategy</u> The Scottish Government has a duty to produce a Land Use Strategy by 31 March 2011. <u>Energy Efficiency</u> The Act requires the Scottish Ministers to prepare and publish a plan to promote energy efficiency, and improve the energy efficiency of living accommodation within 12 months of these sections commencing.
Scottish Climate Change Delivery Plan 2009	The Plan identifies the high level measures to meet the 2020 interim statutory targets and the work that requires to be done over the next 10 years to prepare for the more radical changes needed by 2030 if the 2050 emissions reduction target is to be achieved. The planning system is highlighted as having an important role to play in climate change mitigation through its influence over the location and scale of new development.
Scotland's Climate Change Adaptation Framework 2009	The aim of the Framework is to "lead planned adaptation across all sectors to increase the resilience of Scotland's communities, and the natural and economic systems on which they depend, to the impacts of climate change." It will achieve this through a three pillars approach: 1. Improve the understanding of the consequence of a changing climate and both the challenges and opportunities it presents; 2. Equip stakeholders with the skills and tools needed to adapt to changing climate; and 3. Integrate adaptation into wider regulation and public policy so that it is a help, not a hindrance, to addressing climate change issues. The Framework identifies strategic principles and priority actions as a means of providing leadership, guidance and consistency of approach to both government and non-government decision-makers, and also identifies roles and responsibilities for public and private decision-makers across Scotland. In addition it outlines the levels of risk being applied to manage climate change.
Low Carbon Scotland: Meeting the Emissions	This report sets out how Scotland can deliver annual targets for reductions in emissions from 2010 to 2022

Reduction Targets 2010-2022: The Report on Proposals and Policies, 2011	
Renewables Action Plan 2009 including Updates (update 1, 2010; update 2, 2010; update 3, 2022; update 4, 2011.) and 2020 Route map for Renewable Energy in Scotland	The Renewables Action Plan sets out a framework for action in the specific area of renewable energy, and includes a sectoral route-map for renewable heat. It is consistent with the 50% and 11% targets for 2020, both of which are regarded as indicative interim ambitions, which will clearly need to be exceeded in due course. • Identifies what needs to happen and by when to achieve objectives; • focus on the actions needed over the immediate 24 month period; • Establish in the public domain what will effectively become a live document – a portal for the development of the sector, subject to ongoing input and revision as new opportunities arise, as technology moves forward, and as new requirements become apparent
Forestry Commission Climate Change Programme 2013	The Action Plan sets out the actions that the Forestry Commission Scotland propose to implement to increase the response and contribution of Scottish Forestry to the challenges of a changing climate. It focuses on what requires to be done in relation to early actions and increasing awareness.
Cultural Heritage	
Scottish Historic Environment Policy (SHEP) 2011	SHEP sets out Government Policy for the historic environment which encompasses built heritage features (ancient monuments, archaeological sites and landscapes, historic buildings, townscapes, parks, gardens and designed landscapes, as well as marine heritage) and the context or setting in which they sit, and the patterns of past use, in landscapes and within the soil, and also in our towns, villages and streets.
The Historic Environment (Amended) (Scotland) Bill	The Bill is an amending piece of legislation and its scope and content are formed by a series of amending provisions identified by Historic Scotland and local government, and during the course of discussions with stakeholders during 2007, which followed the publication of a report by the Historic Environment Advisory Council for Scotland on the need for a review of heritage legislation in Scotland. Scottish Ministers concluded that what was required was a single, simple piece of legislation, with a limited scope, to amend three pieces of current primary legislation, The Historic Buildings and Monuments Act of 1953, the Ancient Monuments and Archaeology Areas Act of 1979 and the Planning (Listed Buildings and Conservation Areas) (Scotland) Act of 1997 all while protecting the core of the current system. The Historic Environment (Amendment) Scotland Bill will contribute to the Scottish Government's central purpose of sustained economic growth by introducing a series of provisions that will enhance the ability of central and local government to manage Scotland's unique and irreplaceable historic environment. The amending Bill will support, in particular, the Government's Greener Strategic Objective and will provide the regulatory authorities with a much-improved toolkit to help manage, protect and enhance Scotland's historic environment for future generations. The Bill was introduced to the Scottish Parliament on 4 May 2010.
Historic Environment Strategy for Scotland (2014)	Historic Environment Strategy is a high level framework which sets out a 10 year vision for the historic environment. The key outcome is to ensure that the cultural, social, environmental and economic value of Scotland's historic environment continues to make a strong contribution to the wellbeing of the nation and its people. It was developed collaboratively and identified the need for strategic priorities to help align and prioritise sector activity towards a common goal.
Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997	An Act to consolidate certain enactments relating to special controls in respect of buildings and areas of special architectural or historic interest with amendments to give effect to recommendations of the Scottish Law Commission.
Ancient Monuments and Archaeological Areas Act 1979	An Act to consolidate and amend the law relating to ancient monuments; to make provision for the investigation, preservation and recording of matters of archaeological or historical interest and (in connection therewith) for the regulation of operations or activities affecting such matters; to provide for the recovery of grants under section 10 of the Town and Country Planning (Amendment) Act 1972 or under section 4 of the Historic Buildings and Ancient Monuments Act 1953 in certain circumstances; and to provide for grants by the Secretary of State to the Architectural Heritage Fund.
Landscape	
Local Landscape Areas Supplementary Guidance 2015	The Landscape Supplementary Guidance was adopted on 17 June 2015 and becomes statutory supplementary guidance to the Adopted Local Development Plan. It has been produced to include the review and update of Local Landscape Designations in Perth and Kinross into the Council's planning policy framework. It also provides further advice on the implementation of Local Development Policy ER6: Managing Future Landscape Change to Conserve and Enhance the Diversity and Quality of the Area's

	Landscapes within the 11 Special Landscape Areas, and will help to bring forward land management initiatives to protect and enhance these areas.
European Landscape Convention 2000	Promotes the protection, management and planning of all landscapes in Europe. It highlights the importance of and need for public involvement in the development of landscapes, and encourages a joined up approach through policy and planning in all areas of land use, development and management, including the recognition of landscape in law.
Tayside Landscape Character Assessment 1999	This document provides a detailed assessment of the landscape character of the Tayside region for use by planning authorities in the preparation and review of their development plans, and in the scoping and consideration of changes in land use. It considers the likely and existing pressures and opportunities for landscape change and assesses the sensitivity of the landscape to these changes. It also identifies areas of landscape that are or may be under threat and provides guidelines on how differing landscapes may be conserved, enhanced or restructured as appropriate. Perth and Kinross is covered by a range of Landscape Character Areas, including: • Broadvalley Lowland • Dolerite Hills • Firth Lowlands • Highland Foothills • Highland Glens • Highland Glens and Lochs • Highland Summits and Plateaux • Igneous Hills • Inland Loch • Lowland Hills • Lowland Loch Basin • Lowland River Corridors • Plateau Moor: Rannoch Moor • Urban
Settlement Strategy Landscape Capacity Study Kinross Local Plan, David Tyldesley & Associates, 2006	Perth & Kinross Council commissioned this study to assist in preparing a number of Long Term Development Strategies for various settlements within the Kinross-shire Local Plan area as a result of the Reporter's recommendations following the Inquiry into the 2001 Plan. The Local Plan identifies three settlements: Milnathort, Blairingone and Crook of Devon where the Council proposes with the community, land owners and others to enter into discussions to formulate long-term development strategies for each area, the results of which will be incorporated into any subsequent review of the local plan. This study focuses on the Milnathort/Kinross Area and the Fossoway Area, including the settlements of Blairingone, Crook of Devon, Drum, Powmill and Rumbling Bridge. Its purpose is to provide an assessment of the existing landscape and its ability to accommodate future development. The objectives of the Study were to: • Evaluate the landscape setting of the two areas, identifying key resources for protection/enhancement • Identify sensitive areas where development should be discouraged • Outline an appropriate landscape framework to support any future development • Identify long term options, in landscape terms, for development within the two areas. Options should be put forward for different scales of development and should include the identification of potential expansion areas with information regarding the type of development which may be suitable, any necessary landscape mitigation or enhancement required and how development could be phased to ensure the most appropriate sites are developed first. The Study draws conclusions as to those locations where the landscape has the capacity to accommodate further development for the settlements of Kinross, Milnathort, Blairingone, Crook of Devon and Drum, Powmill, and Rumbling Bridge following the carrying out of a Settlement Capacity Assessment for each. The Study will help inform the assessment of site options for the LDP.
Wildness in Scotland's Countryside, SNH 2003	The document describes the main pressures leading to the loss of wildness, and provides support to the policy approach taken in NPPG14 (now superseded by SPP). It also considers the difficulty associated with identifying wildness and wild land in our landscapes. It draws a distinction between "wildness" – the quality enjoyed, and "wild land", or places where wildness is best expressed. Whilst wild land has normally been identified in the uninhabited and remoter areas in the north and west of the country, the quality of wildness can be found more widely in the countryside, sometimes relatively close to settlements.
Fitting Landscapes - Scottish Government's policy statement on design and management of transport corridors.	'Fitting Landscapes' provides the Scottish Government's policy statement addressing the landscape design and management of our transport corridors.

Material Assets	
Going for green Growth: A Green Jobs Strategy for Scotland, 2005	Aims to grab hold of the business opportunities and advantages arising from a belief in and commitment to sustainable development. It sets a vision of a vibrant, low carbon economy with Scotland as a centre for green enterprise.
Scotland's National Transport Strategy 2006	Sets out a long term vision for transport, along with objectives, priorities and plans. It focuses on three strategic outcomes which will set the context for transport policy making for the next twenty years: 1. Improve journey times and connections between cities and towns and global markets to tackle congestion and provide access to key markets. 2. Reduce emissions to tackle climate change. 3. Improve quality, accessibility and affordability of transport, to give people the choice of public transport and real alternatives to the car.
Transport Scotland's Strategic Transport Projects Review 2008	The Review sets out the future investment programme for transport in Scotland over the next twenty years. It identifies 29 major investment priorities across the country which will support the future growth of Scotland's businesses and communities. Those priorities of particular relevance to the Perth and Kinross area are: • Faster, more frequent rail services linking Fife, Aberdeen, Inverness, Edinburgh, Perth and Glasgow – reducing journey times between Inverness and the central belt by up to 30 minutes and by up to 20 minutes between Aberdeen and Edinburgh. • Programme of improvements for the A9 including upgrading to dual carriageway standard between Perth and Inverness. It is the first national, multi-modal, evidence based appraisal of Scotland's current transport network and as forecast over the next two decades.
Scotland's Zero Waste Plan 2010	The Plan's mission is "to achieve a zero waste Scotland, where we make the most efficient use of resources by minimising Scotland's demand on primary resources, and maximising the reuse, recycling and recovery of resources instead of treating them as waste". <u>Vision</u> This vision describes a Scotland where resource use is minimised, valuable resources are not disposed of in landfills, and most waste is sorted into separate streams for reprocessing, leaving only limited amounts of waste to go to residual waste treatment, including energy from waste facilities. A zero waste Scotland will: • be where everyone - individuals, the public and business sectors - appreciates the environmental, social and economic value of resources, and how they can play their part in using resources efficiently; • reduce Scotland's impact on the environment, both locally and globally, by minimising the unnecessary use of primary materials, reusing resources where possible, and recycling and recovering value from materials when they reach the end of their life; • help to achieve the targets set in the Climate Change (Scotland) Act 2009 of reducing Scotland's greenhouse gas emissions by 42% by 2020 and 80% by 2050; • contribute to sustainable economic growth by seizing the economic and environmental business and job opportunities of a zero waste approach. • The implementation of this Plan will move Scotland towards achieving: • 40% recycling/composting and preparing for re-use of waste from households by 2010 • No more than 2.7 million tonnes of biodegradable municipal waste to be sent to landfill by 2010 • 50% recycling/composting and preparing for reuse of waste from households by 2013 • The preparing for reuse and the recycling of 50% by weight of waste materials such as paper, metal, plastic and glass from household waste and similar by 2020 • No more than 1.8 million tonnes of biodegradable municipal waste to be sent to landfill by 2013 • 60% recycling/composting and preparing for reuse of waste from households by 2020 • No more than 1.26 million tonnes of biodegradable municipal waste to be sent to landfill by 2020 • 70% recycling and preparing for reuse of construction and demolition waste by 2020 • No more than 5% of all waste to go to landfill by 2025 • 70% recycling/composting and preparing for reuse of all waste by 2025 <u>Role of Land Use Planning in Delivering Zero Waste</u> The Plan identifies the planning system as having a crucial role to play in delivering waste management facilities for all waste to ensure its objectives and targets are met.
TACTRAN Regional Transport Strategy 2008-2023	The Tayside and Central Scotland Transport Partnership (TACTRAN) include the local authority areas of Angus, Dundee City, Perth and Kinross, and Stirling.

	In line with the requirements of the Transport (Scotland) Act 2005, the Regional Transport Strategy sets out a vision and strategy for improving the region's transport infrastructure, services and other facilities over the next fifteen years. TACTRAN's vision is to deliver: "a transport system, shaped by engagement with its citizens, which helps deliver prosperity and connects communities across the region and beyond, which is socially inclusive and environmentally sustainable and which promotes the health and wellbeing of all." The Strategy seeks to achieve this vision through a balanced and integrated approach supporting the key themes of: • Delivering economic prosperity • Connecting communities and being socially inclusive, and • Delivering environmental sustainability, health and wellbeing The Strategy sets out a number of objectives and subsequent issues for the area under the following six broad themes: 1. Economy: To ensure transport helps to deliver regional prosperity 2. Accessibility, Equality and Social Inclusion: To improve accessibility for all, particularly for those suffering from social exclusion 3. The Environment: To ensure that the transport system contributes to safeguarding the environment and promotes opportunities for improvement 4. Health and Wellbeing: To promote the health and wellbeing of communities 5. Safety & Security: To improve the real and perceived safety and security of the transport network 6. Integration: To improve integration, both within transport and between transport and other policy areas A STAG Appraisal and SEA have been carried out for the Transport Strategy. In summary the outcome of the SEA was that: • The effects on carbon emissions, air quality and health are dependent on the reduction in car dependency and promoting more sustainable modes (cycling and walking) • There is potential to reduce traffic growth • There may be some significant effects on the natural and cultural heritage from new infrastructure projects at some locations

	The STAG Appraisal demonstrates that: • There is good resonance with the core vision of the Strategy, which is sustainable economic growth, to redress the current inequalities which in part are due to the peripheral location of key settlements • There is a strong fit with the stated objectives of the Strategy, with particular emphasis on environment and health • There is a positive SEA, which shows potential benefits across a wide range of environmental indicators • The Strategy contains measures to reduce inequality and address concerns of specific groups in society
Shaping Perth's Transport Future: A Transport Strategy for Perth And the Wider Region 2010	Highlights proposal to tackle existing transport problems, their causes and improvements to ensure that Perth continues to thrive as a modern, vibrant city. Proposals include a new crossing over the River Tay (Cross Tay Link Road, CTLR) supported by a package of City Enhancements to improve the wider public transport, walking and cycling networks and "lock-in" the benefits of the CTLR and the removal of traffic from the city centre.
Safeguarding Scotland's Resources – Blueprint for a more resource efficient and circular economy	This programme commits to actions that will make an impact on Scotland's resource consumption, encouraging a reduction in the amount of raw material we consume by wasting less and using our finite resources more efficiently.
SEPA Thermal Treatment of Waste Guidelines	This guidance sets out SEPA's approach to permitting thermal treatment of waste facilities and our role as a statutory consultee of the land use planning system.
Population	
TAYplan Housing Need and Demand Assessment 2014	An HNDA estimates the future number of additional homes to meet existing and future housing need and demand. It also captures information on the operation of the housing system to assist local authorities to develop policies on new housing supply, management of existing stock and the provision of housing-related services. Its purpose is to provide a robust, shared and agreed evidence-base for housing policy and land use planning and to ensure that both LHSs and Development Plans are based upon a common understanding of existing and future housing requirements. The TAYplan HNDA was confirmed as "robust and credible" by the Centre for Housing Market Analysis on 24th February 2104. It sets the following targets for housing within Perth and Kinross:

<table>
<tr><td></td><td>

Additional allocations required by HMA

HMA	Housing Land Requirement 2014-28*	HLR 2014-28 minus adjustments (rounded)	Effective Housing Land Supply 2014-28 (rounded)	Shortfall (additional allocations required)
Highland	1120	840	760	80
Kinross	882	795	855	0
Perth	7238	6515	8445	0
Strathearn	1820	1640	1760	0
Strathmore	1680	1510	1580	0
P&K	12740	11300	13400	80

* includes Kinross adjustment of 10% to Perth HMA

Please note - The shortfall in Highland doesn't occur until the 2021 - 26 effective period

</td></tr>
<tr><td>Homes for Scotland's People: A Scottish Housing Policy Statement, 2006</td><td>Sets out the Scottish Executive's commitments to housing. Particularly aims to provide more affordable housing, through diversification of ownership structures and ensuring planning plays a role in releasing land for housing in development plans.</td></tr>
<tr><td>Homes Fit for the 21st Century: The Scottish Government's Strategy and Action Plan for Housing in the Next Decade: 2011-2020</td><td>Sets out the Scottish Government's housing vision and strategy for the decade to 2020.</td></tr>
<tr><td>Perth And Kinross Local Housing Strategy 2011-2016</td><td>The Strategy sets out what Perth and Kinross Council is planning to do, in co-operation with our partners, to address key housing issues in the area over the five-year period 2011-2016

The Housing (Scotland) Act 2001 requires local authorities to undertake a comprehensive assessment of housing needs and conditions, and to produce strategies to tackle the housing problems in their areas. As a result, Perth & Kinross Council has produced a Local Area Housing Strategy which covers the period 2011-2016.</td></tr>
<tr><td>PKC Housing in the Countryside Supplementary Guidance 2014</td><td>The Housing in the Countryside Supplementary Guidance is used to help determine planning applications for residential development within the Adopted Local Development Plan area.

The policy aims to:
safeguard the character of the countryside,
support the viability of communities,
meet development needs in appropriate locations, and
ensure that high design standards of siting and design are achieved.</td></tr>
<tr><td colspan="2">Human Health</td></tr>
<tr><td>Learning for our Future: Action Plan for the UN Decade of Education for Sustainable Development, 2006</td><td>Actions to be taken by the Scottish Executive in support of the global programme to integrate the principles, values and practices of sustainable development into all aspects of education.</td></tr>
<tr><td>Scottish Environment and Health Strategic Framework</td><td>Recognition of role of natural environment in enhancing health and wellbeing</td></tr>
<tr><td>The Land Reform (Scotland) Act 2003

The Scottish Outdoor Access Code, 2003</td><td>The Act established statutory rights of responsible access to land and inland water for outdoor recreation, crossing land and some educational and commercial purposes. It sets out where and when access rights apply and how land should be managed in relation to access.

The Code provides detailed guidance on the responsibility of those making use of access rights and of those managing land and water, i.e. it sets out how access rights should be used.</td></tr>
<tr><td>Perth and Kinross Core Path Plan 2012</td><td>Core Paths Plan has been produced by the Council as required by the Land Reform (Scotland) Act 2003 and shows a system of paths (core paths) which the Council believes provide reasonable public access throughout Perth and Kinross.</td></tr>
<tr><td>Strategic Framework for Sport & Active Recreation in Perth and Kinross 2011-2015</td><td>The Strategic Framework for Sport & Active Recreation in Perth and Kinross aims to deliver better opportunities for physical activity, recreation and sport at the heart of Scotland with a mission statement of "Working with our local communities and partner organisations to encourage more active lifestyles and to widen participation
in Sport & Active Recreation for the improvement of our health and wellbeing"

The aims of the strategy are to:
Maintain and widen participation;
Develop people, places and organisations; and
Provide pathways and improve performance</td></tr>
<tr><td>Designing Places – A Policy Statement for Scotland,
The Scottish Executive 2001</td><td>It is a material consideration in decisions on planning applications and appeals. It also provides the basis for a series of Planning Advice Notes (PANs) dealing with more detailed aspects of design.

This is the first policy statement on designing places in Scotland and marks the Scottish Executive's determination to raise standards of urban and rural development. The document sets out the policy context for important areas of planning policy, design guidance, professional practice, and education and training.

The Policy Statement highlights the need for a change in attitudes, expectations and practices about the design of cities, towns, villages and the countryside in order to create successful and sustainable places. In addition, it outlines the need for:</td></tr>
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	1. Decision makers who understand the role of design in delivering sustainable development. 2. Developers, landowners, investors and public bodies who recognise the commercial and economic value of good design. 3. Effective collaboration between disciplines, professionals, local communities and others in the planning and urban design process. 4. Development plans with effective design policies, and urban design frameworks, development briefs and master plans to provide planning and design guidance. 5. Developers submitting design statements with planning applications that explain the design principles on which the development proposal is based. 6. A high level of awareness and urban design skills in local authorities, including planners and councillors who are committed to raising design standards and understand the impact of their decisions. 7. A stronger design element in built environment professional education. 8. Better design education in continuous professional development programmes. 9. Greater commitment to higher standards of design among public bodies. In terms of the development plan the Policy Statement states that it should set out key design policies relating to issues that are particularly important locally, and to specific areas and sites where change is expected. It continues that the plan should explain how the planning process should deal with design, and specify what degree of detail will be expected in planning and design guidance; in what degree of detail proposals should be presented at different stages in the application process; and in what circumstances design statements will be needed.
Let's Get Scotland Walking – The National Walking Strategy	The National Walking Strategy outlines our vision of a Scotland where everyone benefits from walking.
Cycling Action Plan for Scotland 2013	This updated Cycling Action Plan for Scotland sets out what more needs to be done and the delivery roles sought. Scottish Government and Transport Scotland have obvious roles in providing resources and showing leadership; local authorities, communities, public, private and third sectors all need to participate too.

	It sets 19 actions which outlines how Transport Scotland can work in partnership to achieve our shared vision that by 2020, 10% of everyday journeys taken in Scotland will be by bike.
A Long-Term Vision for Active Travel in Scotland 2030	This document encourages active travel with the aim to achieve many outcomes, including better health, having attractive, safe communities and increased economic activity.
Equally Well	This is a public health strategy for Scotland with a focus on health inequalities. A key principle is reducing people's exposure to factors in the physical and social environment that cause stress, are damaging to health and wellbeing and lead to health inequalities.
Good Places Better Health	Good Places better Health is the Scottish Government's strategy on health and the environment. This approach recognises that the physical environment has a significant impact on the health of Scotland's people and that action is required to create health-nurturing environments for everyone.
"Climate Change and human health risks"	This WHO publication reports on current scientific understanding of global climate change, including international views on the IPCC Third Assessment Report and the implications that this may have on human health.

Perth and Kinross Council

Local Development Plan 2
SEA Environmental Report

APPENDIX B: BASELINE MAPS
AND DATA

December 2015

DRAFT

PERTH & KINROSS COUNCIL

APPENDIX B: BASELINE MAPS AND DATA

List of Maps and Charts

Cultural Services

- Wild Land Areas
- Biological SSSI's, RSPB IBA's and Farmland Wader Areas
- Area and Condition of Protected Areas
- Geological SSSI's and Tayside Geodiversity Sites
- BAP Broad Habitat Change
- Scenic Landscapes
- Protected Species Distribution
- Landscape Character
- Recreation and Green Infrastructure
- Residential Properties within 500m of a Core Path
- Residential Properties within 800m of a Bus Stop
- Mode of Travel to Work/School
- Traffic Volume
- Population and Vulnerability
- Resident Satisfaction with their Neighborhood
- Obesity in School Children
- Life Expectancy
- Noise Complaints
- Vacant and Derelict Land
- Historic Environment
- Number of Planning Applications with the Potential to Impact the Historic Environment
- Historic Landscape Character Assessment

Provisioning Services

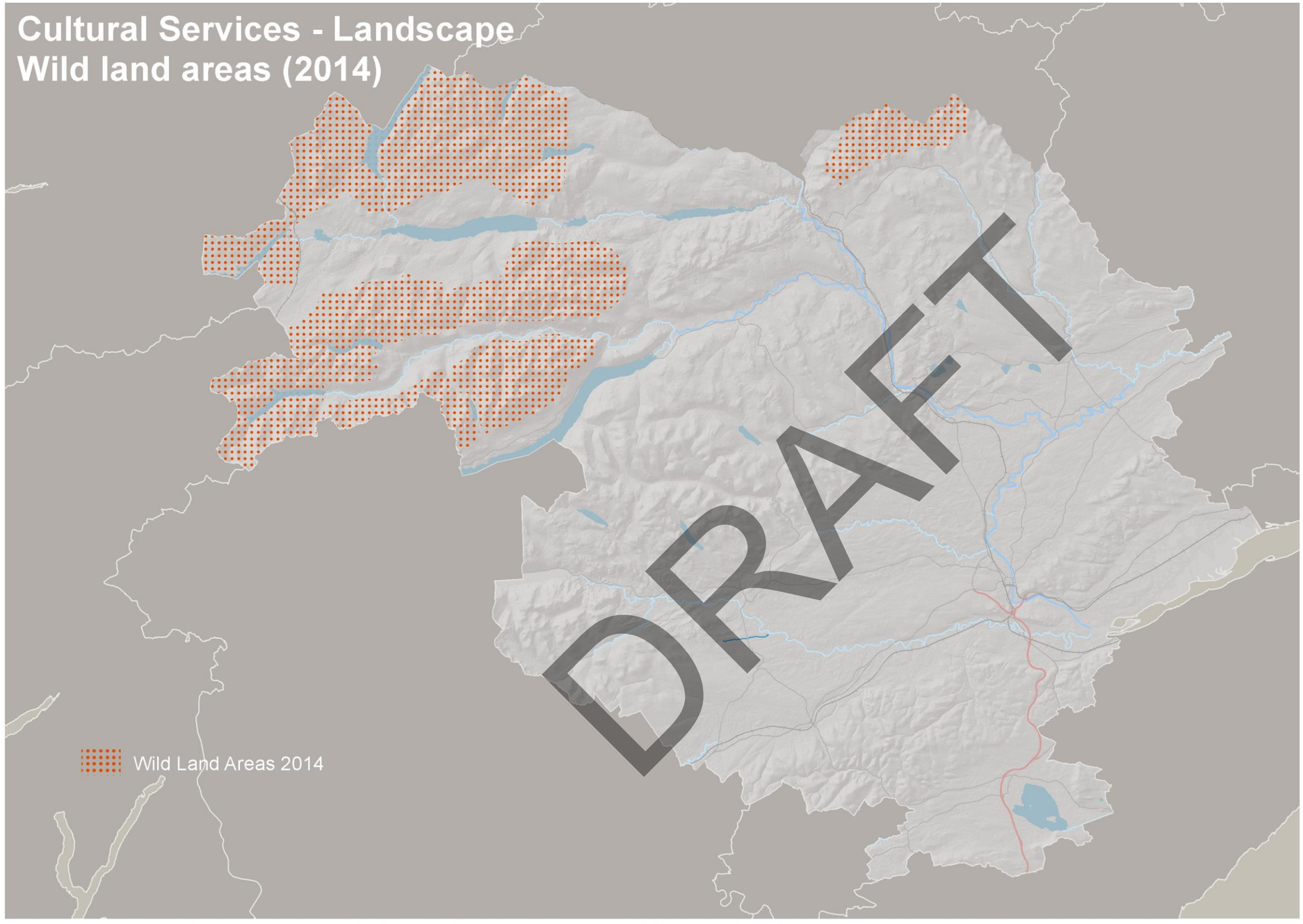
- Land Cover Map – Broad Habitat Type
- Ancient and Semi Natural Woodlands
- Native and Nearly Native Woodlands and Potential Native Woodland Networks
- Residential Properties within 500m of an Area of Woodland Less than 2ha
- Residential Properties within 4km of an Area of Woodland Greater than 20ha
- Drinking Water
- Water Abstractions for Agriculture
- Prime Agricultural Land and Water Abstraction for Agriculture
- Domestic Electricity Demand
- Natural Gas and Heat Demand
- Renewable Energy Capacity

Regulating Services

- Air Quality Management Areas
- Surface Water Quality
- Flood Risk
- Natural Flood Management
- Groundwater Quality
- Contaminated Land
- Co2 Emissions per Capita
- Prime Agricultural land
- Carbon Richness of Soils
- Carbon Richness of Soils, Deep Peat and Priority Peatlands
- Major Soils Types

Supporting Services

- Household Waste
- Waste Sites
- Mean Annual Levels of Key Air Pollutants
- Annual Precipitation at Key Weather Stations
- Mean Daily Flow
- River Tay District Rod Count



Current position

Wilderness is defined, by SNH, as 'a quality experienced by people when visiting places of a certain character.' Relative wildness is mapped by determining the level to which 4 physical attributes are present. These are: the perceived naturalness of the land cover, the ruggedness of the terrain, remoteness from public roads or ferries, and the visible lack of buildings, roads, pylons and other modern artefacts. The results of these analyses are combined to produce a map of relative wildness of Scotland.

There are 5 Wildland areas within or intersecting the area. .

Relevance of this indicator

Preservation and enhancement of the distinctive landscape of Perth and Kinross is important to maintain community well being, biodiversity and to support the local economy, which are dependent on tourism and maintenance of a healthy environment. The required development of roads associated with forestry, rural development, windfarms and other development pressures can detract from an area's sense of wildness.

Links to PKC SD Principle:

SDP5 - Protecting and improving natural resources and biodiversity (e.g. air quality, water quality, land contamination)

SDP 6 Well maintained, local, user-friendly open spaces with facilities for everyone

Links to Local Outcome:

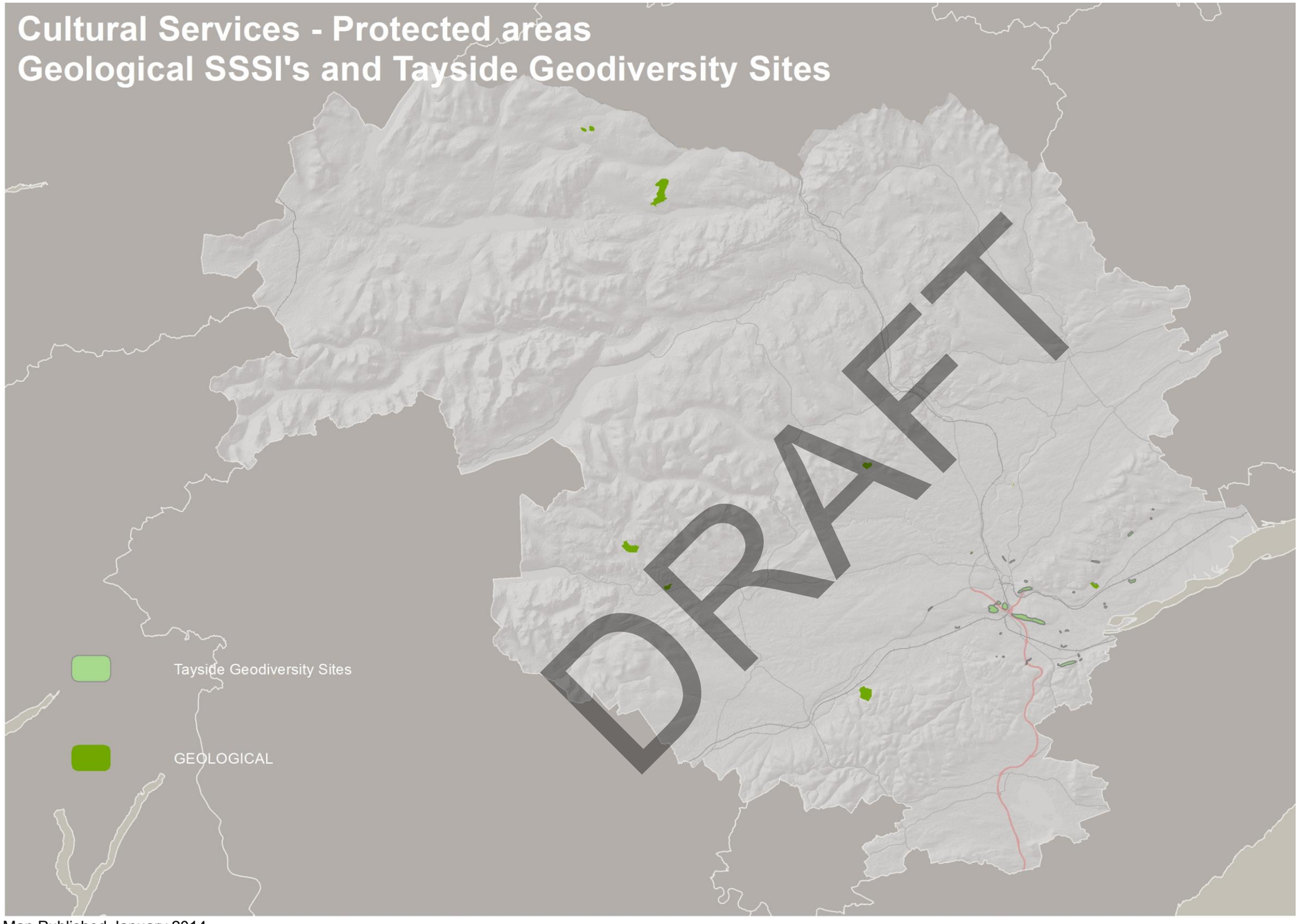
Our area will have a sustainable natural and built environment

Links to National Outcome:

We value and enjoy our built and natural environment and protect it and enhance it for future generations

Data source: PKC**,** Scottish Natural Heritage

Data availability: Annual



Map Published January 2014

Current position

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, SSSI).

In 2014/15 96 percent of Geological protected sites were considered to be in favorable condition. This represents a decline of 4 percent in the condition of geological notified features.

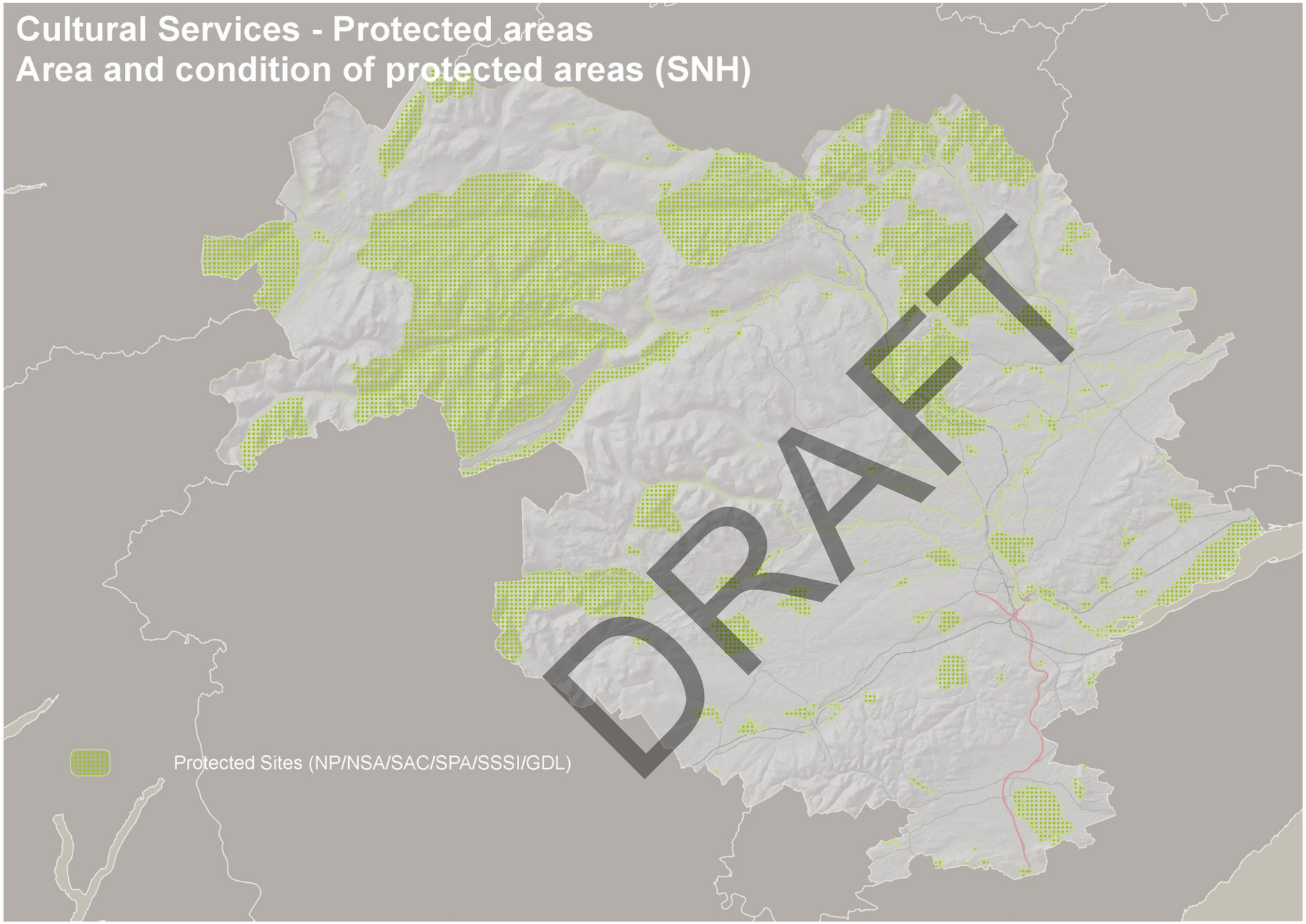
The Perth and Kinross Council area contains or adjoins 30 Geodiversity sites.

Relevance of this indicator

The diverse wildlife and habitats of the Tayside area are highly valued locally, nationally and internationally and are resources that need to be protected. Biodiversity benefits communities and human health through the provision of a high quality environment in which to live. Biodiversity is integral to the productivity and beauty of the countryside, contributing significantly to the local economy by attracting many tourists to the area.

Data source: National Biodiversity Network, RSPB, SNH

Data availability: ad hoc



Current position

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, SSSI).

In 2014/15 78.2 percent of Biological protected sites and 96 percent of Geological protected sites were considered to be in favorable condition. This represents an improvement in condition of 1.6 percent for biological notified features and a decline of 4 percent in geological notified features.

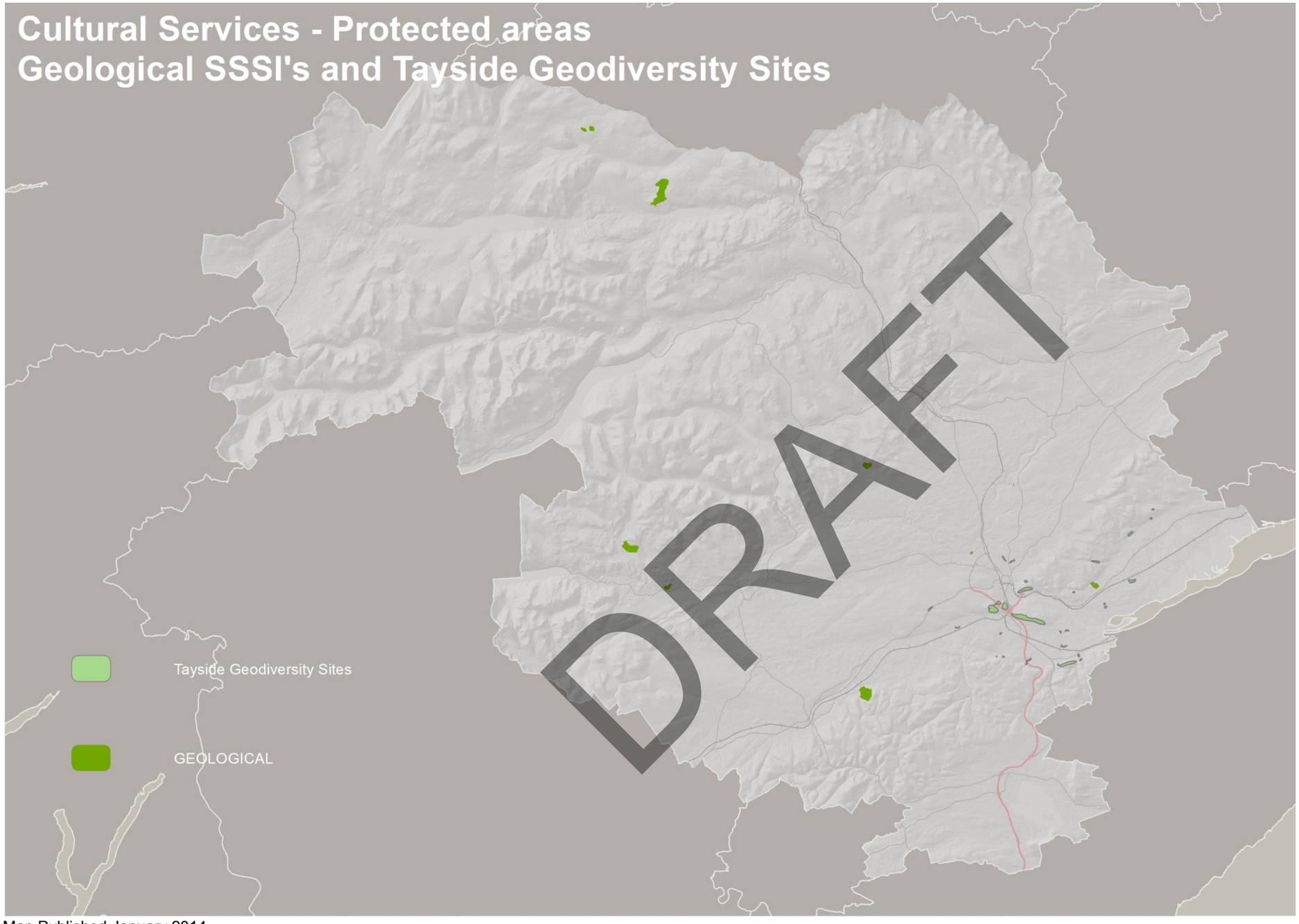
Relevance of this indicator

The diverse wildlife and habitats of the area are highly valued locally, nationally and internationally and are resources that need to be protected. Biodiversity benefits communities and human health through the provision of a high quality environment in which to live. This indicator identifies those areas within the Strategic Development Plan Area highlighted for their contribution to the landscape and identified for specific and habitats protection. (It should be noted that designation of an area does not guarantee its quality).

Data source: Scottish Natural Heritage

Data availability: Annual

Map Published January 2014



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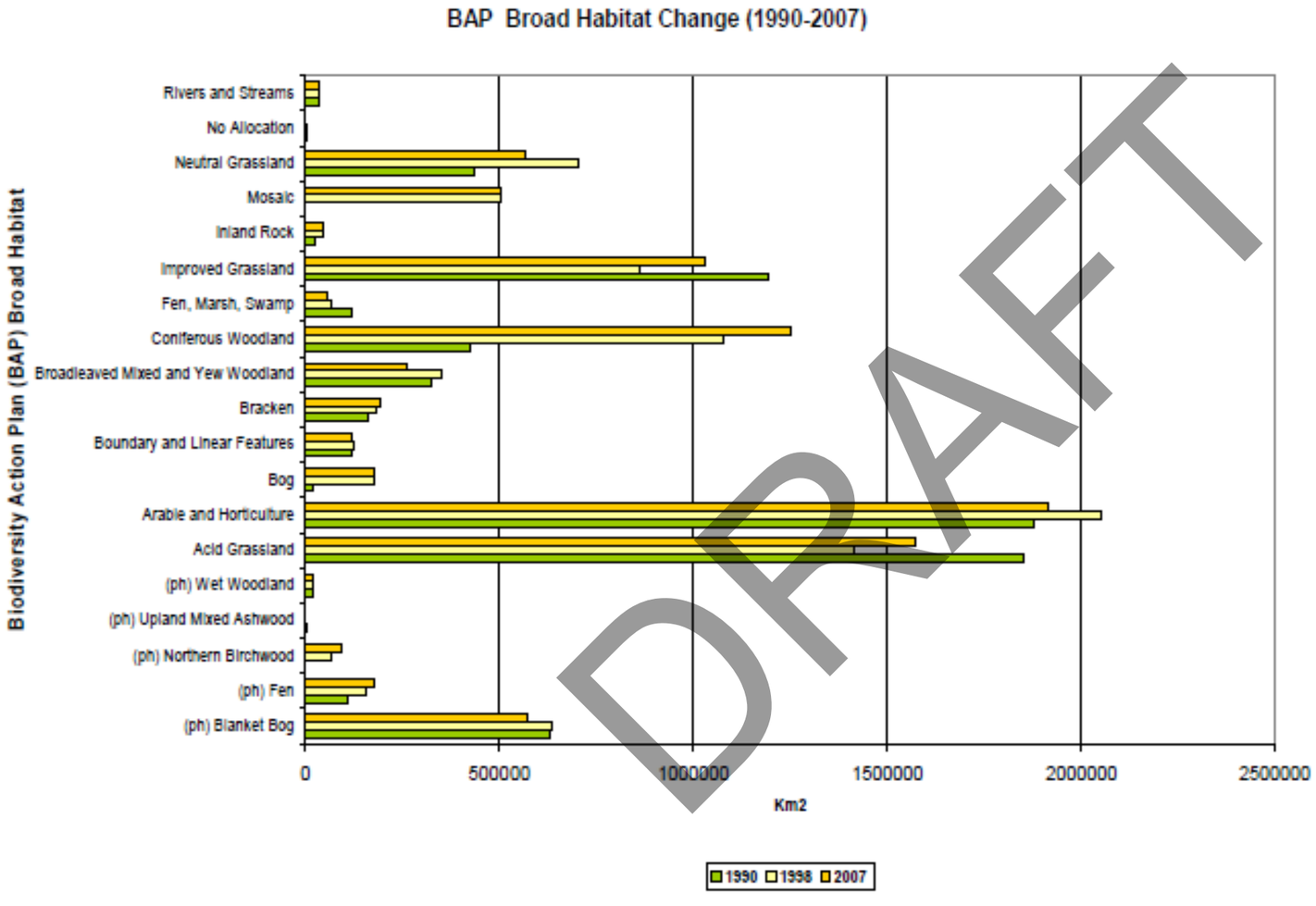
Data source: National Biodiversity Network, RSPB, SNH

Data availability: ad hoc

Cultural Services – BAP Broad Habitat Change



Current position

Available data collated from varied Phase 1 and Natural Vegetation Classification (NVC) habitat surveys (1984 – 2007) indicates a baseline of 9% priority BAP habitat coverage in Perth and Kinross.

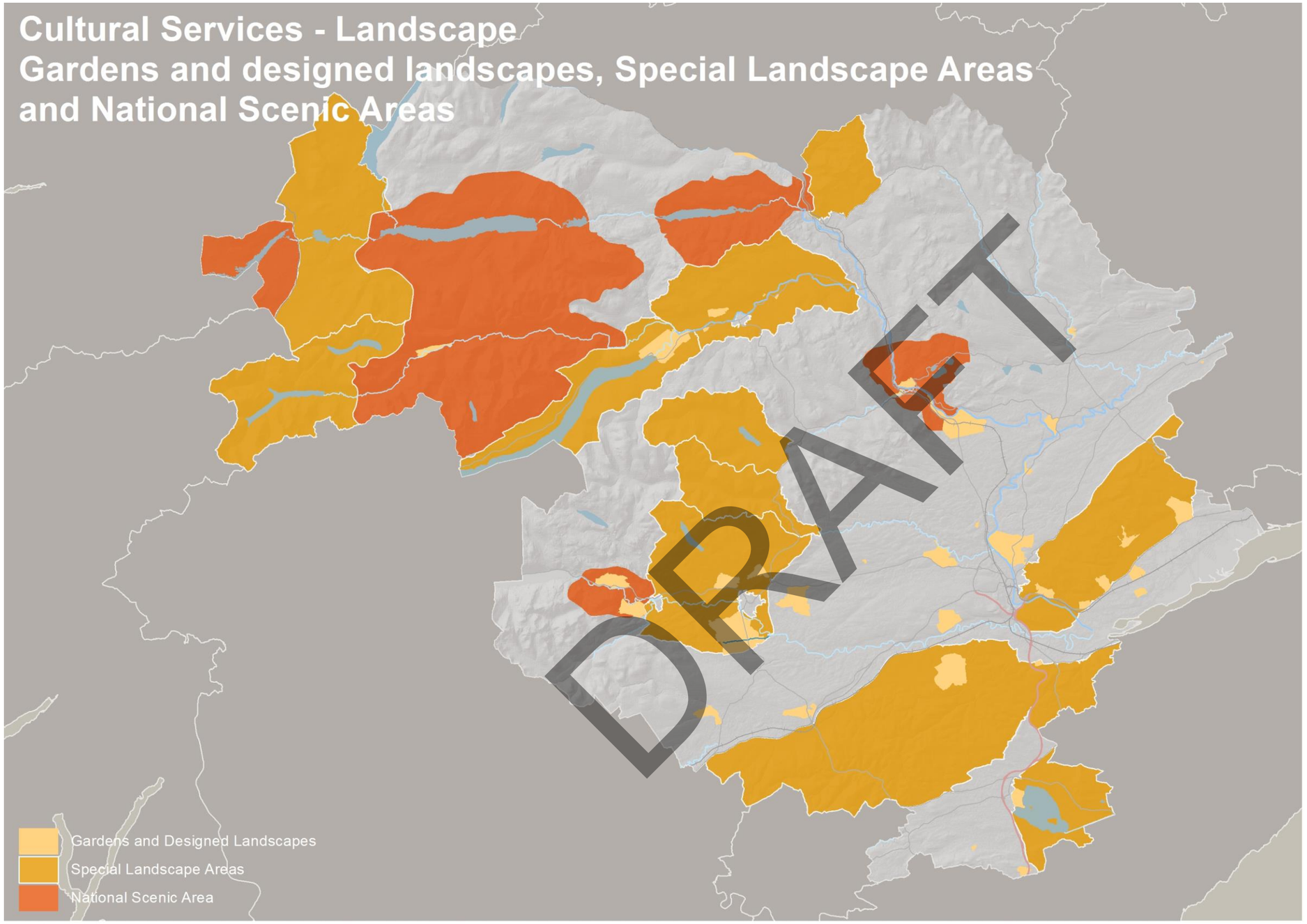
Results of the Countryside Survey 2007 indicate an overall increase in the net coverage of BAP priority habitats in Perth and Kinross, with 47% of habitats showing an increase, 26% remaining stable and 26% declining from 1990 to 2007.

Relevance of this indicator

Biodiversity benefits communities and human health through the provision of a high quality environment in which to live. Biodiversity is integral to the productivity and beauty of the countryside, contributing significantly to the local economy by attracting many tourists to Perth and Kinross each year specifically because of its unique wildlife. Natural and semi-natural habitats are subject to pressure due to the rising demand for residential and commercial development. The Tayside Biodiversity Action Plan identifies the lack of information on the quality of existing habitats and effective management techniques to protect them as the key factors contributing to the loss of habitats and species.

Data source: Scottish Natural Heritage, Countryside Survey 2007

Data availability: No Planned Update



Map Published 2015

Current position

The only national landscape designation in Scotland is National Scenic Area (NSA). These areas are considered to be of national importance due to their outstanding scenic interest which must be conserved as part of the country's natural heritage.

In 2015 there were 42 gardens and designed landscapes covering 11123 ha representing an increase in area of 68 ha over the previous year.

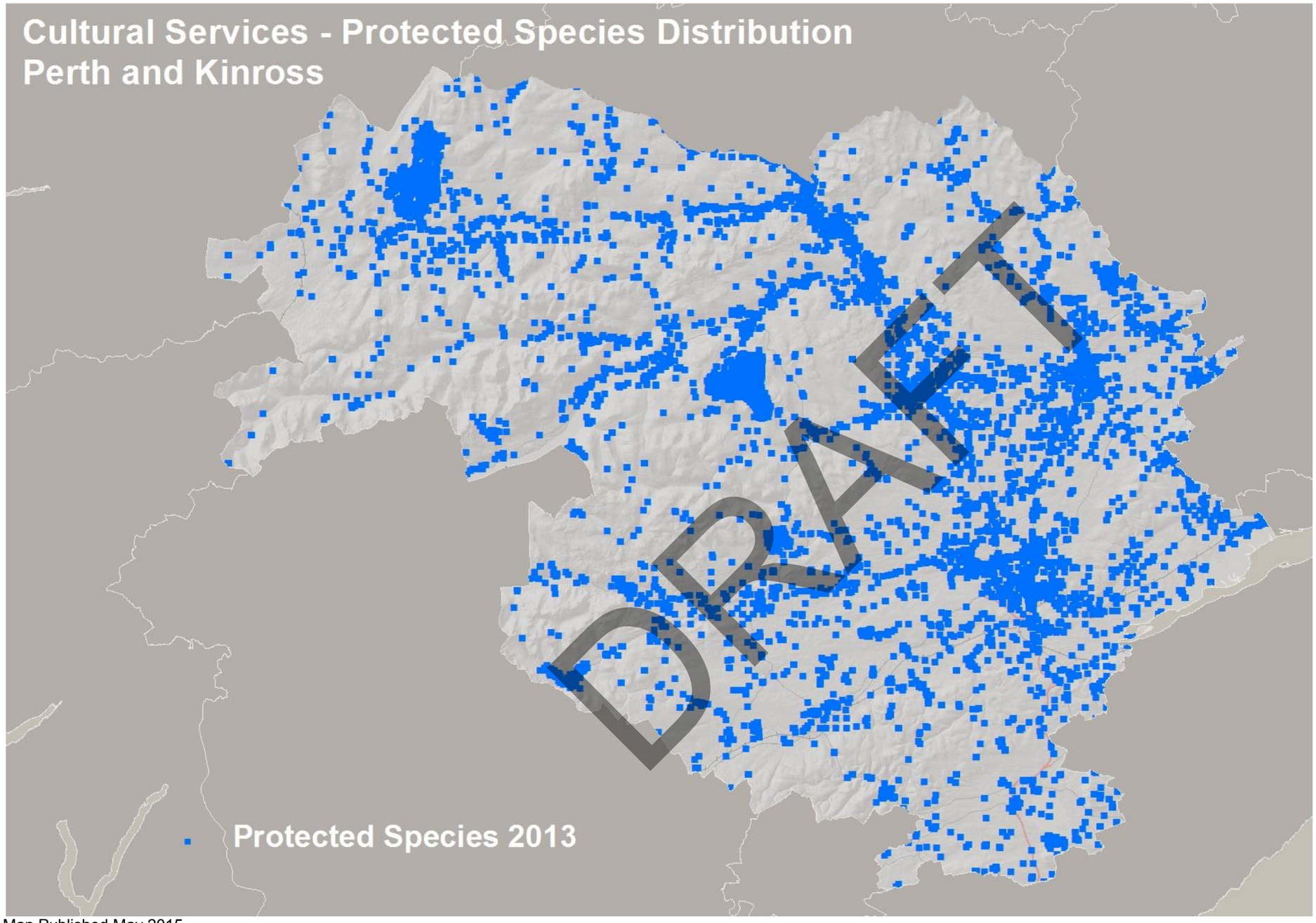
There are 11 Special Landscape Areas (SLAs) spread across Perth and Kinross, and consist of a range of highland and lowland areas covering 144 400 ha or around 27% of Perth and Kinross. SLAs are landscapes within Perth and Kinross which merit special attention, either because they are of particular value and warrant protection or because they are degraded and require active management or positive restoration, or are under threat from inappropriate development.

Relevance of this indicator

Landscape incorporates the environmental and cultural features present in an area. Preservation and enhancement of the distinctive landscape of Perth and Kinross is important in maintaining community well being, biodiversity and supporting the local economy (tourism in particular). This indicator identifies those areas within Perth and Kinross highlighted for their contribution to the landscape and identified for specific protection. (It should be noted that designation of an area does not guarantee its quality).

Data source: Scottish Natural Heritage, Historic Scotland, PKC

Data availability: Ad hoc



Map Published May 2015

Current position

Protected species have been recorded throughout Perth and Kinross. The map provides a record of the location of all protected species recordings and includes both Statutory Species and LBAP protected species.

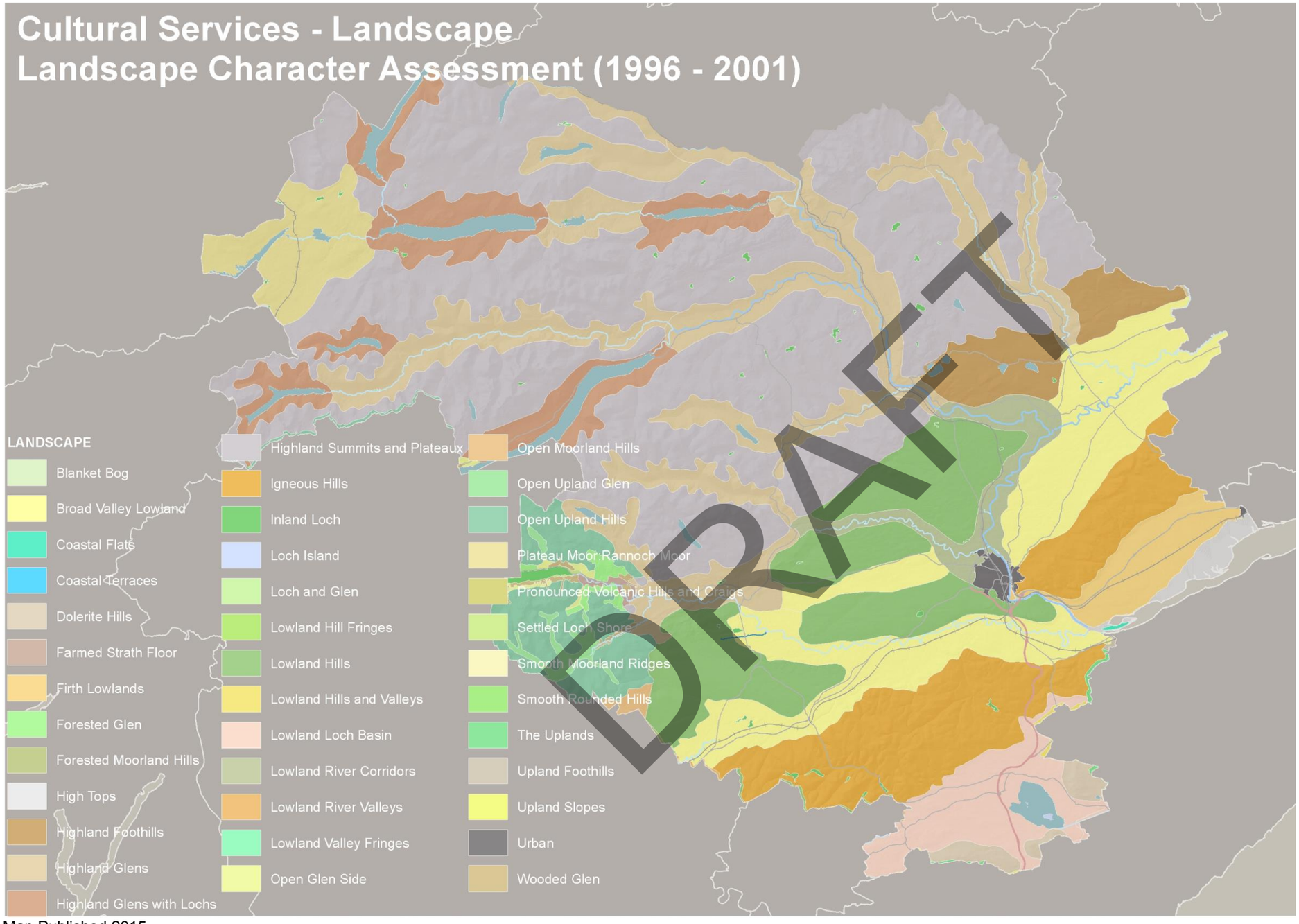
There are 5391 recordings of LBAP species and 9394 recordings of statutory species covering 44% of all one km squares in Perth and Kinross.

Relevance of this indicator

The diverse wildlife and habitats of Perth and Kinross are highly valued locally, nationally and internationally and are resources that need to be protected. Biodiversity benefits communities and human health through the provision of a high quality environment in which to live. Biodiversity is integral to the productivity and beauty of the countryside, contributing significantly to the local economy by attracting many tourists to Perth and Kinross each year specifically because of its unique wildlife. Species identified as priority species (Tayside BAP, national and/or internationally protected) are those most important to the area in terms of conservation requirements. This indicator represents how effective management practices have been in improving the condition of these key species

Data source: National Biodiversity Network, Local Records Centre, Scottish Natural Heritage

Data availability: As and when required



Map Published 2015

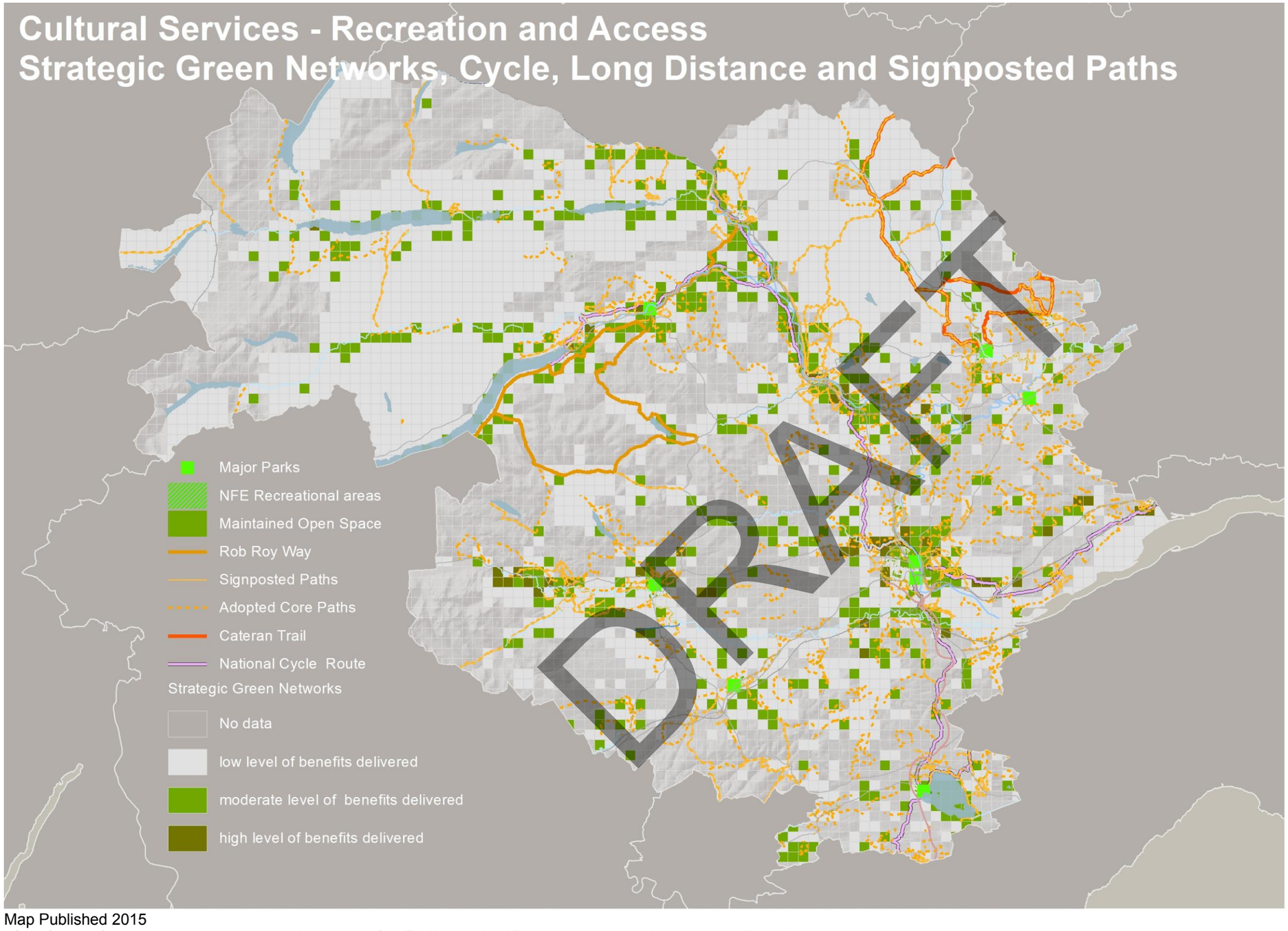
Current position

The landscape within the Perth and Kinross is divided into two main units: highlands and lowlands, reflecting geology, topography, vegetation and land use. Key landscape character areas are mountains of the highlands and islands (30%), highland and island glens (13%) broad valley lowlands (10%), lowland hills (5%) and upland igneous and volcanic hills (6%). The remaining areas are comprised of a mix of lowland basins and valley, peatlands and inland lochs (The Macaulay Institute, 2001)

Relevance of this indicator

Landscape incorporates the environmental and cultural features present in an area. Preservation and enhancement of the distinctive landscape of the Perth and Kinross area is important to maintain community wellbeing, biodiversity and to support the local economy, which is dependent on tourism and maintenance of a healthy environment.

Data source: James Hutton Institute
Data availability: No Planned Update



Map Published 2015

Current position

Development should not only contribute towards new green infrastructure as the need arises as a result of individual developments, a contribution should also be made towards existing green infrastructure, by improvement or enhancement and / or by ensuring that there is no adverse impact or fragmentation of existing green infrastructure as a result of development.

These are requirements placed on developers by Local Development Plan policy. However there is also a growing demand from the public for developers to create places which are healthier, more attractive and pleasant, more sustainable and better able to withstand the effects of climate change, and which work with nature and the environment rather than against it.

Relevance of this indicator

Open space and woodland are valued elements of the landscape. Access to these areas contributes to long term human health and well being.

Planning authorities should consider the need to strengthen and develop existing access and greenspace networks, and the contribution that these areas might make to improving quality of life and providing opportunities for informal recreation as part of their open space audits and strategies and core path planning.

Links to National Outcome:

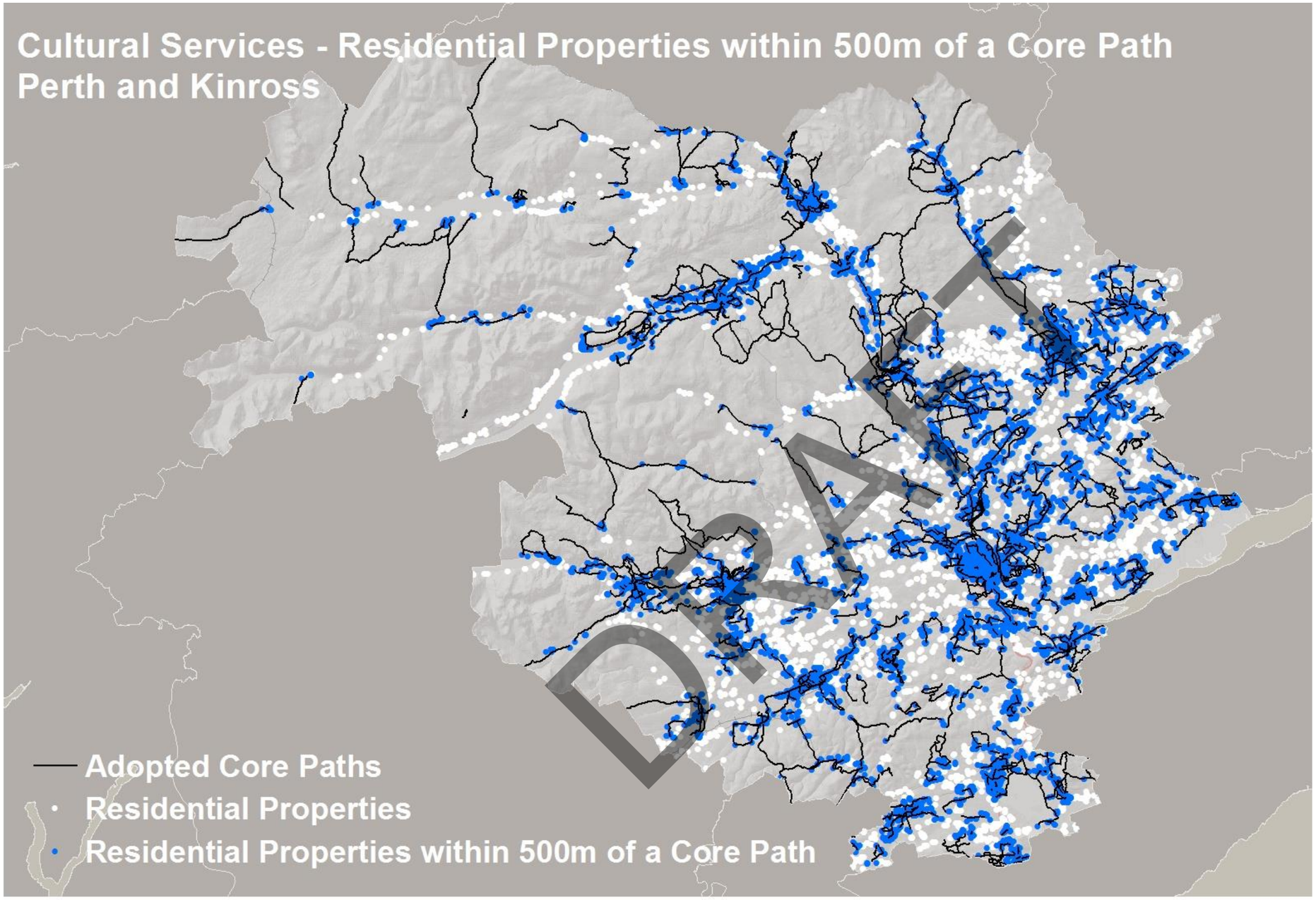
We live in well-designed, sustainable places where we are able to access the amenities and services we need

We value and enjoy our built and natural environment and protect it and enhance it for future generations

Data source: FC, TACTRAN, PKC, EKOS

PKC

Data availability: Annual



Current position

Available data from Perth and Kinross Council indicates that the majority (89%) of households are within a 500 metre straight-line distance of an adopted core path.

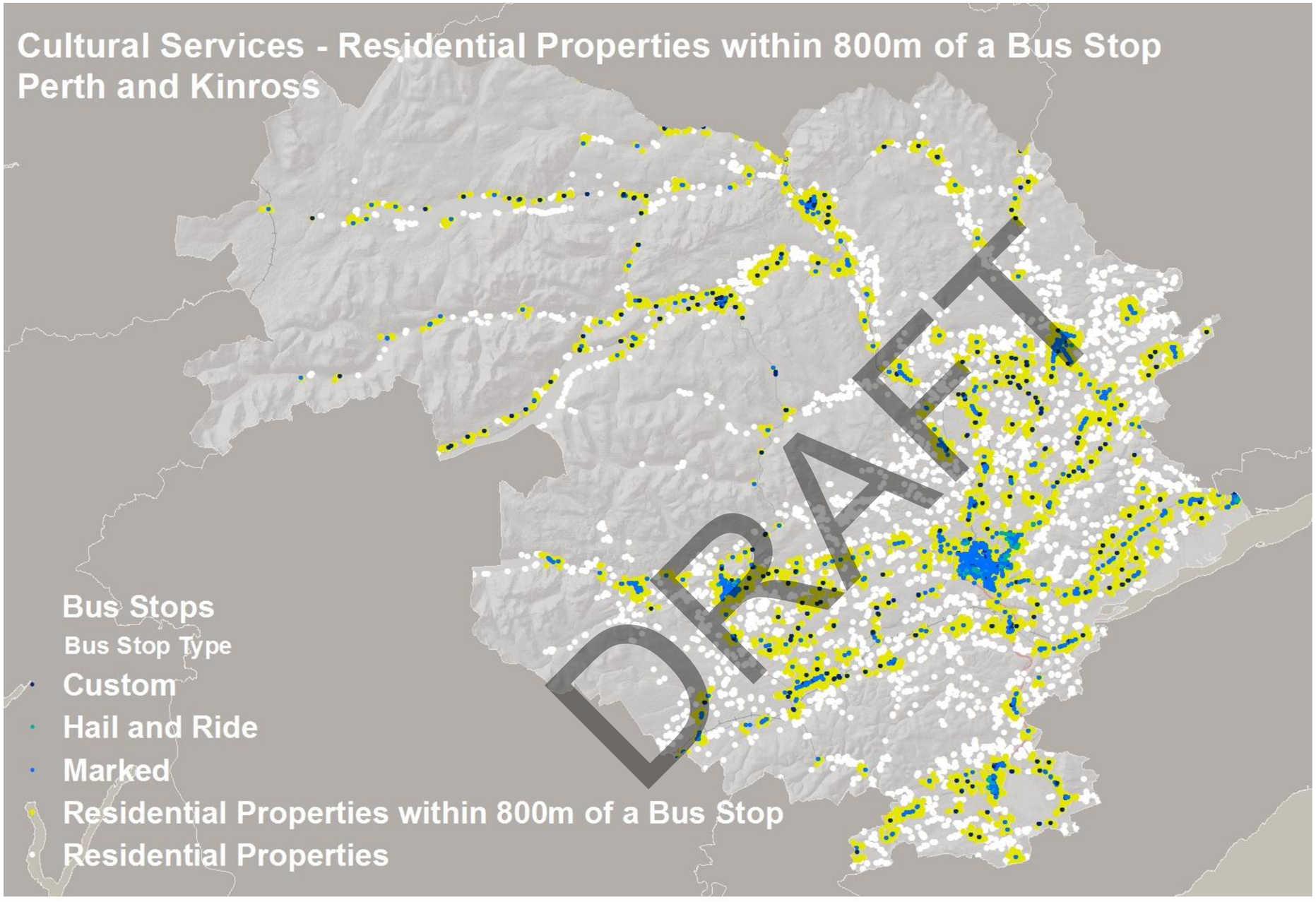
Relevance of this indicator

Open space and woodland are valued elements of the landscape. Access to these areas contributes to long term human health and wellbeing.

Data source: Perth and Kinross Council

Data availability: Annual

Map Published May 2015



Current position

Available data in Perth and Kinross indicates a high proportion of the households in Perth and Kinross are within an 800 metre straight-line distance of a bus stop (93%) a slight decrease of 1% over the 2010 figure. The accompanying map indicates how sparse bus stops are in rural areas.

Relevance of this indicator

Accessibility to transport is a key issue for sustainable development and social inclusion. As well as being a more sustainable mode of travel (better resource efficiency, less polluting) public transport is vital (especially to non-car owners) in promoting social inclusion through better access to work and key local services for all.

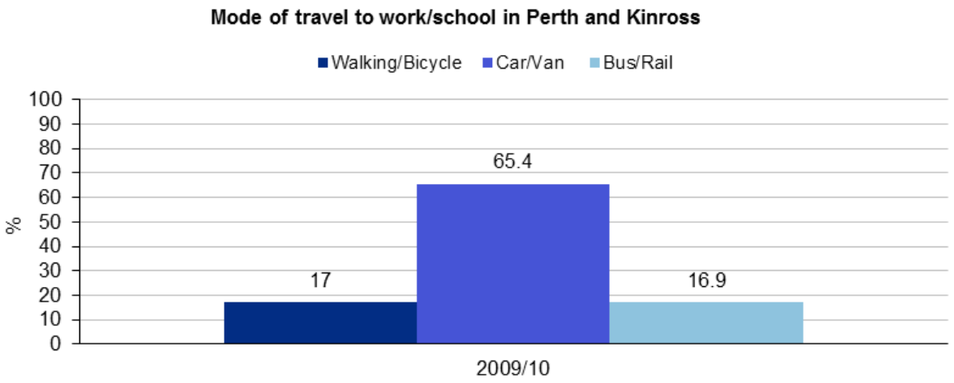
The UK Department for Transport (DfT) uses '% of all households within 13 minutes walk of an hourly or better bus service' to monitor and assess local transport accessibility. 800 metres should be used as the equivalent of "up to 13 minutes".

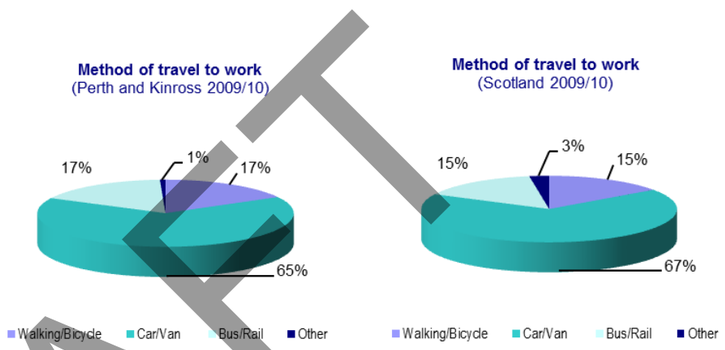
Data source: Perth and Kinross Council

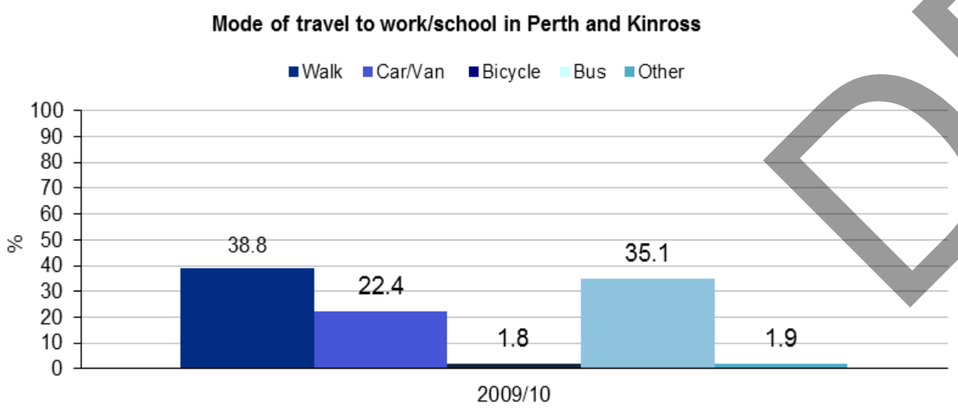
Data availability: Annual

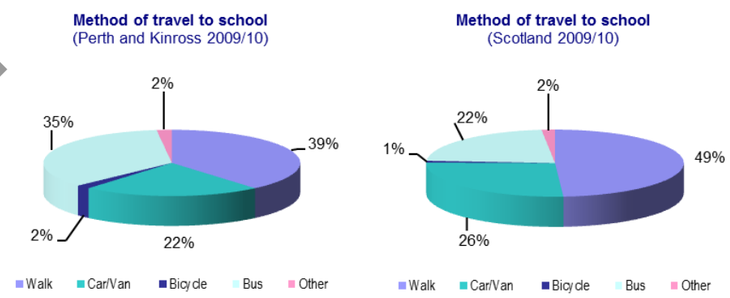
Map Published May 2015

Cultural Services – Mode of Travel to Work/School









Current position

The usual method of travel to work by employed adults (16+) not working from home in Perth and Kinross is presented in these graphs. The most popular method of travel to work in Perth and Kinross in 2009/10 was by car/van (65%). The findings for Perth and Kinross in 2009/10 follow the pattern across Scotland as a whole.

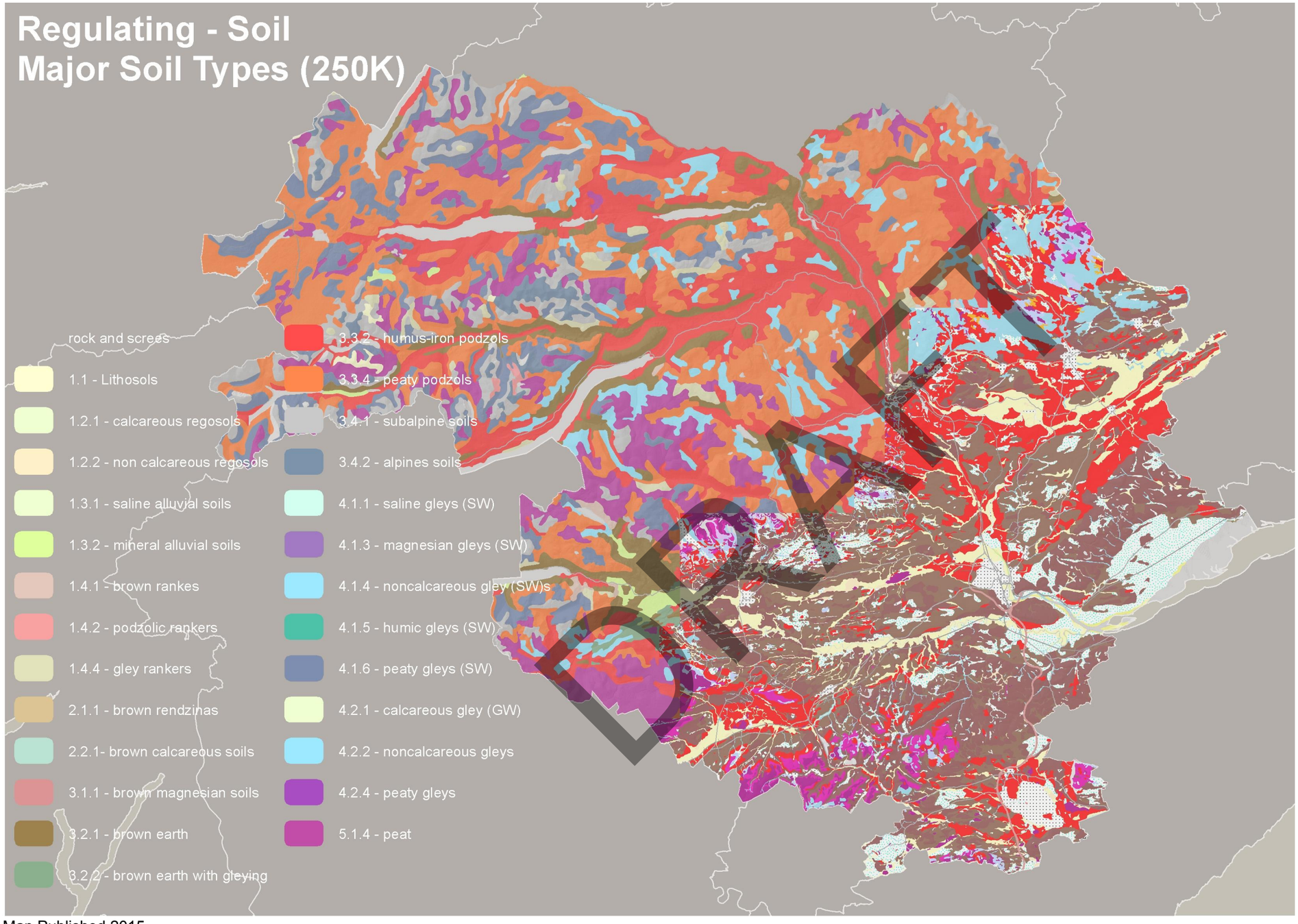
The usual method of travel to school by children in full time education in Perth and Kinross is presented in these graphs. The most popular method of travel to school in Perth and Kinross in 2009/10 was by walking, followed by bus, car/van, bicycle and others. The findings for Perth and Kinross in 2009/10 show a higher use of bus travel and lower use of walking as the main travel to school method compared to the rest of Scotland.

Relevance of this indicator

The mode of travel used by individuals has a subsequent impact on the environment (i.e. the use of public transport, walking or cycling having less of an impact on the environment than the use of cars). Increased use of these more sustainable modes of travel for journeys to work and school contributes towards improved resource efficiency and air quality, reduced greenhouse emissions and congestion, and can be beneficial to health through increased physical activity.

Data source: Scottish Household Survey

Data availability: Annual



Current position

The 1:250,000 soil dataset is used to identify potential soil with natural heritage issues of national interest. This included; *a)Soils with high organic content* (peat and peaty soil types), **b) *Soils directly associated with a habitat of conservation or a key geodiversity feature*** *and c) Prime agricultural land*

Of the 138 soil unit maps identified on the 1:250,000 scale soil maps in the TAYplan area. The dominant soils types in the area are Humus-iron podzols (19%), peaty podzols (18%), brown forest soils with gleying (18%) and brown forest soils (17%). Peaty soils cover 9% of the TAYplan area. Soil Major sub groups considered to be of national interest occurring in the area include:

- Humus – iron podzols in semi natural settings (associated with native pinewood forests)
- Peat – peatland habitats
- Alluvial soils – associated with river geomorphology (<5%)
- Alpine and subalpine soils – sensitive to degradation (<5%) (SNH, 2013)

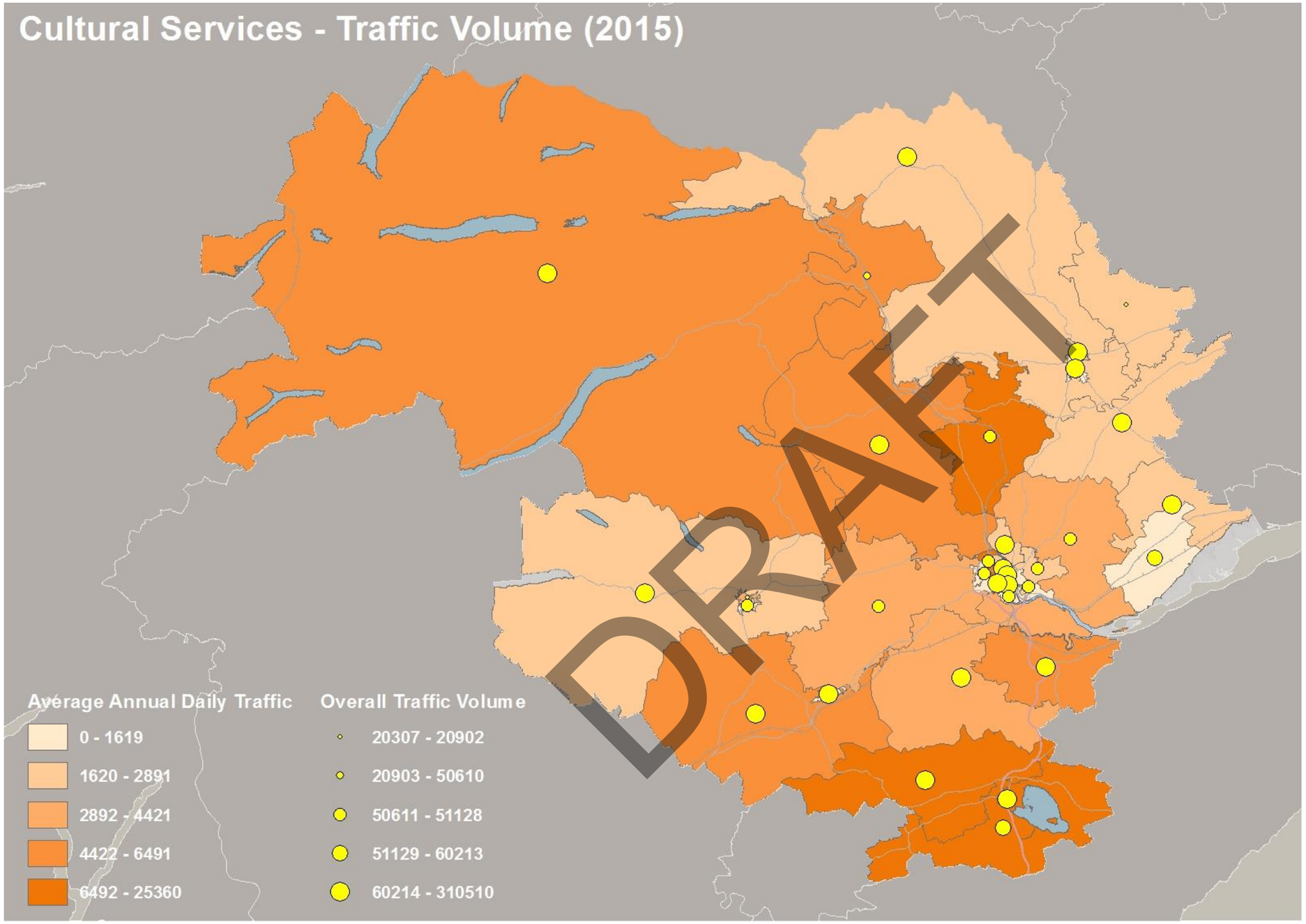
Relevance of this indicator

Healthy soils provide a range of environmental, economic and social benefits, which include providing the basis of the agricultural and forestry industries.

Threats to soil functions are erosion and compaction related to land management, contamination, sealing, loss of biodiversity, acidification from acid rain, climate change, and loss of organic matter.

Sources James Hutton Institute, PKC

Map Published 2015



Map Published May 2015

Current position

A traffic survey from 2015 shows the variation in the latest average annual daily traffic volume across Perth and Kinross by geographic area and the points indicate the total traffic count recorded at key sites throughout Perth and Kinross. As would be expected, the greatest volumes of traffic are observed within Perth and on the roads south of Perth leading to Edinburgh and Stirling.

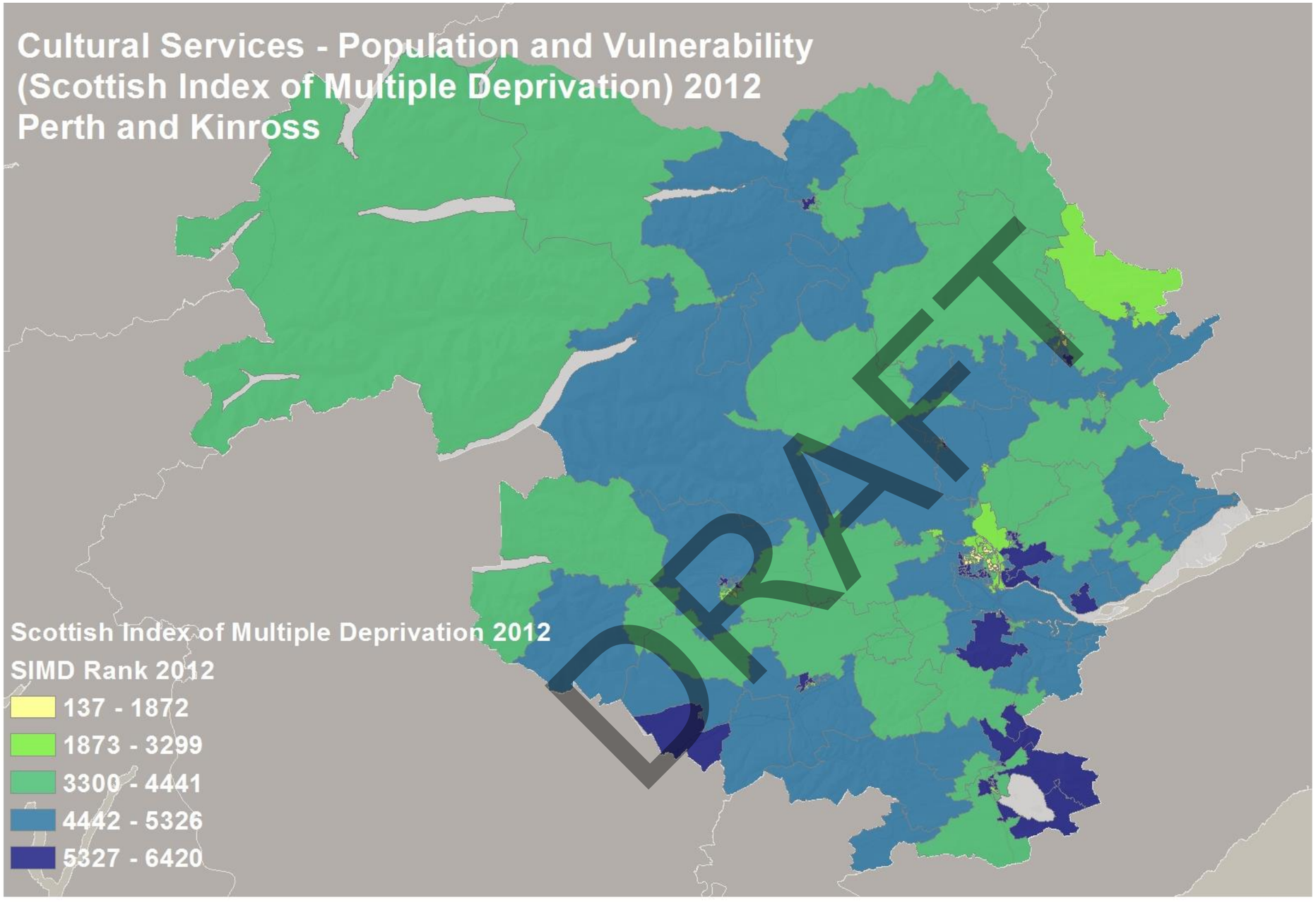
According to the regional transport strategy traffic on the road network in Tayside and central Scotland has been increasing by an average of approximately 1.6% per annum over the last 10 years. Local trend data is not currently available.

Relevance of this indicator

The type of transport used by residents and visitors influences the built and natural environment, human health and climate change. Traffic exhaust emissions are the primary source of air pollutants in Perth and Kinross and transport is the principle source of carbon dioxide. Transport also directly endangers human health and fauna due to road accidents.

Data source: Perth and Kinross Council

Data availability: Unknown



Current position

The Scottish Index of Multiple Deprivation (SIMD) targets small concentrations of multiple deprivations to be identified. The data zones are ranked from most deprived (1) to least deprived (6,505) on the overall SIMD and on each of the individual domains. The SIMD, thus provides, a picture of relative area deprivation across Scotland (Scottish Government, 2015).

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 deprived datazones in Scotland, compared to 6 (3.4%) in 2009.

The map shows the overall SIMD by 20% bands within the local authority. The most deprived areas within Perth & Kinross are found in Perth and Crieff with a small number of datazones in Blairgowrie. The larger rural datazones in the south show as being the least deprived (Local Authority Results, Scottish Government, 2012) a trend that has continued from 2009.

Relevance of this indicator

Sustainable development and growth of the Local Development Plan Area is important in maintaining community wellbeing, biodiversity, landscape and natural and cultural heritage and supporting the local economy (tourism in particular).

Data source: SIMD; GROS

Data availability: Annual

Map Published May 2015

Cultural Services – Resident satisfaction with their neighbourhood as a place to live

Current position

Since 2001/2, the percentage of residents surveyed in Perth and Kinross who rate their neighborhood as a very good or fairly good place to live has remained steady between 94 - 97%. This is consistently higher than the average for Scotland over the same period.

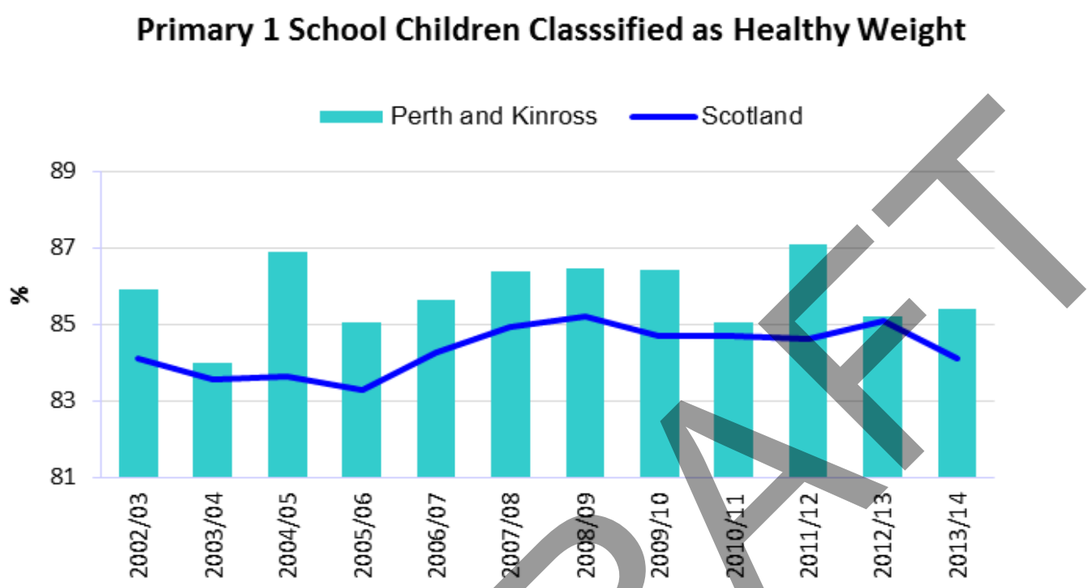
Relevance of this indicator

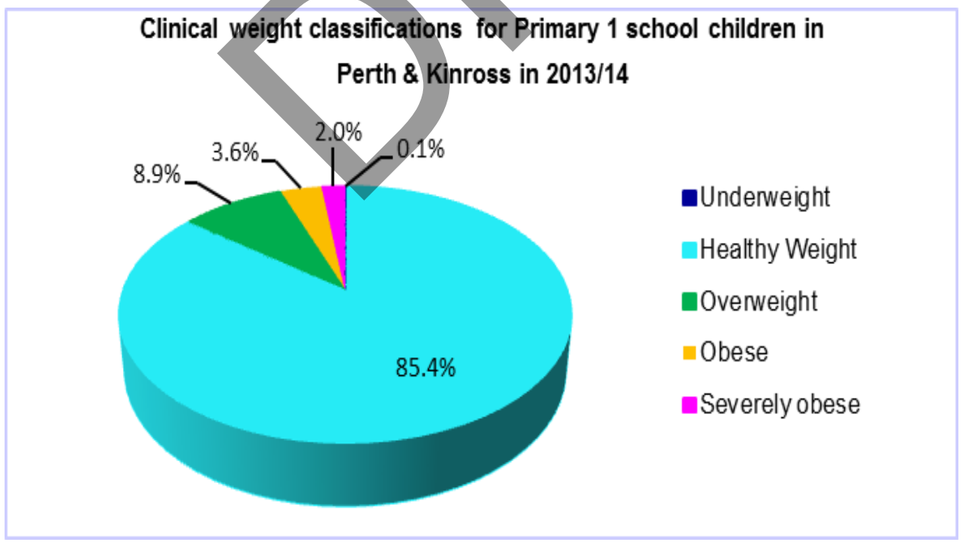
Neighbourhood well-being is an important feature of sustainable communities and there is a strong relationship between neighbourhood assets (e.g. safety, trust, co-operative neighbours, housing quality, and local services) and neighbourhood well-being. Assessing resident satisfaction with their neighbourhood as a place to live can give an indication of this.

Data source: Scottish Household Survey

Data availability: Annually

Cultural Services – Obesity in School Children





Current position

In 2013/14, 85.4% of Perth and Kinross primary 1 children receiving a review were classified as of clinically healthy weight. This is consistent with the previous period and above the average for Scotland over the same period. 8.9% were classified as overweight, 3.4% as obese, 3.6% as severely obese and 0.1% as underweight.

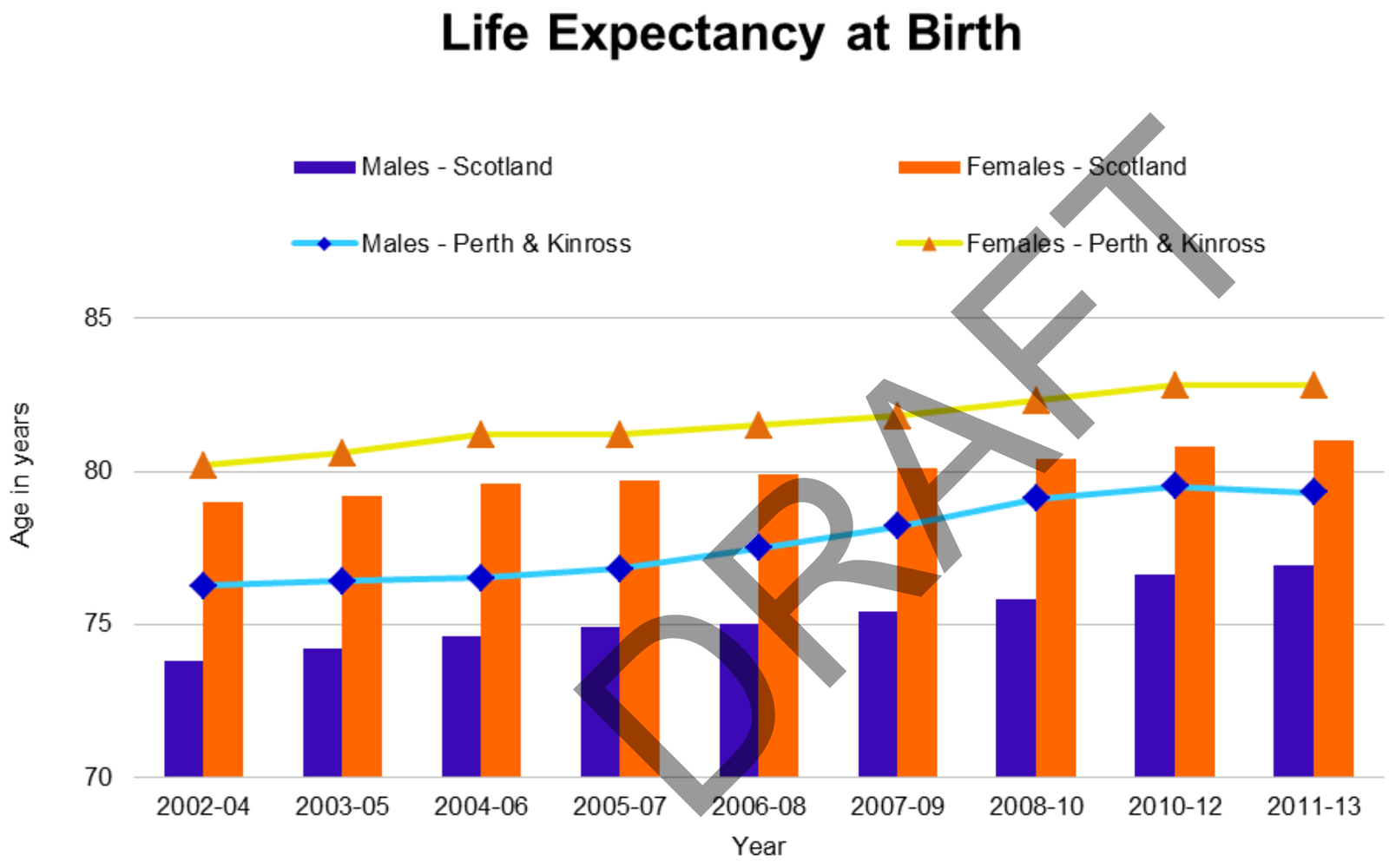
Relevance of this indicator

Being overweight or obese during childhood is a health concern in itself, but can also lead to physical and mental health problems in later life, such as heart disease, diabetes, osteoarthritis, and back pain, increased risk of cancer, low self-esteem and depression.

Data source: ISD Scotland

Data availability: Annually

Cultural Services – Life Expectancy at Birth



Current position

Life expectancy at birth (in years) in Perth and Kinross remains consistently high for both men and women, being consistently above the average for Scotland. The latest life expectancy figures published (2011-13) identify men (79.3%) and women (82.8%) in Perth and Kinross as having a higher life expectancy than the average for men (76.9%) and women (81%) across Scotland.

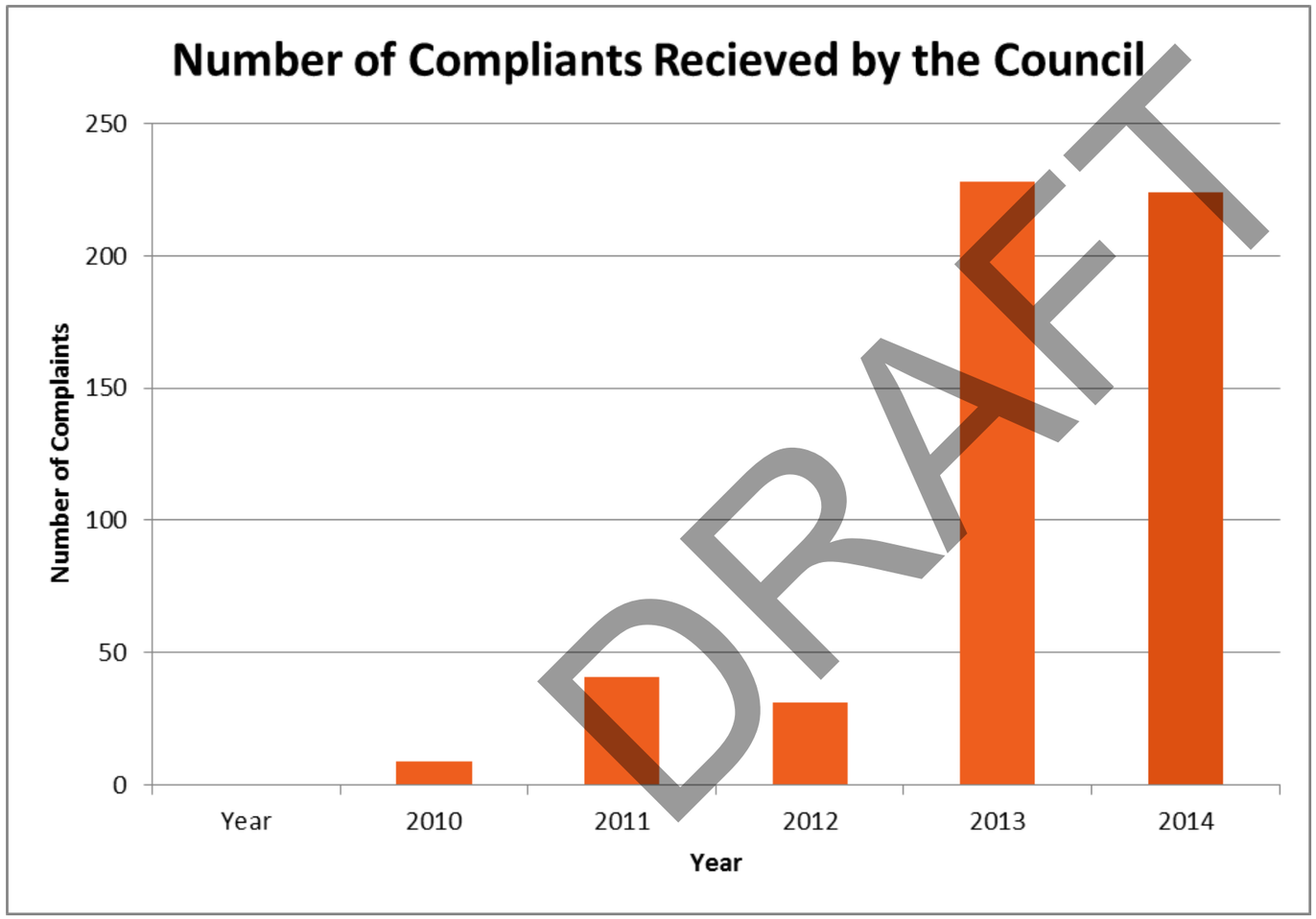
Relevance of this indicator

The life expectancy for a given population indicates the number of years that a person born in a specific year could be expected to live. It is influenced by numerous factors, including educational, social and economic status, as well as the performance of the health system. There are often links between lower life expectancy and deprivation.

Data source: National Records of Scotland

Data availability: Annually

Cultural Services – Number of Noise Complaints Received by the Council



Current position

The increase in the number of noise complaints observed in 2013 relates to a change in recording method, which in future will allow more accurate information to be collected with regards to the type of noise complaint received.

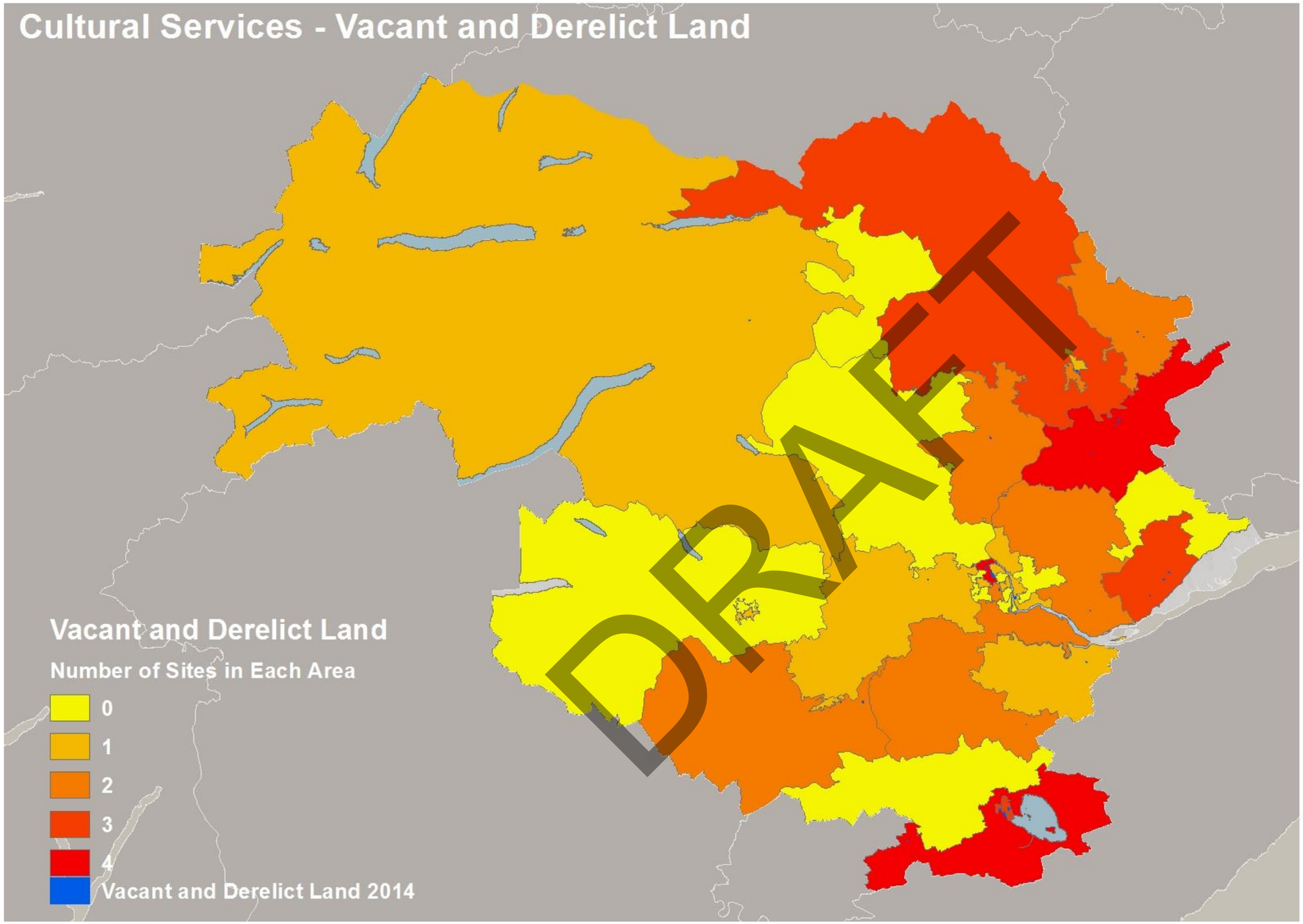
This change in recording method means that we are unable to see a pattern with regards to noise complains in the Perth and Kinross Area.

Relevance of this indicator

There is a growing understanding, both at the government and individual level, of the contribution of the environment to long term human health and wellbeing. Nearly a third of UK residents are annoyed by neighbour noise, and for 14% it has an impact on quality of life

Data source: Perth and Kinross Council

Data availability: Annually



Map Published 2015

Current position

A relatively small area of the land stock (46ha) in Perth and Kinross is vacant or derelict. The number of sites either vacant or derelict has decreased gradually from 49 in 2010 to 38 in 2015.

There has been a decline in the area of land vacant or derelict over the same period (50ha in 2010 compared to 46 ha in 2014) however there was a slight rise (2ha) in area of land that I vacant or derelict between 2013 and 2014.

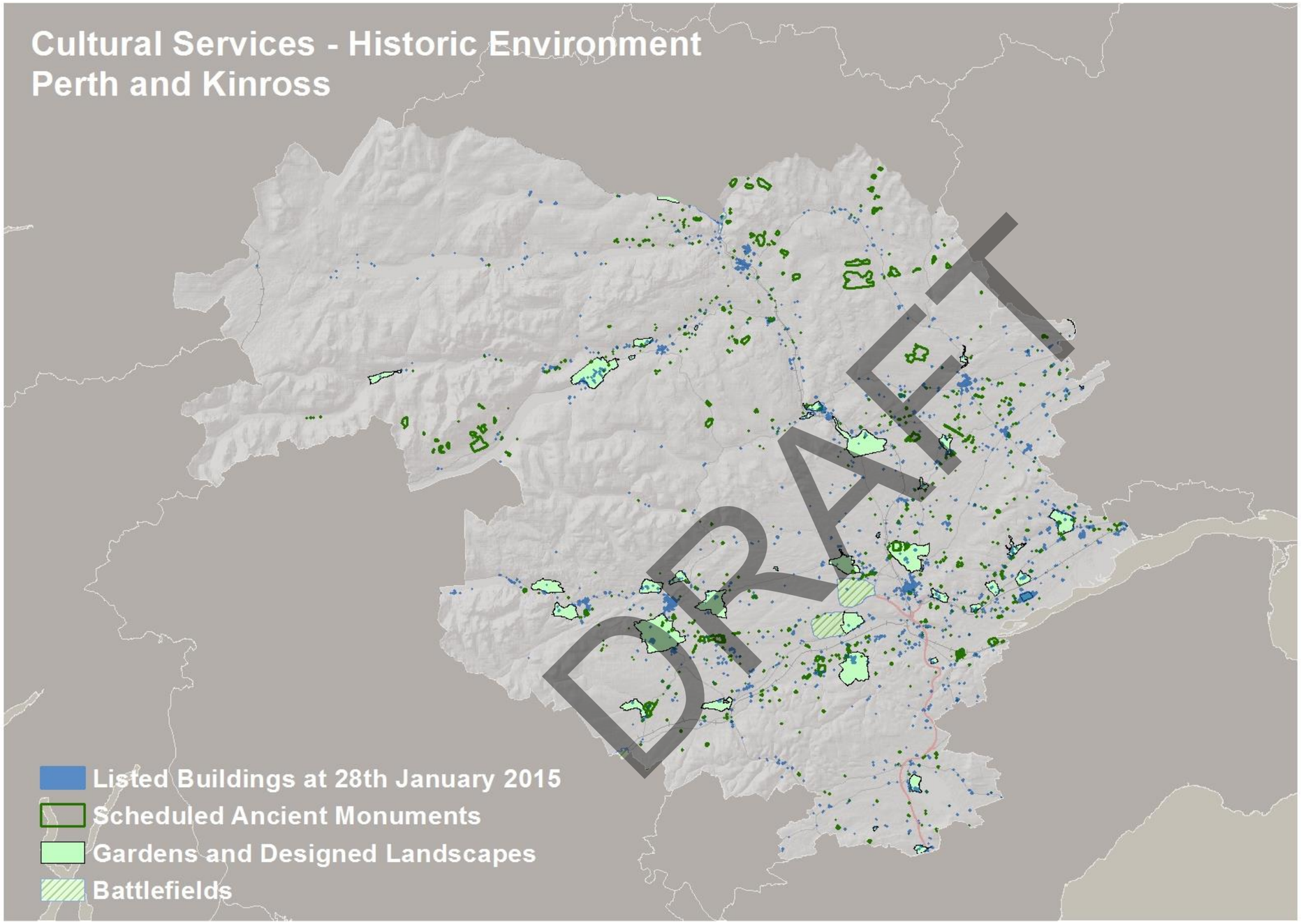
The map highlights the spatial distribution of the number of sites that are vacant and derelict using intermediate geography zones.

Relevance of this indicator

Preservation and enhancement of the distinctive landscape of Perth and Kinross is important to maintain community wellbeing, biodiversity and to support the local economy, which are dependent on tourism and maintenance of a healthy environment. Vacant and derelict land can often detract from the quality of the landscape and impact surrounding communities by deterring investment from the area.
Derelict land may also pose a threat to human health, if contamination is present by, for example, leaching of harmful chemicals into the local water courses.

Data source: Scottish Vacant and Derelict Land Survey, PKC

Data Availability: Annual



Map Published May 2015

Current position

Perth and Kinross contains 744 Scheduled Ancient Monuments and 3113 listed buildings. 131 listed buildings are on the buildings at risk register an increase of 35 since 2009. There are 42 historic gardens and designed landscapes covering 11123 ha.

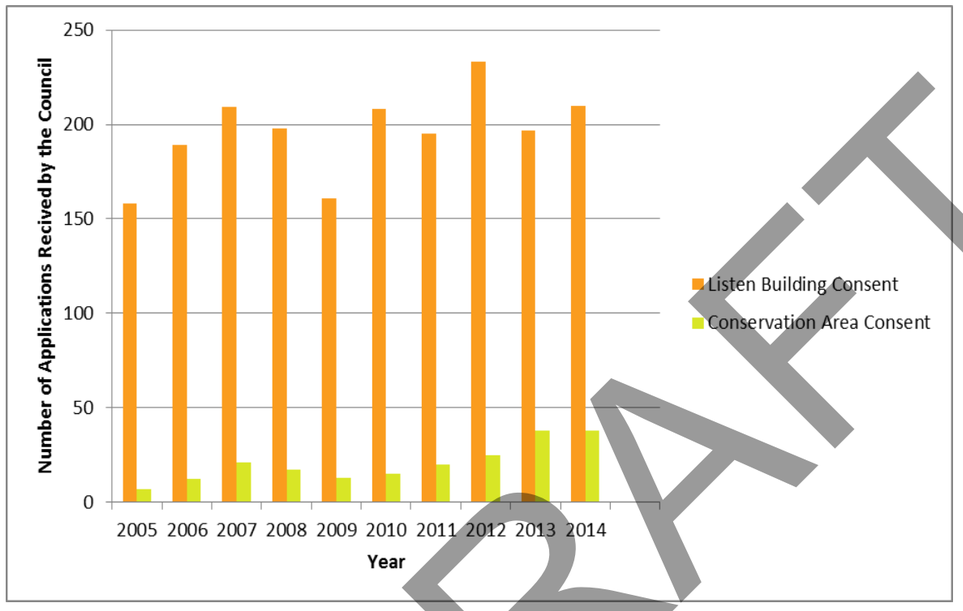
There are 36 conservation areas throughout Perth and Kinross.

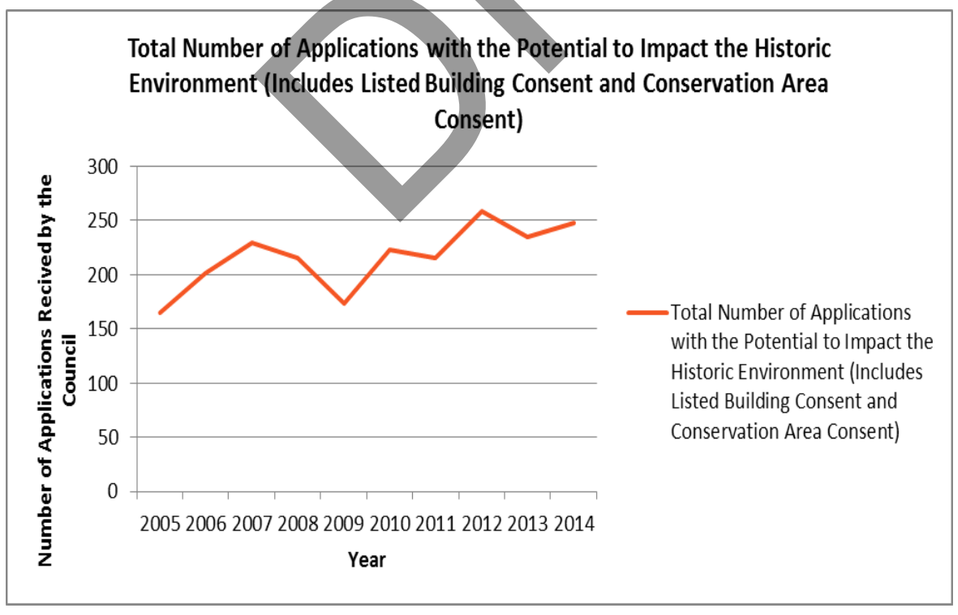
Relevance of this indicator

The historic character of the environment is important to quality of life and sense of identity, and it is a vital contributor to the economy through the attraction of visitors. Constant change in the historic environment is a result of natural processes, such as climate change and erosion, and human interventions, such as land management, urban and rural development, transportation and pollution.

Data source: Historic Scotland
Data availability: Annually

Cultural Services – Number of applications for Planning Consent with the Potential to Impact the Historic Environment





Current position

In 2014 there were 210 applications involving listed building consent and 38 involving conservation area consent; a slight decrease over the previous year.

The number of planning applications with the potential to impact the historic environment has been gradually increasing since 2005. There was a drop in 2009 which could be due to the economic downturn and the number of application peaked in 2012 with 258 in total. Overall however the pattern shows an increasing number of planning applications with the potential to impact the historic environment.

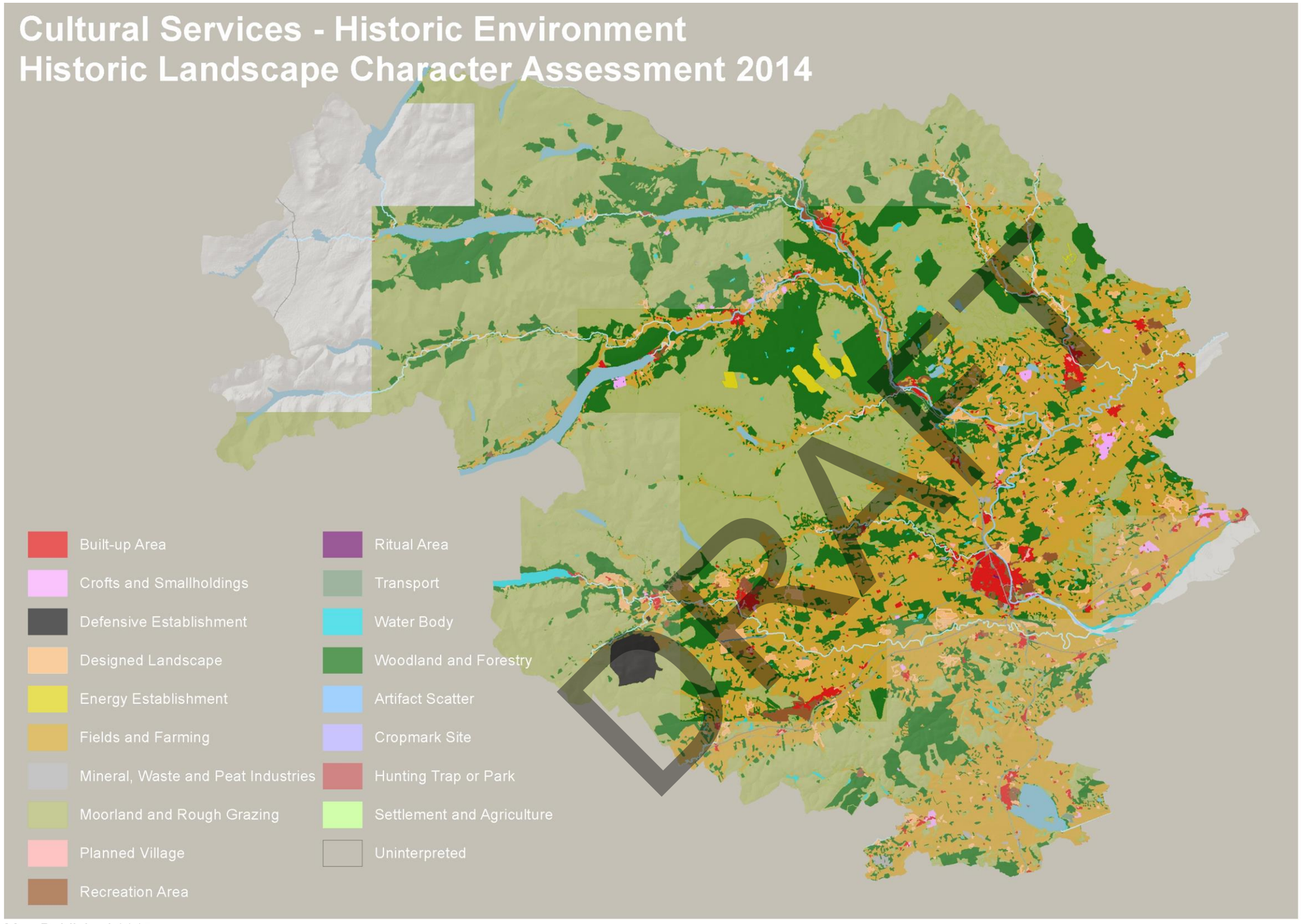
(Note that this is the total number of applications received, Not all will have been approved.)

Relevance of this indicator

The historic character of the environment is important to quality of life and sense of identity, and it is a vital contributor to the economy through the attraction of visitors. Constant change in the historic environment is a result of natural processes, such as climate change and erosion, and human interventions, such as land management, urban and rural development, transportation and pollution.

Data source: Perth and Kinross Council

Data availability: Annually



Map Published 2015

Current position

The HLA is a GIS-based mapping project that shows the historic origin of land-use patterns, describing them by period, form and function. It is compiled at a scale of 1:25000, and is based on the analysis of key data sources, such as early maps, aerial photography and survey results (Historic Scotland 2013).

The HLA has identified some 55 individual historic land-use types. The majority of the region has been identified as rough grazing and rectilinear fields. The second largest areas consist of coniferous and woodland plantation and managed woodland (nearly 100, 000 ha).

Relevance of this indicator

The historic character of the environment is important to quality of life and sense of identity, and it is a vital contributor to the economy through the attraction of visitors. Constant change in the historic environment is a result of natural processes, such as climate change and erosion, and human interventions, such as land management, urban and rural development, transportation and pollution.

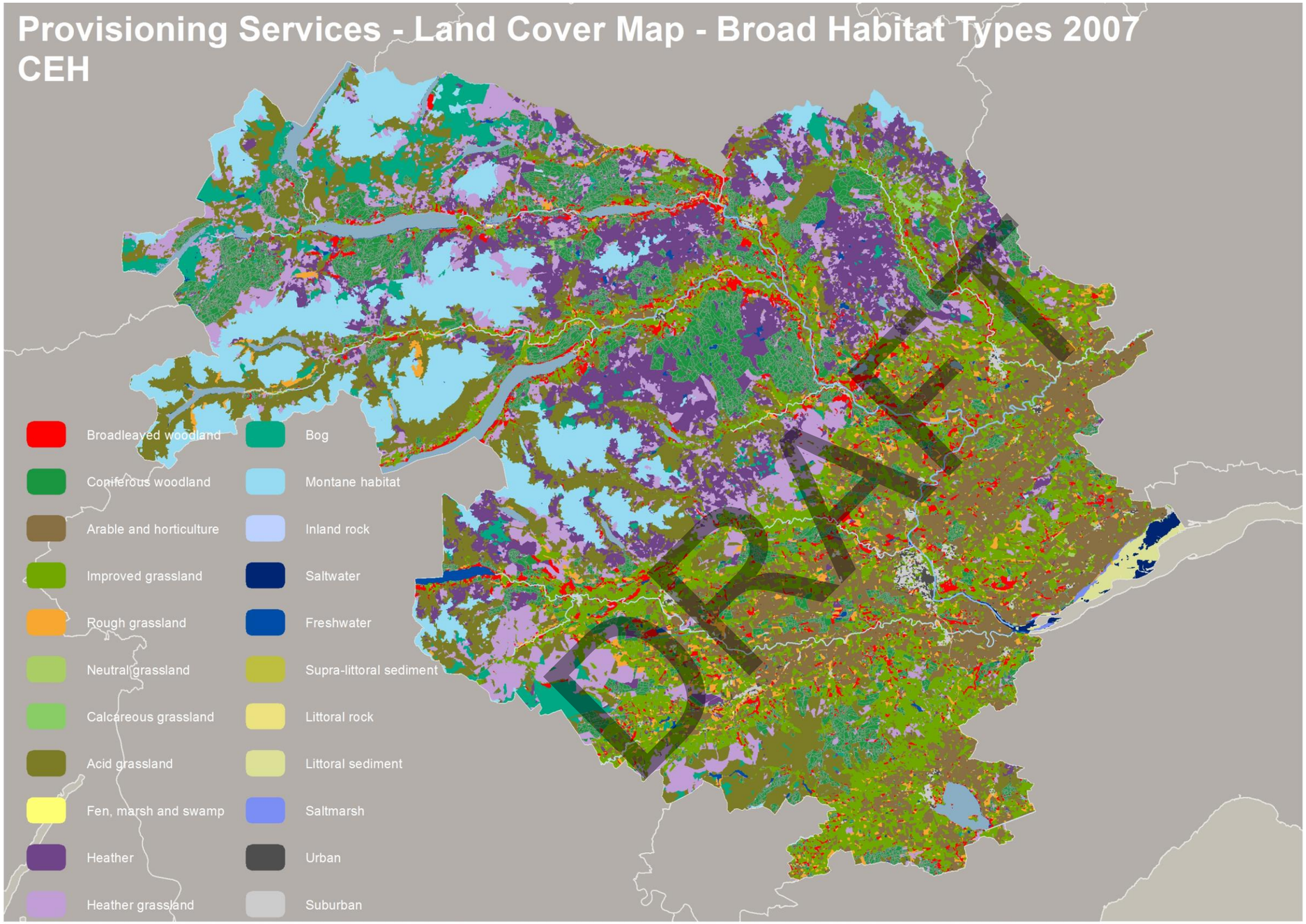
Links to National Outcome:

We value and enjoy our built and natural environment and protect it and enhance it for future generations

We take pride in a strong, fair and inclusive national identity

Data source: Historic Scotland

Data availability: Annual



Map Published February 2014.

Current position

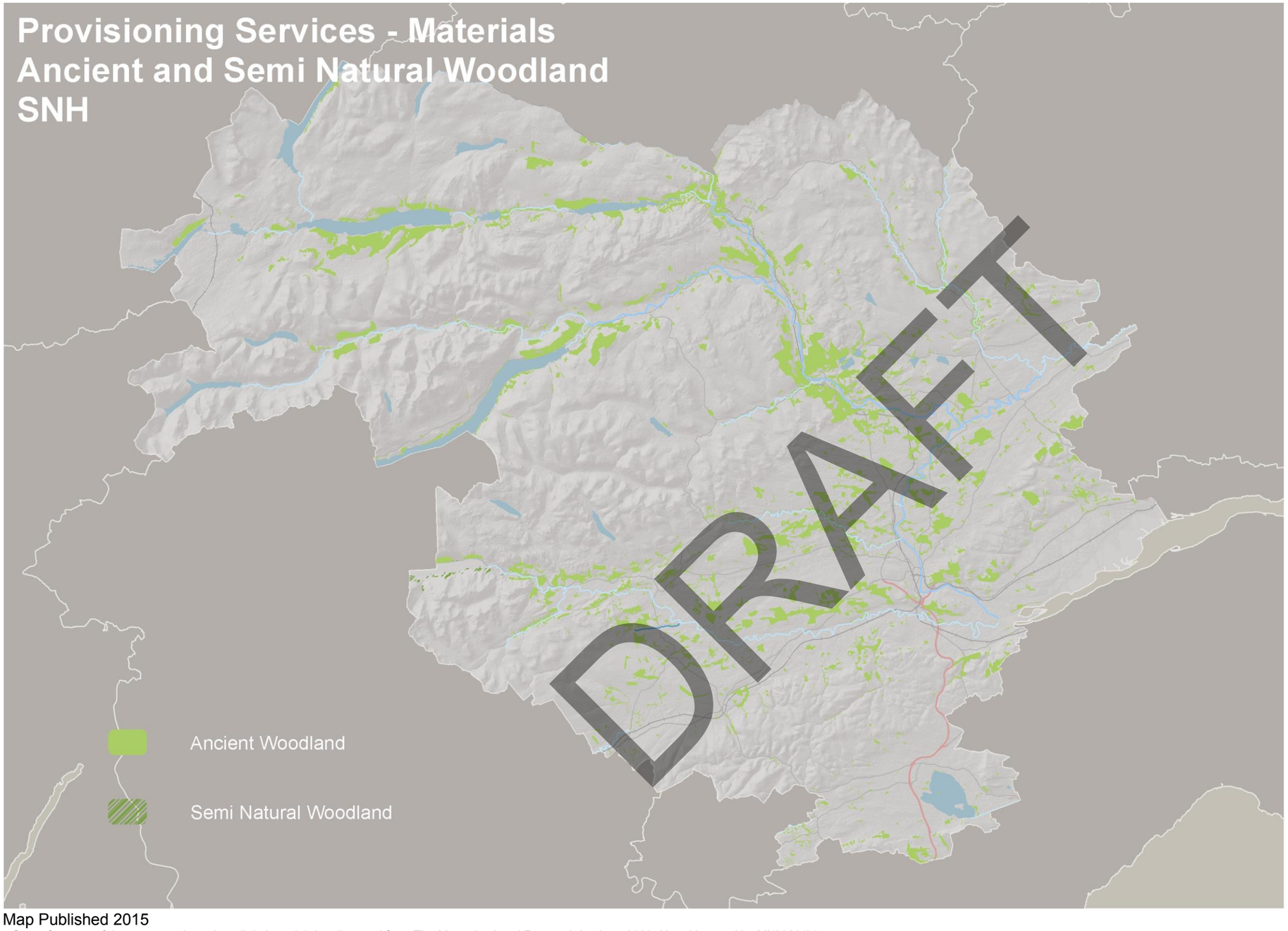
There is a clear distinction between scrub, heath and moorland in the upland area in the north west and agriculture in the lowland areas of the south east and river valleys. The main land cover categories are montane and heath scrub (36%), grassland (28%) agriculture (10%) and forestry / woodland (17%). Predominantly residential areas account for less than 1% of the total Perth and Kinross area.

Relevance of this indicator

Land cover as assessed by the Centre for Ecology and Hydrology (CEH) is a parcel-based classification of UK land cover. It uses 23 classes to map the UK, which are based on the UK Biodiversity Action Plan (BAP).
The natural physical influences which originally shaped the landscape of Perth and Kinross and continue to cause it to change are solid and drift geology, hydrology and climate.

Data source: Centre for Ecology and Hydrology

Data availability: No Planned Update



Map Published 2015

Current position

The Forestry Commission identified approximately 57142 ha of ancient and semi-natural woodland in Perth and Kinross (2006).

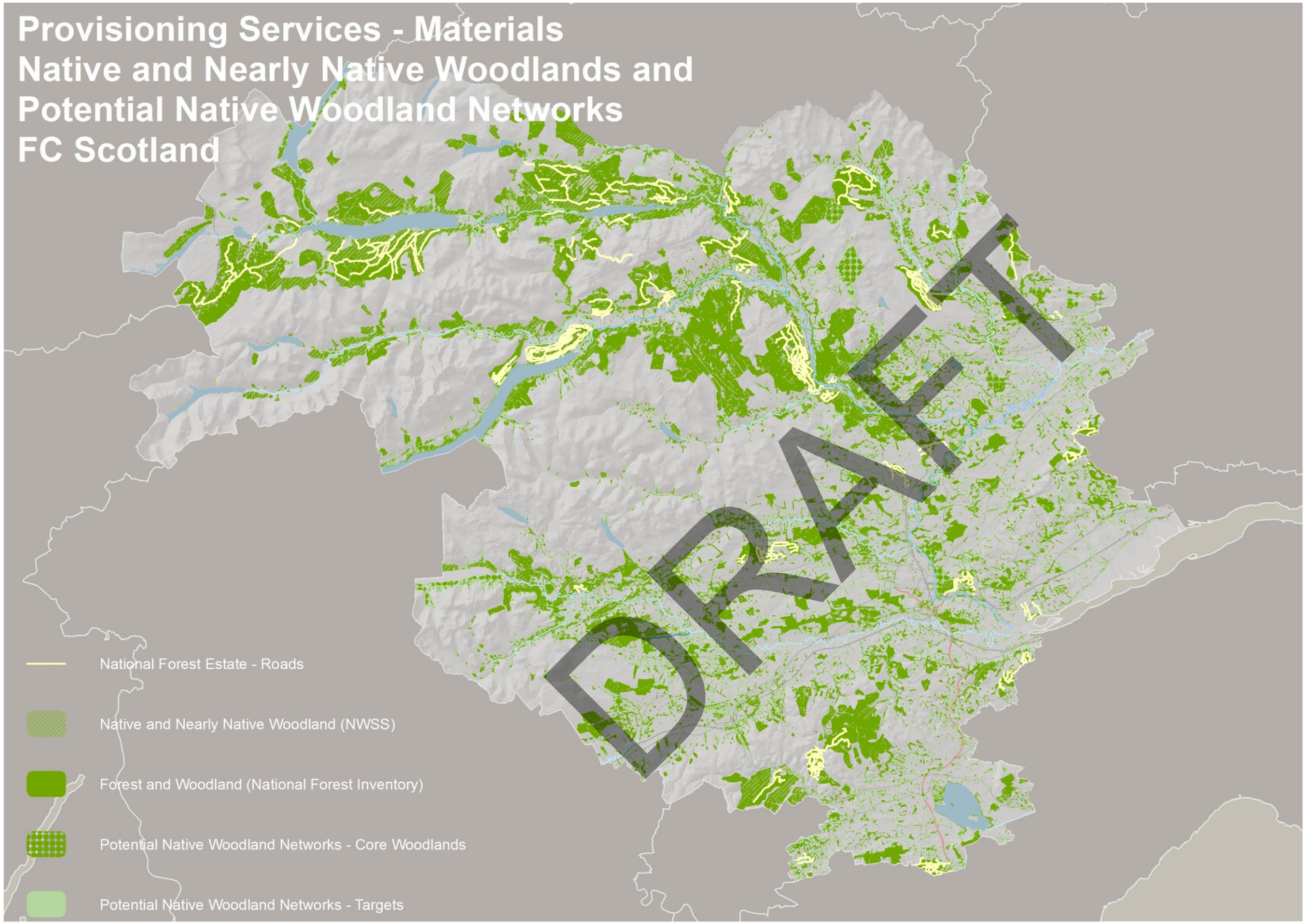
Relevance of this indicator

This dataset contains information gathered by remote means using 1970s sources (maps, aerial photos) about the woodland cover present on Ancient & Long-Established Woodland Inventory sites. It does not contain information about woods not on the Inventory.

The historic character of the environment is important to quality of life and sense of identity, and it is a vital contributor to the economy through the attraction of visitors. Constant change in the historic environment is a result of natural processes, such as climate change and erosion, and human interventions, such as land management, urban and rural development, transportation and pollution.

Data source: SNH

Data availability: Annual



Map Published 2015

Current position

There has been a clear upward trend in woodland cover in the region since 1905. The Scottish Forestry Strategy sets an aspirational target of 25% woodland cover in Scotland by 2025.

There has been a clear upward trend in woodland cover in Perth and Kinross since 1905. The Scottish Forestry Strategy sets an aspirational target of 25% woodland cover in Scotland by 2025. In 2010, the Forestry Commission completed the National Woodland Inventory (NFI) which shows the extent of all woodland of 0.5 ha or over. The objective is to identify; real woodland gains and real woodland losses. According the NFI 17% of Perth and Kinross is forested, an increase of 1% or over 6500 ha since 2002. (Forestry Commission, 2011)

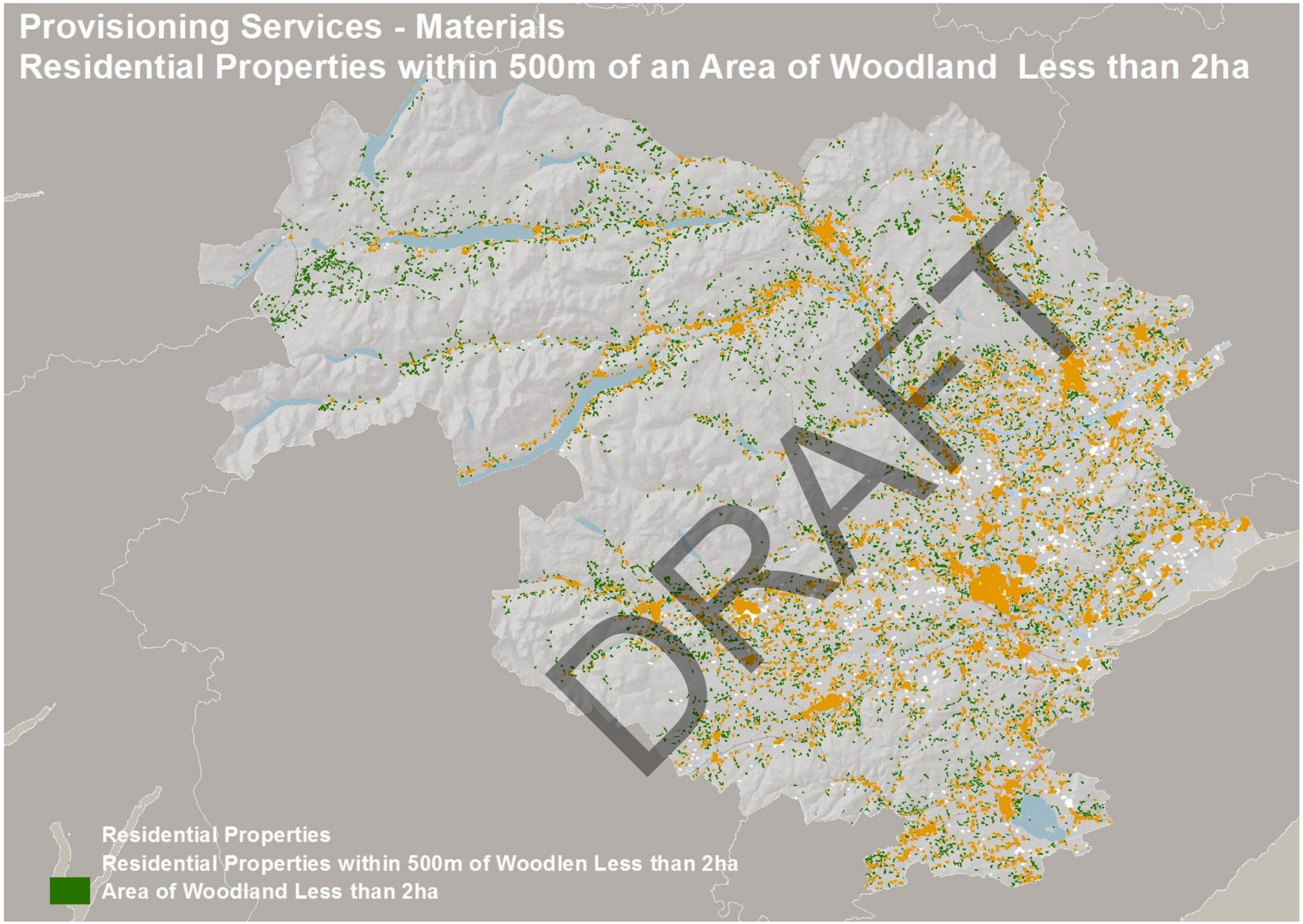
Approximately 6% of this area is native or nearly native woodland according to the Native Woodland Survey of Scotland (Forestry Commission, 2013)

Potential Native Woodland Networks have been identified to help focus native woodland expansion, improvement and restoration. This map highlights core areas of woodland for native woodland expansion and potential expansion zones to core woodlands and shows the location where new native woods would best develop a successful ecological connection to an adjoining core woodland area.

Relevance of this indicator

Preservation and enhancement of the distinctive landscape of the Perth and Kinross area is important to maintain community well being, biodiversity and to support the local economy. Woodlands support the region's economy through timber production, and play a key role in the tourist industry, providing recreational opportunities and contributing to the region's unique landscape and ecology.

Data source: Forestry Commission



Map Published May 2015

Current position

Based on information available in the National Forestry Inventory 87% of residential properties within Perth and Kinross are within 500m of woodland with an area of up to 2 ha. The majority of residential properties (95%) are within 4km of a woodland area greater than 20ha. These figures highlight the accessibility of woodland areas within Perth and Kinross.

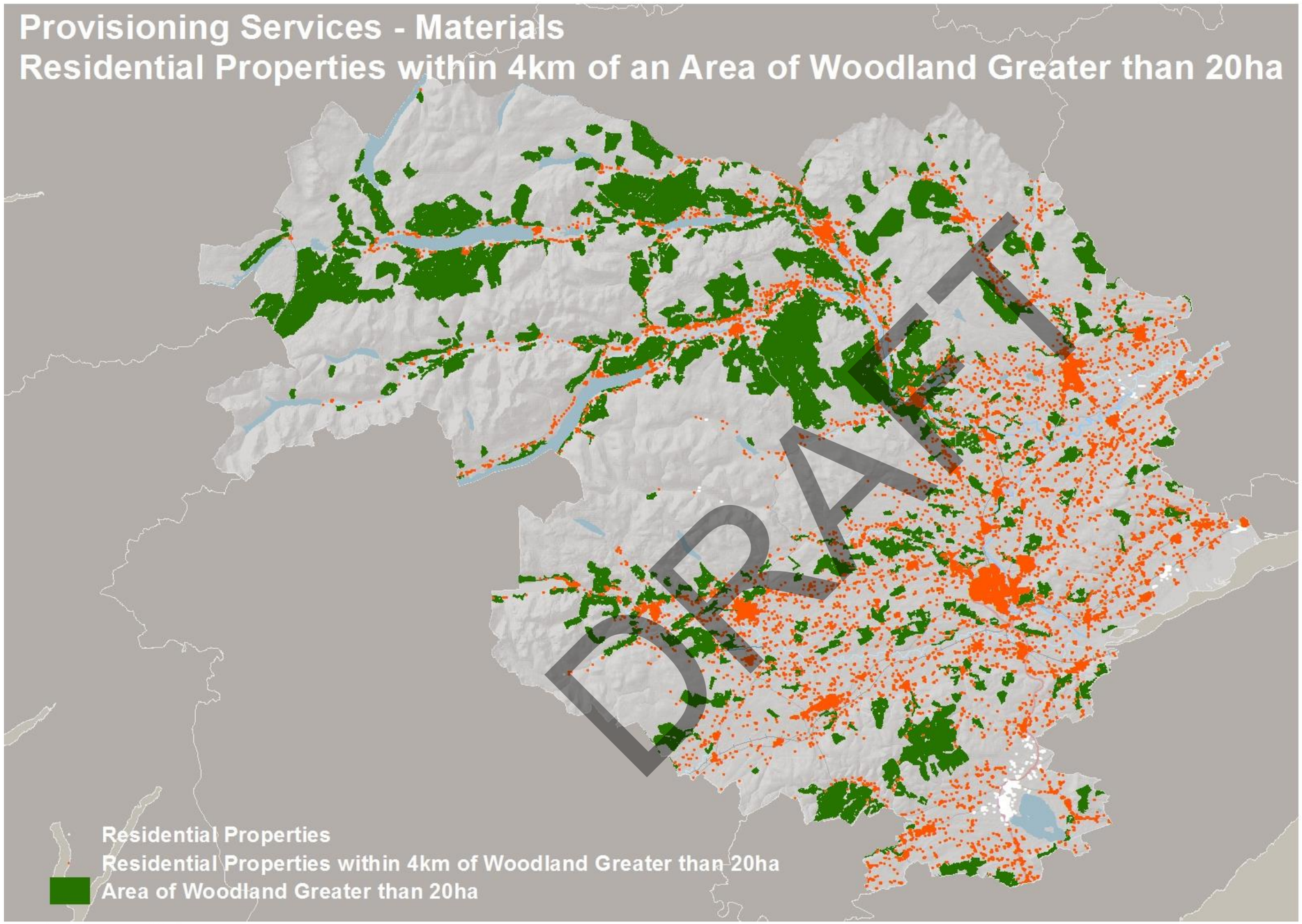
Relevance of this indicator

Open space and woodland are valued elements of the landscape. Access to these areas contributes to long term human health and wellbeing.

There are limited opportunities to provide new open space areas within and in the vicinity of built areas; existing areas are under pressure for development.

Data source: Forestry Commission

Data availability: Unknown



Map Published May 2015

Current position

Based on information available in the National Forestry Inventory 87% of residential properties within Perth and Kinross are within 500m of woodland with an area of up to 2 ha. The majority of residential properties (95%) are within 4km of a woodland area greater than 20ha. These figures highlight the accessibility of woodland areas within Perth and Kinross.

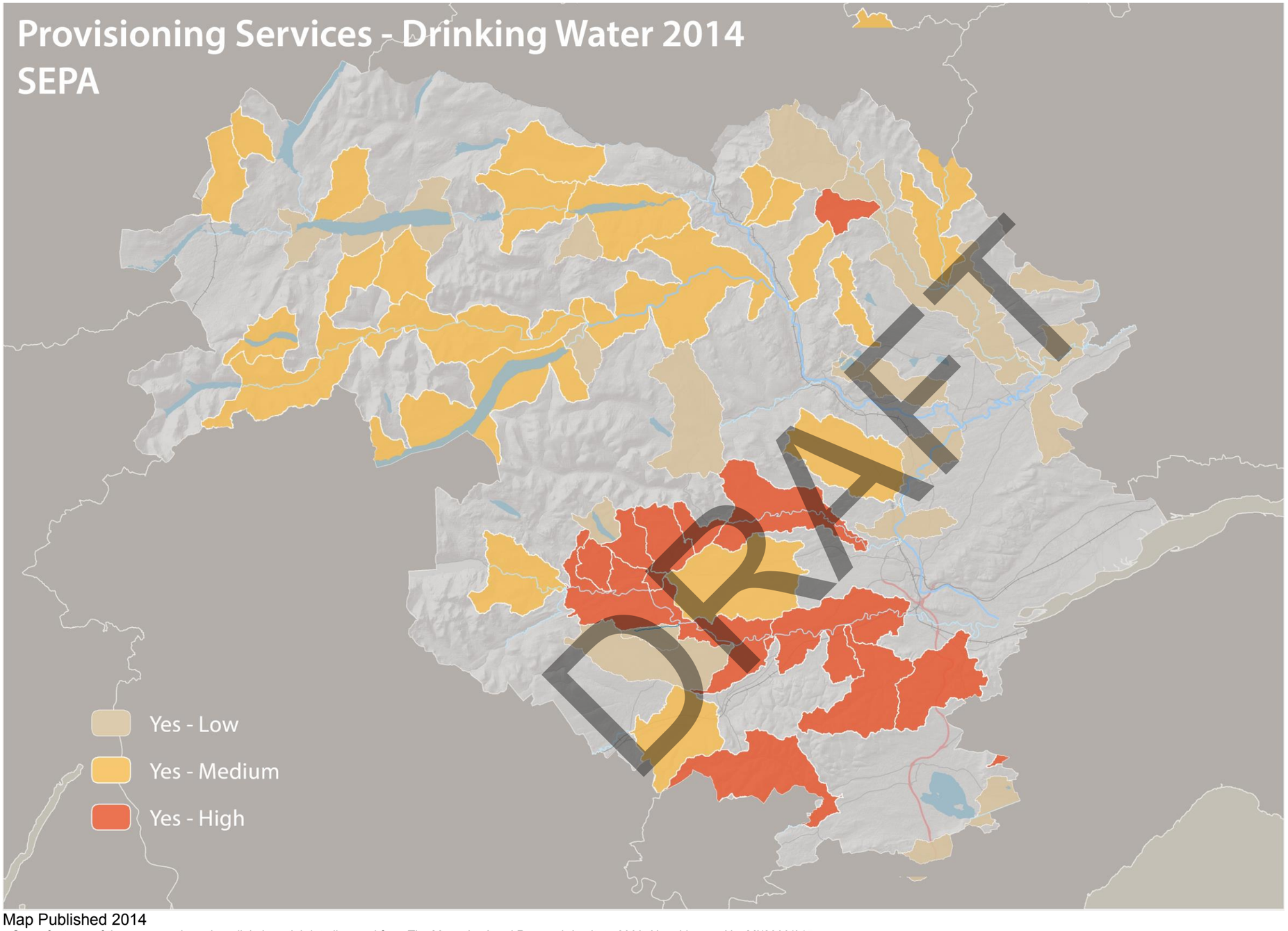
Relevance of this indicator

Open space and woodland are valued elements of the landscape. Access to these areas contributes to long term human health and wellbeing.

There are limited opportunities to provide new open space areas within and in the vicinity of built areas; existing areas are under pressure for development.

Data source: Forestry Commission

Data availability: Unknown



Map Published 2014

Current position

Currently approximately 160,000 ha or 36% of sub catchments intersecting the Perth and Kinross Planning Authority area provide drinking water services.

Brief overview

Drinking water is essential for our survival. 97% of drinking water is supplied by Scottish Water with the remaining 3% coming from private supplies.

Service provided

The service that the water environment provides is volumes of water for abstraction and use in drinking water. This service is provided by lochs, rivers and groundwaters.

Benefits provided

The data we have shows the relative number of people served drinking water. It has been calculated from the abstraction size by assuming that each person requires 300 litres/day.

Impacts caused by use of water environment for drinking water

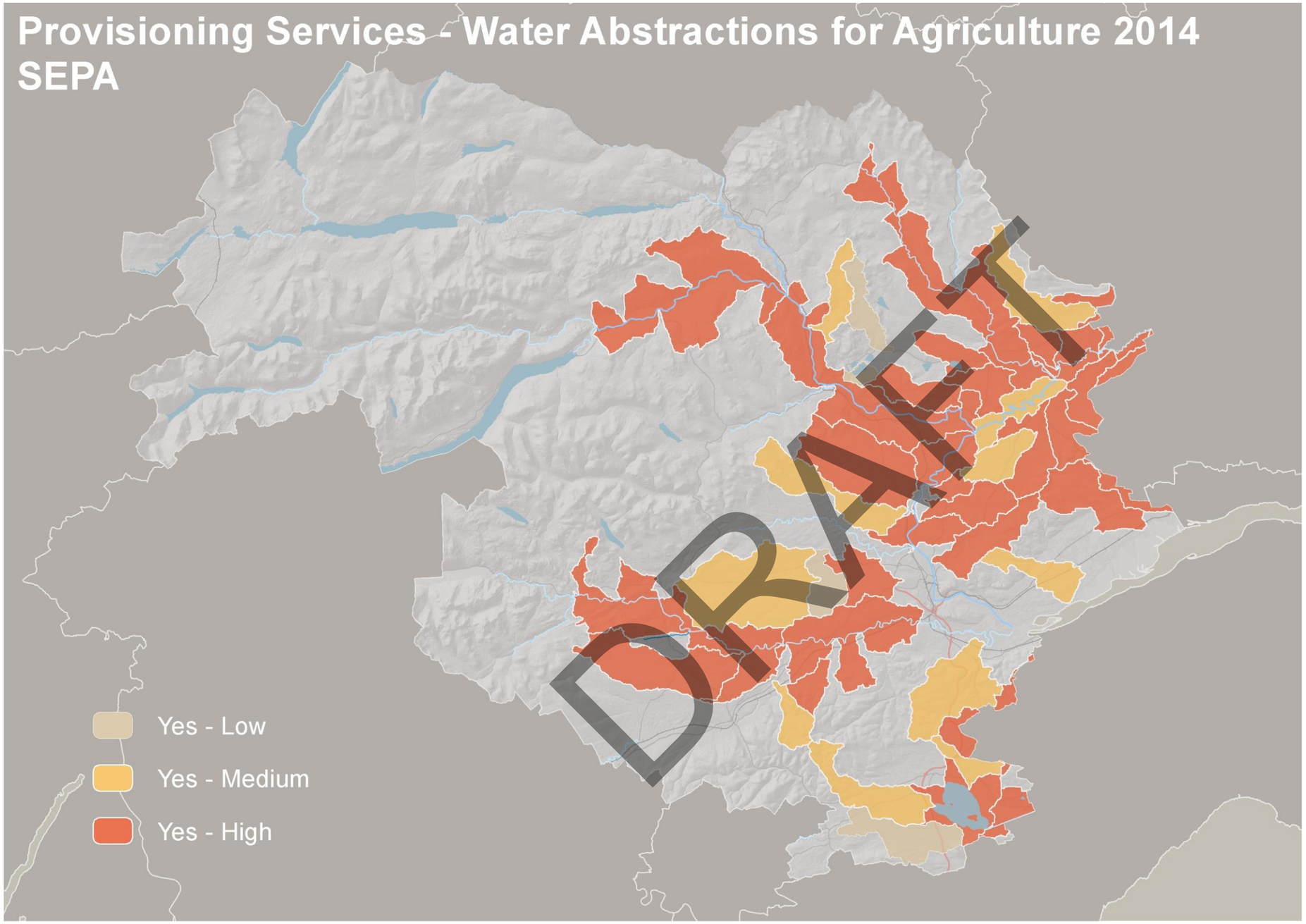
Abstracting water for drinking can impact on river water flows and levels, and therefore on other activities that rely on river water flows, and the habitat that rivers provide. Removal of water could also impact on a water body's ability to dilute other discharges and therefore affect water quality.

Impacts affecting use of water environment for drinking water

Drinking water needs to come from relatively clean supplies. This is particularly the case where private supplies of drinking water are used because they cannot be treated to the same standards as public supplies. If drinking water supplies are not clean and free of pollutants, then costs of treatment for Scottish Water and/or the health of consumers could be affected.

Data availability: Annual

Data provider: SEPA, Scottish Government Drinking Water Quality Dept.



Map Published 2015

Current position

Currently approximately 174,160 ha or ~ 35% of sub catchments intersecting the Perth and Kinross Planning Authority area provide drinking water services.

The data shows that most large abstractions are in the east areas of Perth and Kinross.

Service provided

The data shows the size of abstractions for agriculture from the water environment that SEPA has licensed.

Benefits provided

Total income from farming in Scotland amounts to approximately £600m/year. The relative value of agricultural output is indicated by average Gross Margin for the main farming enterprises (SAC, The Farm Management Handbook, 2011/12, 32nd Edition) for each surface inland water body catchment (Scottish Government data showing percentage of each farm type each agricultural parish was assigned to water body catchment areas). The highest value farming takes place in the water body catchments on the east and north east coast which is also where the largest abstractions for agriculture are licensed. Farming also provides employment for people in many remote areas where there is no alternative employment.

Impacts caused by use of the water environment for agricultural production

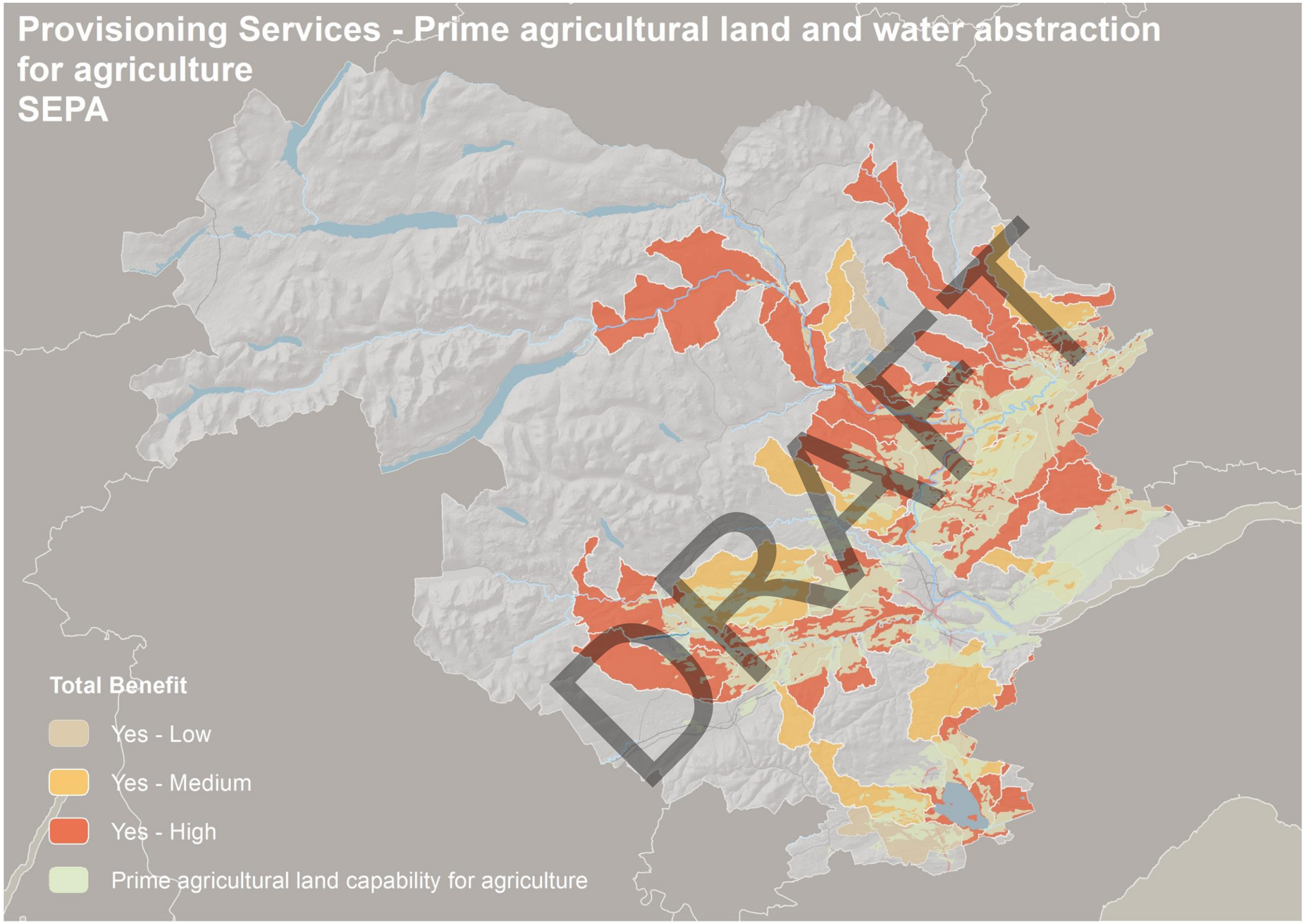
Abstracting water for agriculture can impact on both the availability and flow characteristics of water in rivers and lochs. Removal of water can also affect the ability of a water body to dilute other discharges and therefore impact water quality..

Impacts affecting use of the water environment for agricultural production

Other activities that affect the flows and levels of water in a water body have potential to impact upon its use for agricultural irrigation. In addition, if water quality is reduced this could affect its suitability for use in irrigation. For example, water that is contaminated with faecal indicator organisms would not be suitable for irrigation of fruit or vegetables. water environment.

Data availability: unknown

Data provider: SEPA



Map Published 2015

Current position

The data shows that approximately 11% or 57 000 ha of prime agricultural land are located in the south and eastern areas of Perth and Kinross. Most(~25%) of large abstractions for agriculture are also in these areas.

Service provided

The map shows the size of abstractions for agriculture from the water environment that SEPA has licensed and the Land Capability for Agriculture (LCA) classification , a classification system widely used as a basis of land valuation to rank land on the basis of its potential productivity and cropping flexibility. This is determined by the extent to which the physical characteristics of the land (soil, climate and relief) impose long term restrictions on its agricultural use.

Benefits provided

Total income from farming in Scotland amounts to approximately £600m/year. The relative value of agricultural output is indicated by average Gross Margin for the main farming enterprises (SAC, The Farm Management Handbook, 2011/12, 32nd Edition) for each surface inland water body catchment. The highest value farming takes place in the water body catchments on the east and north east coast which is also where the largest abstractions for agriculture are licensed. Farming also provides employment for people in many remote areas where there is no alternative employment.

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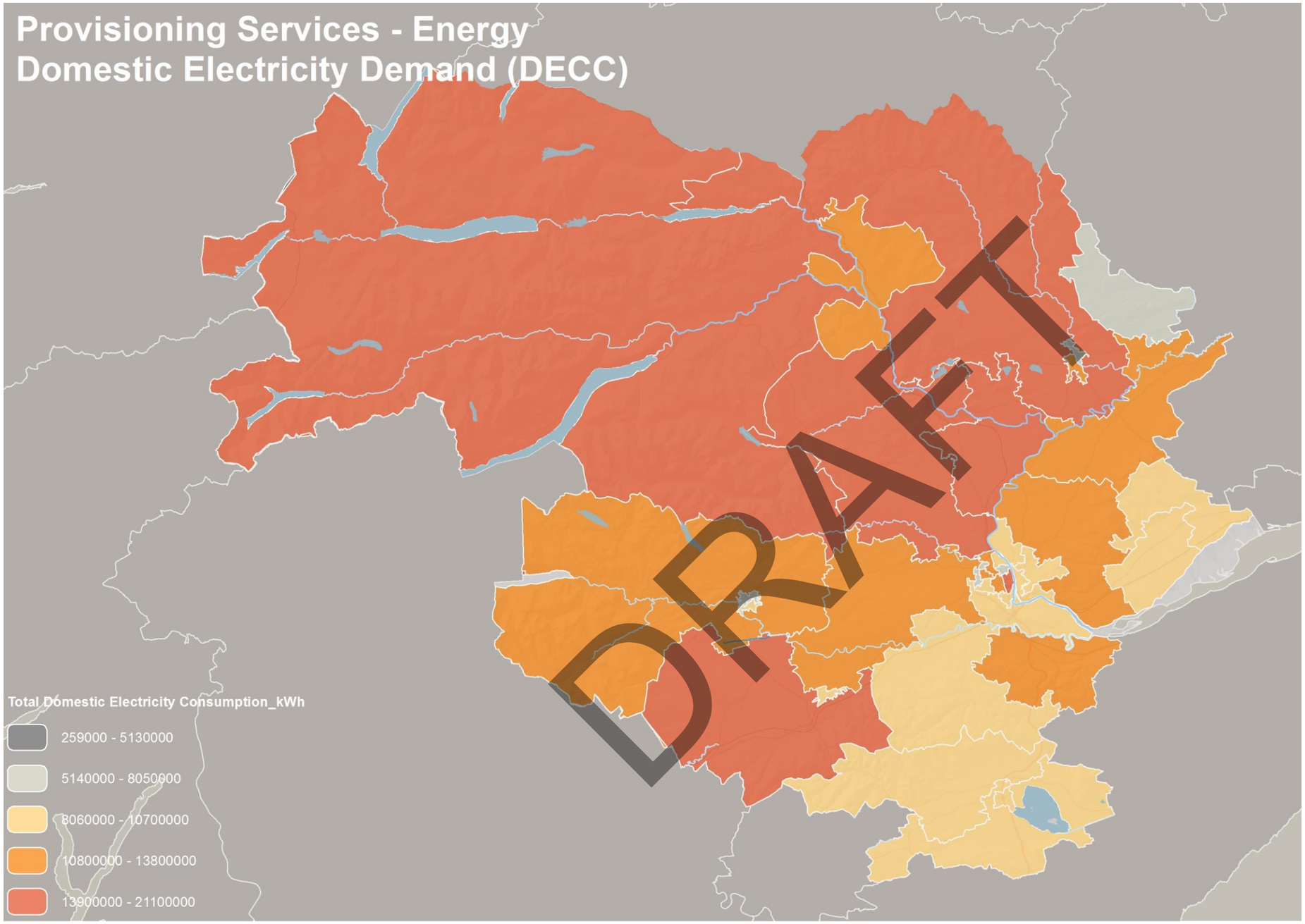
Data availability: unknown

Data provider: SEPA, JHI



Current position

This indicator shows DECC's sub-national estimates of electricity and gas consumption for Great Britain. Estimates are based on the aggregation of Meter Point Reference Number (MPRN) readings throughout Great Britain obtained as part of DECC's annual meter point gas data exercise.

Estimates presented for 2013 are provisional.

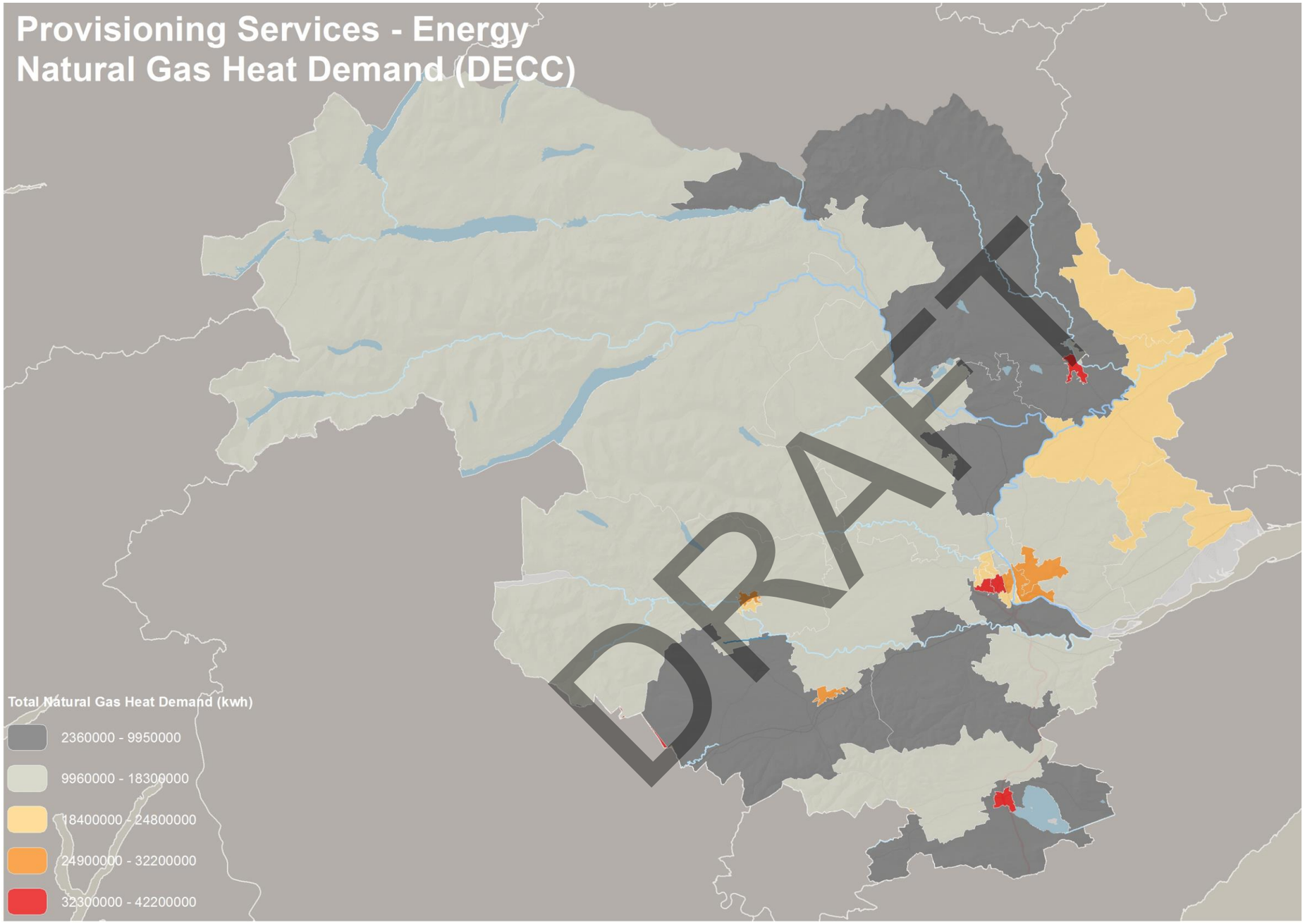
Mean annual domestic electricity consumption per meter in Scotland 3,900 kWh. In Perth and Kinross in 2013 mean domestic was significantly higher 5577 kwh per household.

Relevance of this indicator

Carbon dioxide from transport, industry and domestic sources (such as heating, lighting and cooking) is the main greenhouse gas emitted in Scotland. Reducing carbon dioxide emissions is key to tackling climate change. Energy use, conservation and supply are essential for the long term future of the region.

Data source: DECC

Data availability: Annual



Current position

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The estimates for 2013 cover the gas year between 1 October 2012 and 30 September 2013 and are supplied to DECC as weather corrected data. Estimates presented for 2013 are provisional.

Scotland had the highest mean domestic consumption with 14,300 kWh per meter (median consumption of 12,700 kWh). In Perth and Kinross in 2013 mean domestic consumption was significantly higher with a mean domestic consumption of 15, 822 kwh.

In the domestic sector, gas consumption is predominately used for heating purposes and as a result usage is driven by external temperatures and weather conditions

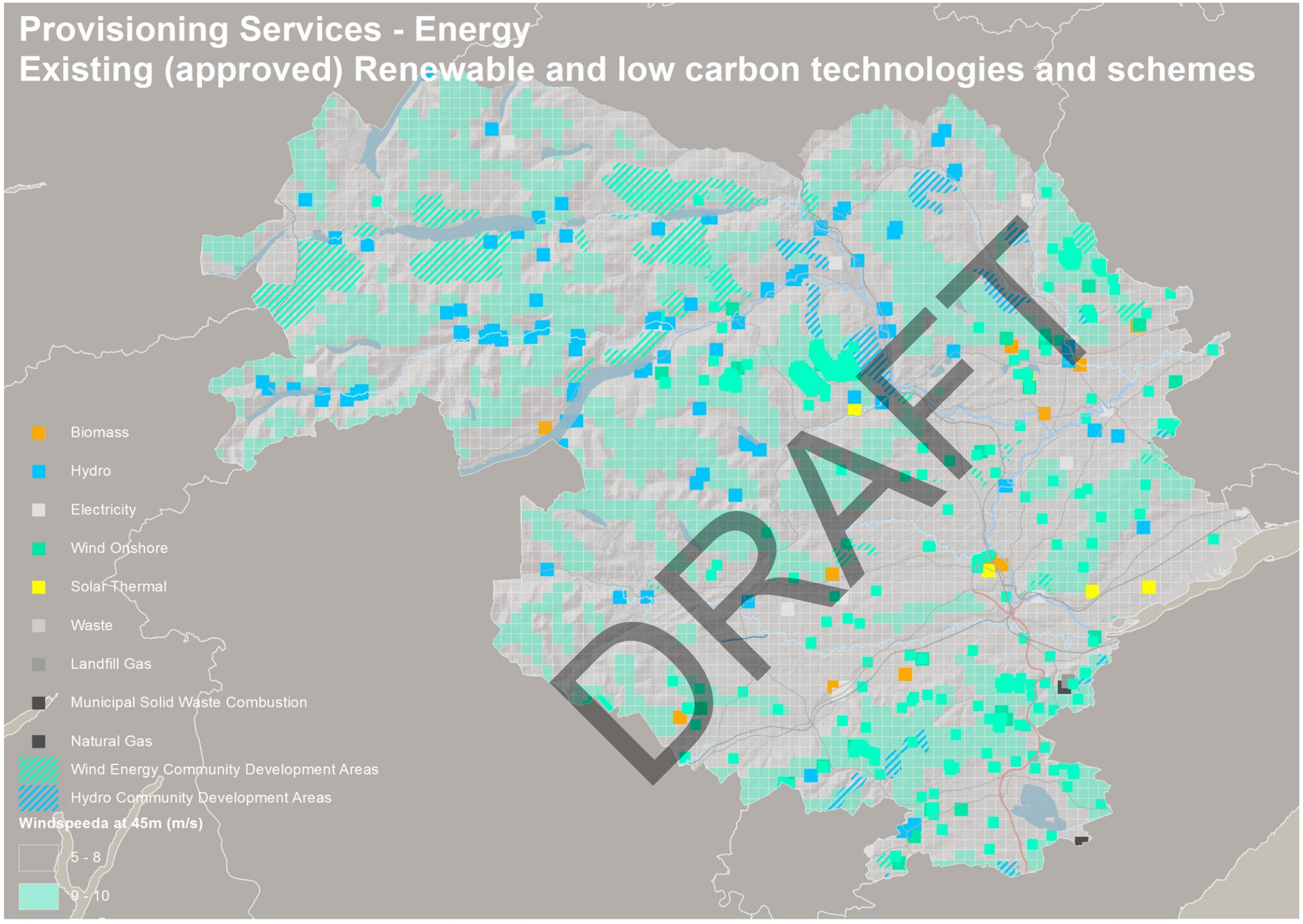
A change in survey methods prevents comment on this trend.

Relevance of this indicator

Carbon dioxide from transport, industry and domestic sources (such as heating, lighting and cooking) is the main greenhouse gas emitted in Scotland. Reducing carbon dioxide emissions is key to tackling climate change. Energy use, conservation and supply are essential for the long term future of the region.

Data source: DECC

Data availability: Annual



Current position

Areas available for communities to investigate the potential for wind and hydro development on the National Forest Estate are shown on the map. The areas shown are indicative of the sites available.

Indicative **hydro** sites are catchments based on a 50 metre resolution Digital Terrain Model (DTM). The power or turbine house has been used as the outlet point in defining the catchments.

To ensure the development of **wind generation** schemes on the NFE are complementary Forestry Commission Scotland will determine if the proposal is likely to be any detrimental impacts on wind speeds, cumulative visual and landscape or other impacts through consultation with partners.

Existing approved and installed windfarms are shown. Perth and Kinross has 3.15% of the nations installed microgeneration capacity, the second highest in Scotland and the UK. Installed capacity for windfarms in Perth and Kinross has increased by 70 MW since 2011 and in 2015 is 297 MW.

Relevance of this indicator

The Scottish Government has a target of generating 100% of Scotland's gross annual electricity consumption from renewable sources by 2020.

Wind and hydro power provide clean and renewable sources of electricity which help reduce greenhouse gas emissions.

Forestry Commission Scotland (FCS) is working to develop the wind and hydro power potential of the National Forest Estate (FCS, 2012).

Local Outcome:

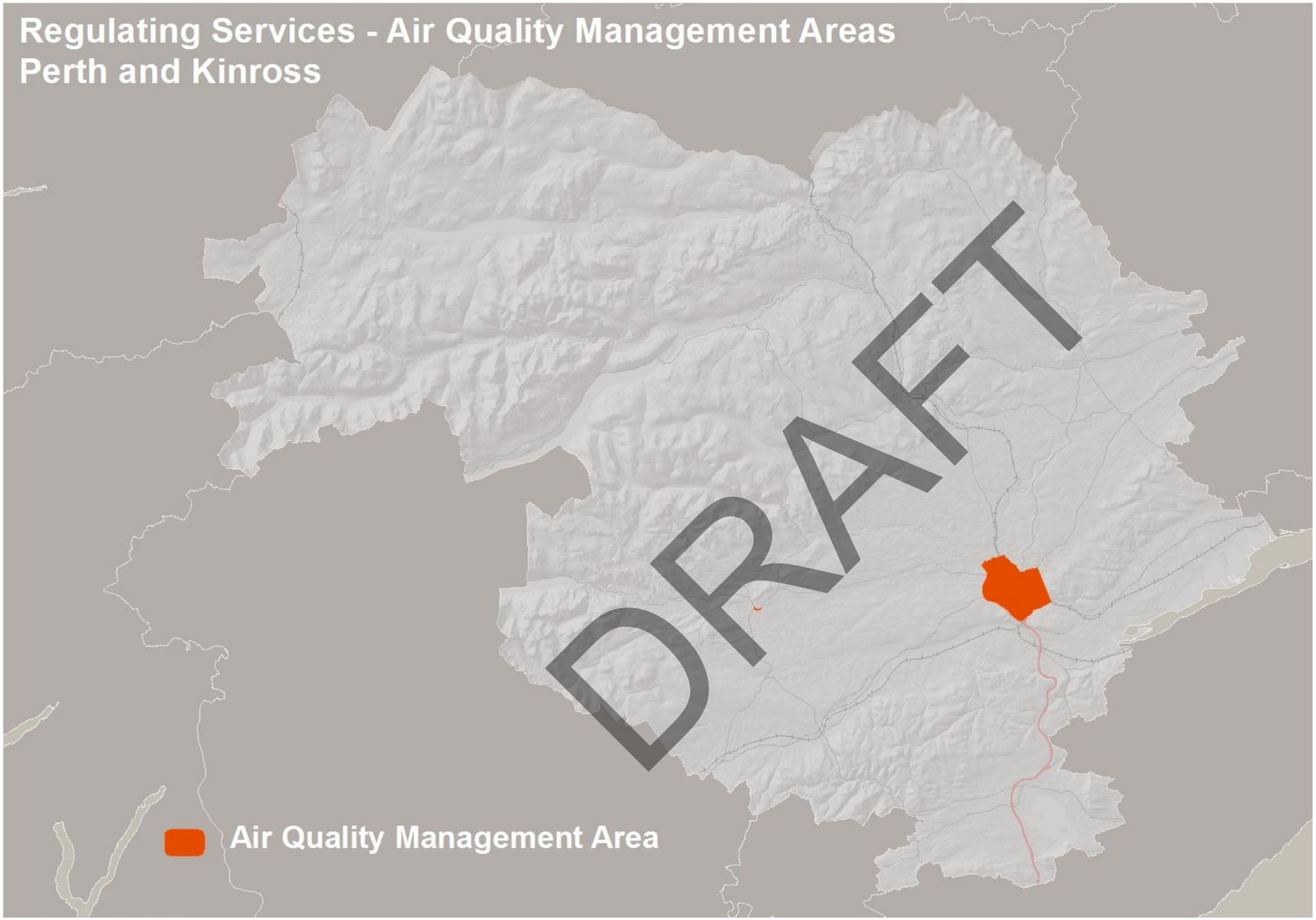
Our area will have a sustainable natural and built environment

National Outcome:

We value and enjoy our built and natural environment and protect it and enhance it for future generations

Data Source: Forestry Commission, PKC

Availability: Unknown



Map Published May 2015

Current position

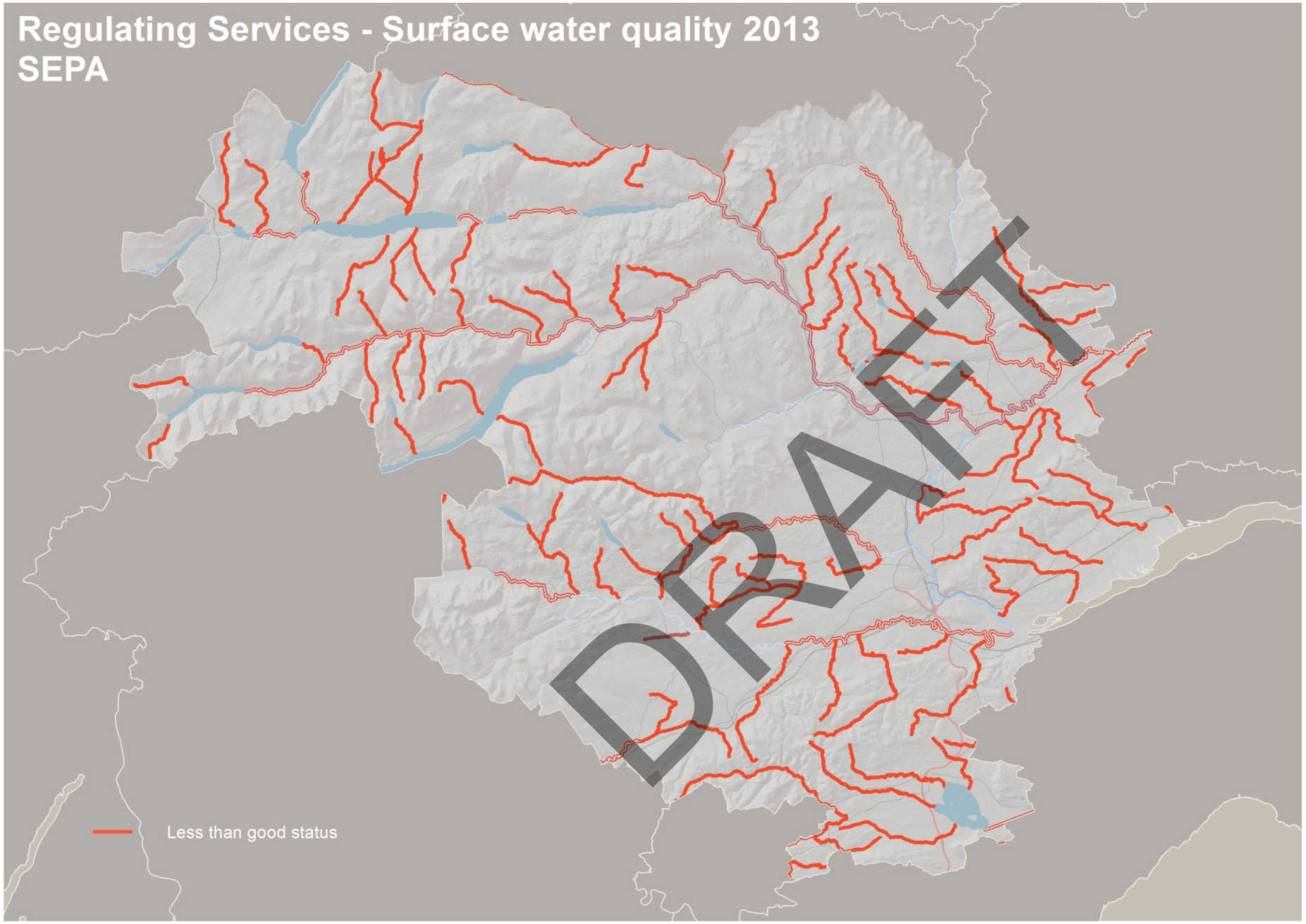
There are currently two Air Quality Management Areas in Perth and Kinross, One in Perth and one in Crieff.

Relevance of this indicator

Clean air is essential for a good quality of life. Exposure to air pollution can have a long-term effect on health. The increase in development that will be suggested through the LDP could result in an increase in air pollution which could have an impact on human health and climate change.

Data source: Perth and Kinross Council

Data availability: ad hoc



Map Published 2015

Current position

According to the draft Scottish River Basin Management Plan, river quality was of a good standard in 2007, with 53% achieving an overall status of good or high quality. In the Perth and Kinross area in 2013 a slightly lower percentage, 45%, of the total number of rivers were classified as being of good status or better, with areas in the East and South containing rivers of bad or poor status.

Benefits delivered

Improving and maintaining the ability of the water environment to support life is a fundamental purpose of the Water Framework Directive (WFD). While our scientific understanding of the ways that ecosystem processes work together to deliver supporting services is still not complete, the standards that have been set for maintaining the ecological status of the water environment in the WFD are based on the need to support its underlying health. If the ecological status of the water environment is deteriorating it is reasonable to assume that its provision of supporting benefits will also be undermined.

Impacts caused by use of the water environment to deliver supporting services

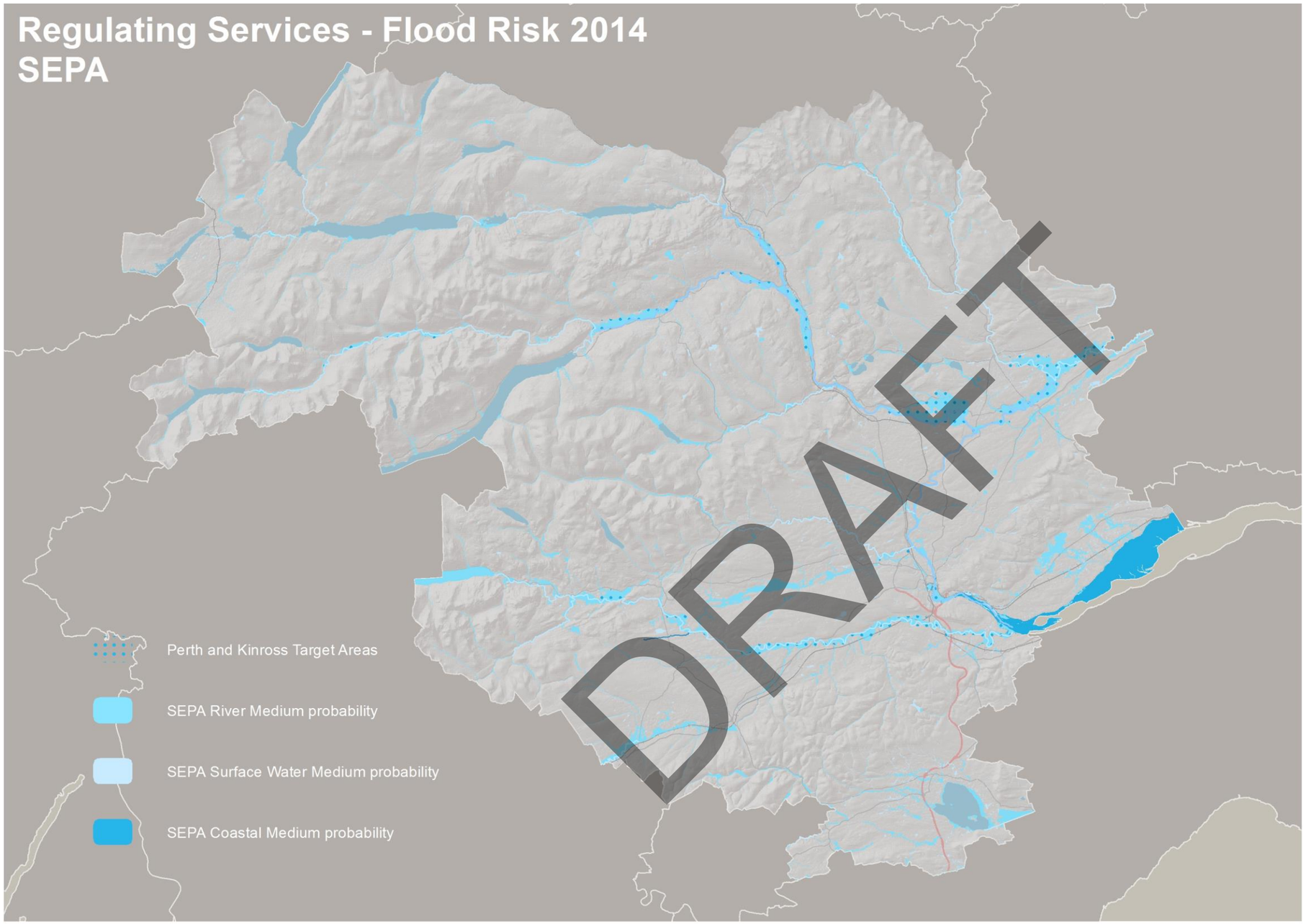
Use of the water environment to deliver basic supporting services for life may have an adverse impact on its use to deliver benefits that require major changes to the water environment.

Impacts affecting use of the water environment to deliver supporting services

Any factors that adversely impact upon the ecological status of the water environment have potential to impact upon its ability to deliver supporting (SEPA, 2014)

Data source: SEPA

Data availability: Annual



Map Published 2015

Current position

The National Flood Risk Assessment is the first step of the new risk-based approach to managing the impacts of flooding, introduced by the Flood Risk Management (Scotland) Act 2009.

The National Flood Risk Assessment has found that one in 22 of all residential 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.

The medium probability layers (1:200yrs) for fluvial and coastal extents are the key datasets for screening new developments for flood risk and providing the first indication of flood risk in a proposed development location.

The medium probability fluvial layer includes hydraulic structures and defences and, thus, is referred to as a defended flood extent.

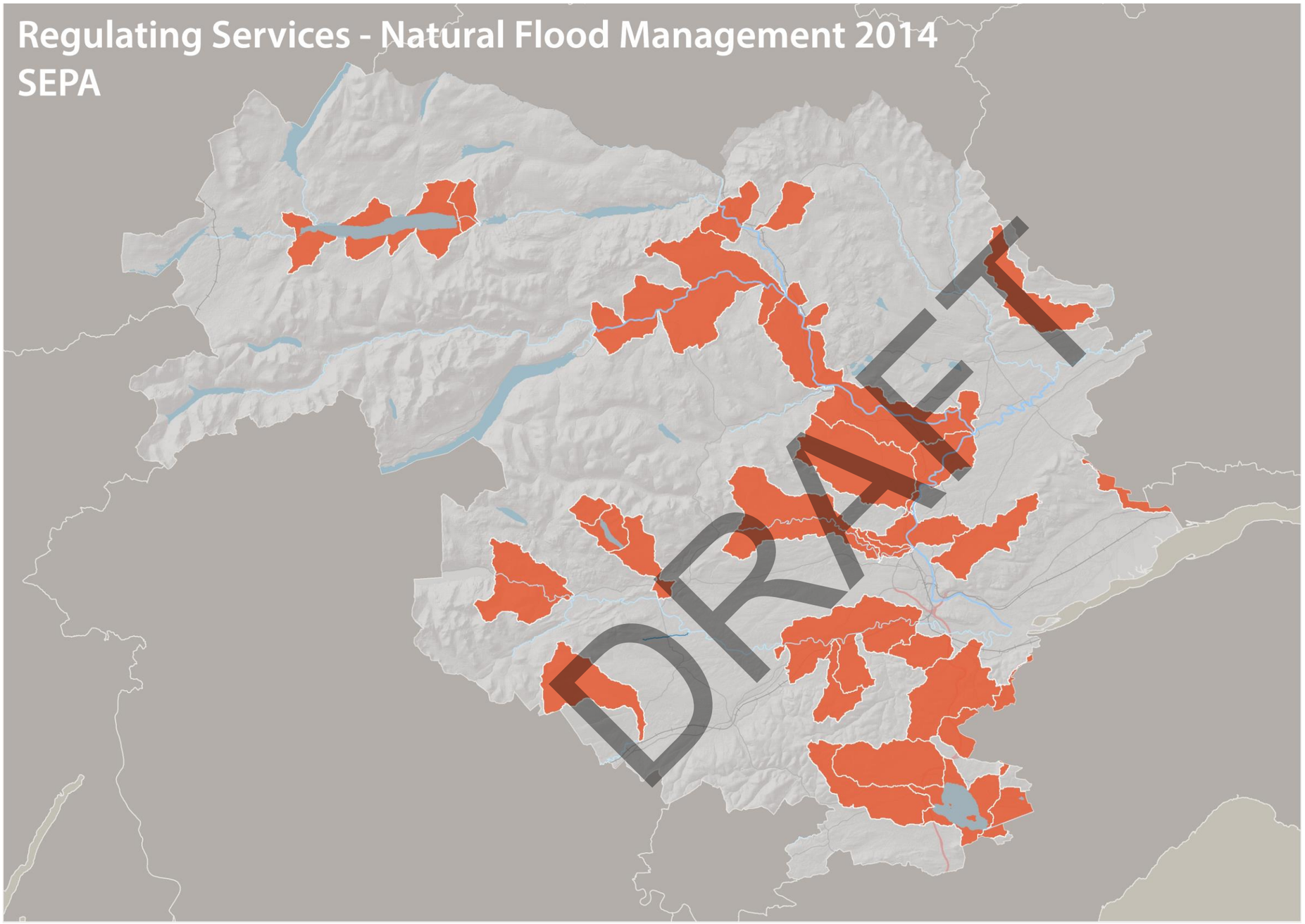
Two mitigation strategies can be implemented: (1) flood control measures and (2) avoidance of the affected area. Further analysis is required to indicate areas at risk within the TAYplan region.

Relevance of this indicator

Flooding is a complex problem affecting many people in Scotland. Approximately one in 22 homes and one in 13 businesses are at risk of flooding Climate change is likely to make the situation more challenging with heavier rainfall and increases in the frequency of extreme weather events expected. An important part of managing flood risk sustainably is to consider where features of the natural environment can be used to slow the flow of water, store water, or contribute to the transport and deposition of sediment that might otherwise contribute to flooding. Some features of the water environment contribute to natural flood management (NFM) for example, naturally functioning rivers (with meanders and flood plains) or coastal wetlands can help to enhance the storage capacity of floodplains and regulate tidal exchange (SEPA)

Presently the primary force driving the maintenance and improvement of inland water environments is the Water Framework. A significant pressure on inland waters is development of the floodplain.

Data availability: Annual, SEPA



Map Published 2014

Current position

Approximately 84,00 ha or 19% of the sub catchments intersecting the Perth and Kinross Planning Authority area offer natural flood management regulation services.

Brief overview

An important part of managing flood risk sustainably is to consider where features of the natural environment can be used to slow the flow of water, store water, or contribute to the transport and deposition of sediment that might otherwise contribute to flooding. Some features of the water environment contribute to natural flood management (NFM) for example, naturally functioning rivers (with meanders and flood plains) or coastal wetlands can help to enhance the storage capacity of floodplains and regulate tidal exchange.

Service provided

Wetlands and flood plains are nonetheless important natural flood management features and their role depends on many factors including their location within a catchment and their vegetation cover. Water bodies can also store water and attenuate flows but this is variable and depends on factors such as their structure (for example whether they contain pools and meanders), the river bed and their location within the catchment.

Water bodies in PVAs have potential to provide more benefits by way of natural flood management than those outside of PVAs. Our data show which water bodies have more than 50% of their area within a PVA.

Impacts caused by use of the water environment for hydro electricity generation

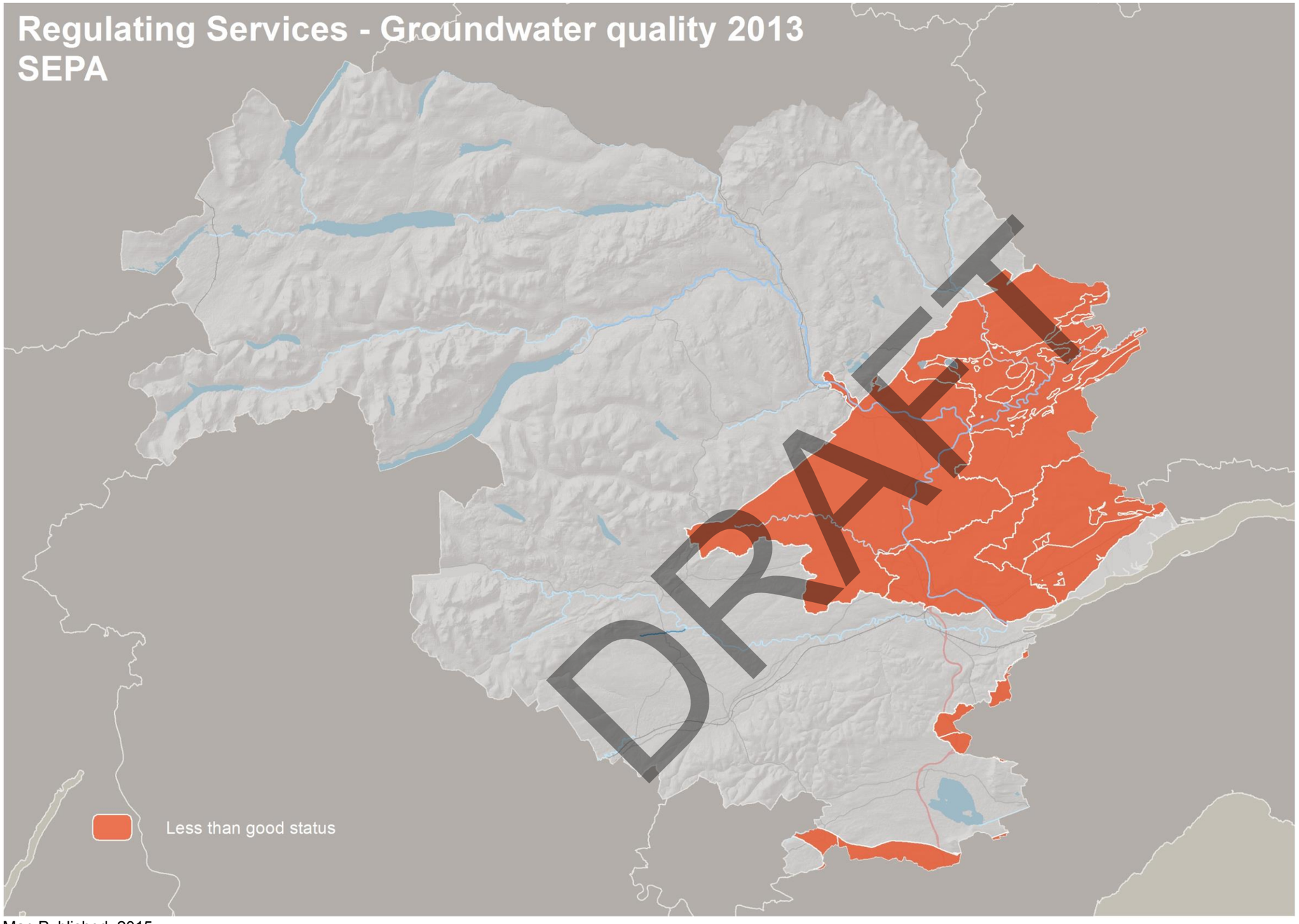
Use of the water environment to provide natural flood management generally has a positive impact on benefits that the water environment is able to provide

Impacts on the water environment that could impact on its use for hydro electricity generation

In general pressures that adversely impact upon flows and levels of water in water bodies have potential to influence the extent to which the water environment and wetlands are able to store and attenuate flows of water that may cause flooding.

Data availability: Annual

Data provider: SEPA



Current position

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, with areas in the East and South containing groundwater bodies of bad or poor status.

Benefits delivered

Improving and maintaining the ability of the water environment to support life is a fundamental purpose of the Water Framework Directive (WFD). While our scientific understanding of the ways that ecosystem processes work together to deliver supporting services is still not complete, the standards that have been set for maintaining the ecological status of the water environment in the WFD are based on the need to support its underlying health. If the ecological status of the water environment is deteriorating it is reasonable to assume that its provision of supporting benefits will also be undermined.

Impacts caused by use of the water environment to deliver supporting services

Use of the water environment to deliver basic supporting services for life may have an adverse impact on its use to deliver benefits that require major changes to the water environment.

Impacts affecting use of the water environment to deliver supporting services

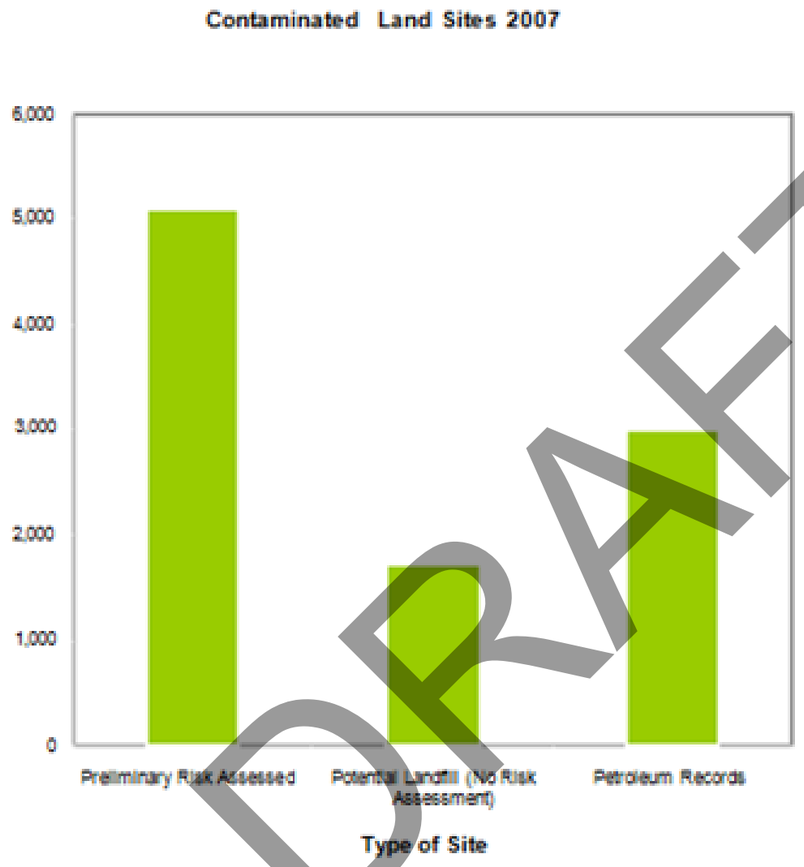
Any factors that adversely impact upon the ecological status of the water environment have potential to impact upon its ability to deliver supporting (SEPA, 2014)

Data source: SEPA

Data availability: Annual

Map Published 2015

Regulating Services – Contaminated Land



Area of Contaminated Land 2007

Type of site	Number
Preliminary Risk Assessed	5,087
Potential Landfill (No Risk Assessment)	1,709
Petroleum Records	3,000
Total	9,796

Current position

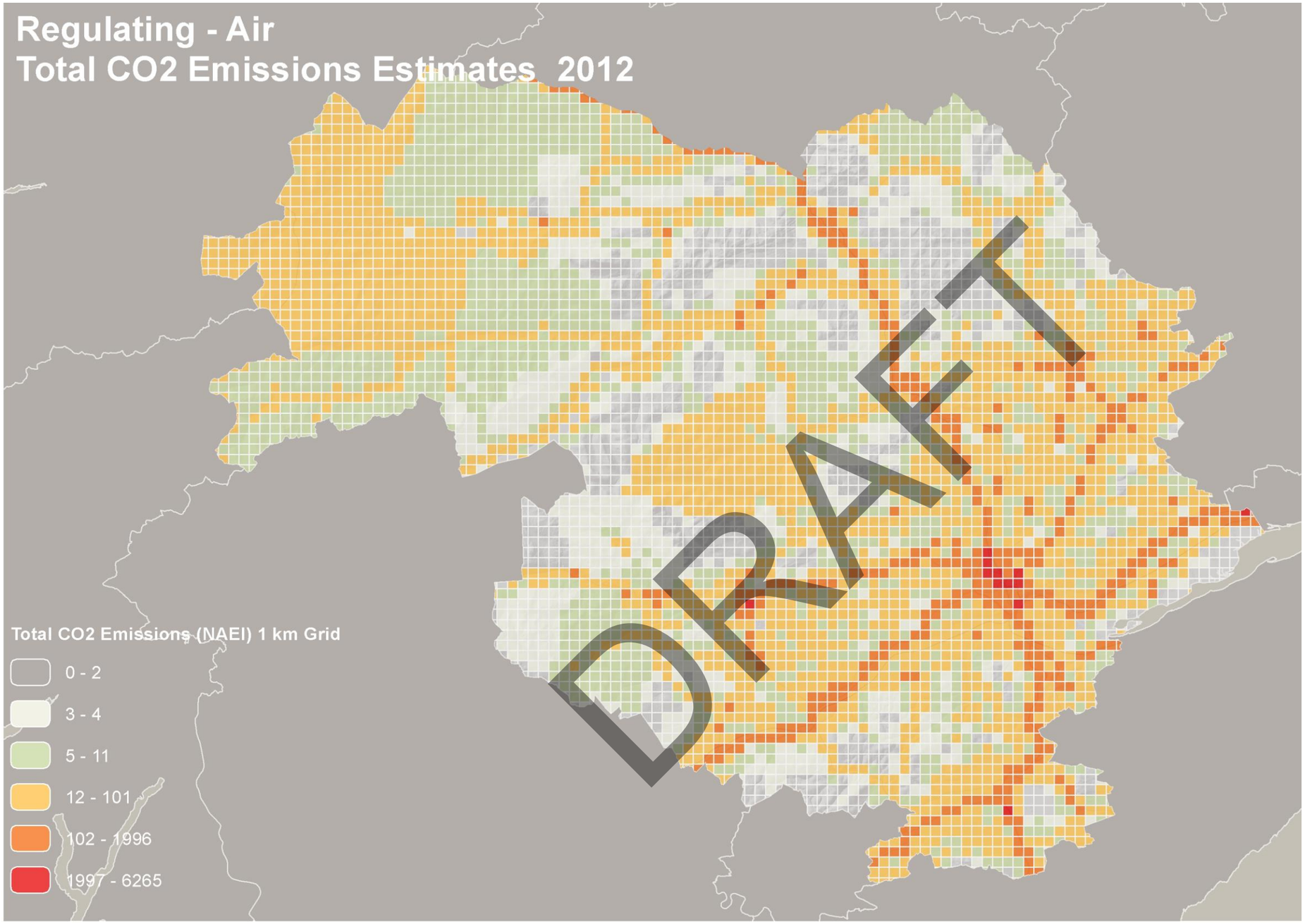
Perth and Kinross has remained relatively unaffected by the onset of the industrial revolution and does not suffer from the concentration of sites that have been affected by unregulated polluting activities in other areas of Scotland. Perth and Kinross has small scale problems over a large geographic area. The information in table identifies sites that may be contaminated based on their previous use and other historical information. These sites require a detailed inspection before any judgement can be made as to their current condition under the statutory definition of 'contaminated land'.

Relevance of this indicator

Healthy soils provide a range of environmental, economic and social benefits. Industrial processes such as town gas production, waste disposal and former garages (amongst others) caused the majority of the observed historical contamination of land in Perth and Kinross. Where there can be significant risks to people or the environment land is considered to be "contaminated land".

Data source: Perth and Kinross Council

Data availability: No Planned Update



Map Published February 2012

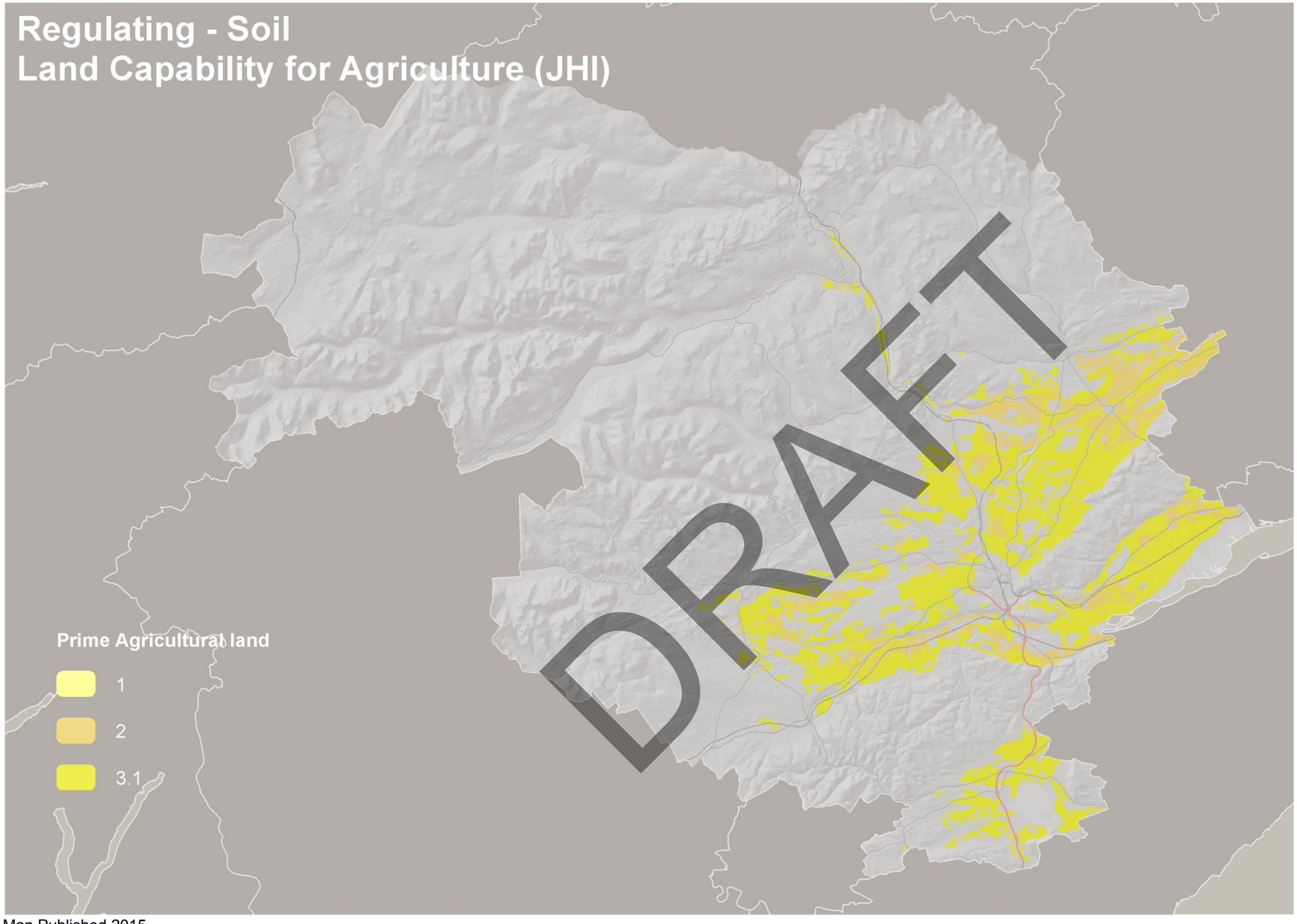
Current position
Carbon dioxide emission estimates per capita in Perth and Kinross have decreased slightly since 2007. In 2012, 8.1 tonnes of CO_2, a rise of 0.6 over previous year, were emitted per capita, compared with 6.7 tonnes per capita as an average across Scotland. Of this, 27% were from the Industry and Commercial sector, 31 % were from domestic and 42 % were from road transport.

A relatively larger proportion of carbon emitted in Perth and Kinross is taken up by land use, land use change and forestry than at the Scottish level.

Relevance of this indicator
The gases that contribute most to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorine compounds. Carbon dioxide from transport, industry and domestic sources (such as heating, lighting and cooking) is the main greenhouse gas emitted in Scotland and Perth and Kinross.

Data source: DEFRA, NAEI

Data availability: Annual (2yr lag)



Current position

Land capability for agriculture is classified using factors such as climate, soil properties (texture, depth, stoniness etc.) and slope. Classes 1, 2 and 3.1 are defined as 'prime agricultural land' with a semi-protected status in the planning system.

At 1:250 000 scale, 11.6% (62000 ha) of the area is occupied by prime agricultural land (class 2 and 3.1).
The 50K soil map surveys mapped in more detailed the most productive south east fringe. The area of prime agricultural land (class 2 to 3.1) occupied 57,000 ha. Land capable of average production but high yield of barley, oat and grass (LCA class 3.2) cover another 45, 250 ha on the 50K map and 4500 ha 57900ha on the 250K map.
Over 50% of the area is occupied by soil class 6 and 7 (rough grassing and soil of limited agricultural values).

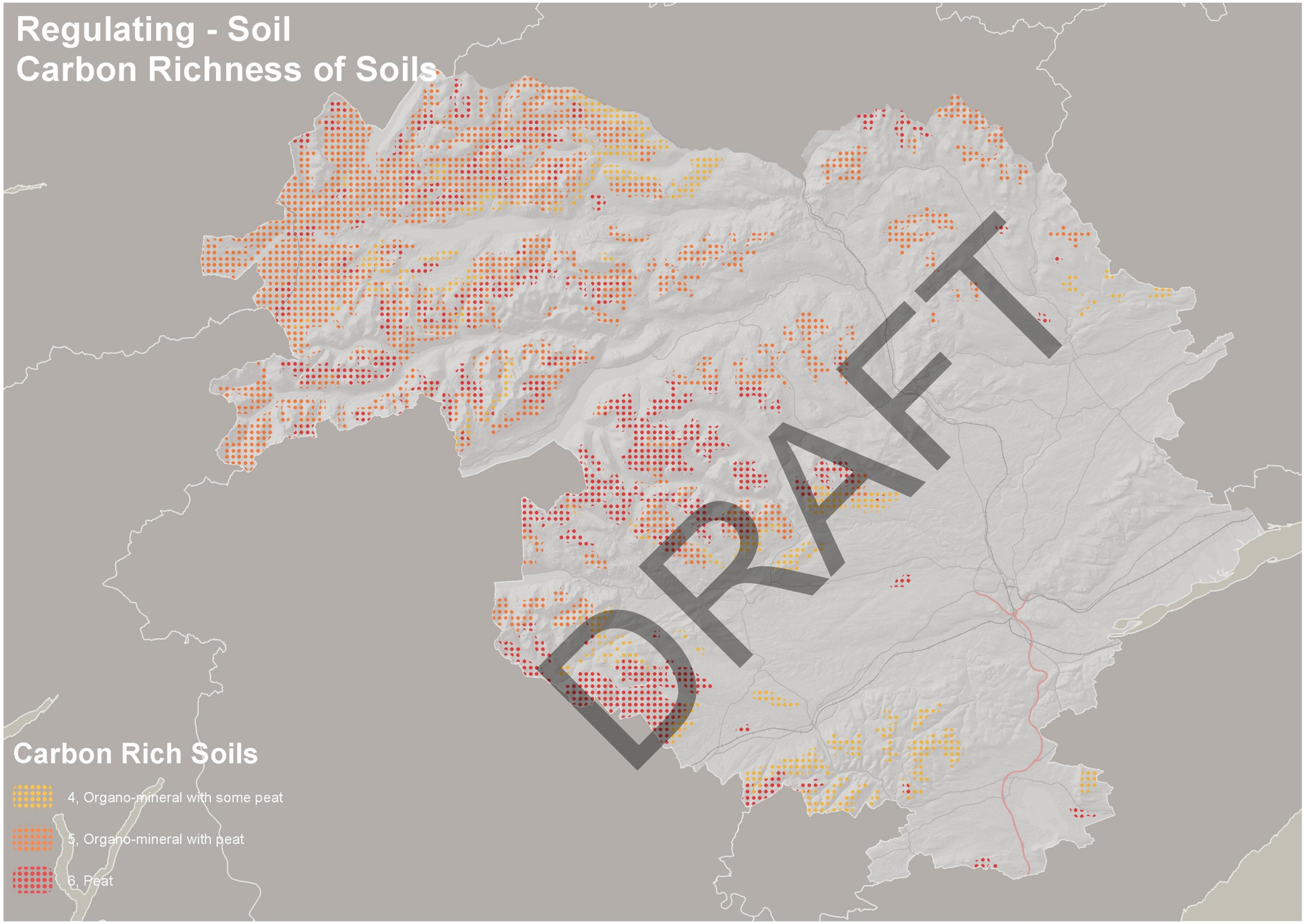
Relevance of this indicator

Preservation and enhancement of the distinctive landscape of the Perth and Kinross area is important to maintain community well being, biodiversity and to support the local economy. Woodlands support the region's economy through timber production, and play a key role in the tourist industry, providing recreational opportunities and contributing to the region's unique landscape and ecology.

Pressures from increased development activity have the potential to impact the prime agricultural land resource. Relevant planning policies addressing landscape and environmental issues need to be taken into account when considering development of prime quality agricultural land

Map Published 2015

Data source: James Hutton Institute



Current position

The 1:250,000 soil dataset is used to identify potential soil with natural heritage issues of national interest. This included; ***a)Soils with high organic content*** **(peat and peaty soil types)**, b) *Soils directly associated with a habitat of conservation or a key geodiversity feature and c) Prime agricultural land*

Soil types with potential higher organic content and associated peat are shown in the adjacent map. Organo-mineral and organic soils are mainly located on the North West fringe of the area and cover around 2000 km^2.

Relevance of this indicator

Healthy soils provide a range of environmental, economic and social benefits, which include providing the basis of the agricultural and forestry industries.

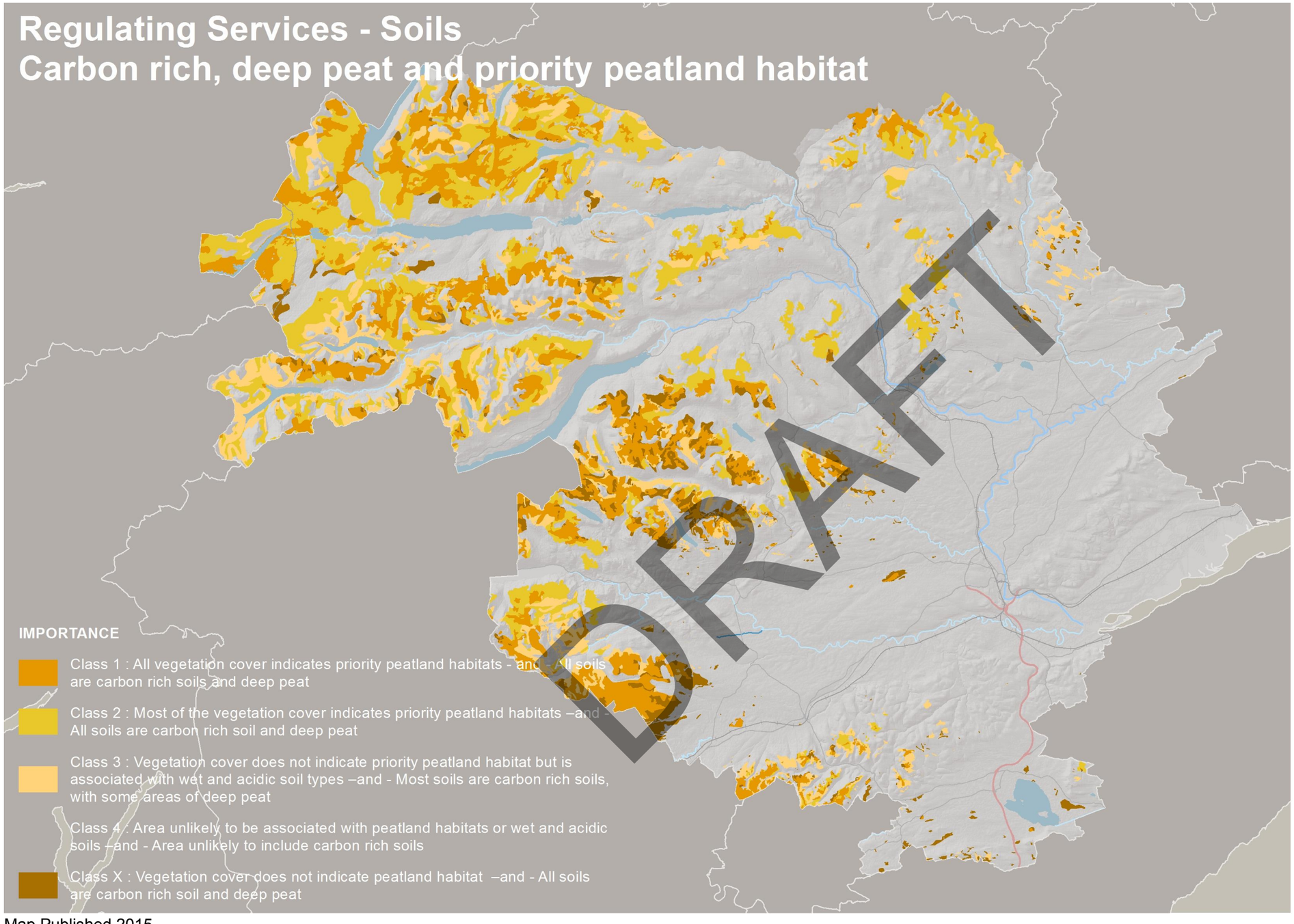
Threats to soil functions are erosion and compaction related to land management, contamination, sealing, loss of biodiversity, acidification from acid rain, climate change and loss of organic matter.

Links to Local Outcome:

Our area will have a sustainable natural and built environment

Sources James Hutton Institute, Scottish Government

Map Published 2015



Map Published 2015

Current position

Scottish Natural Heritage (SNH) has prepared a consolidated spatial dataset of 'carbon rich soil, deep peat and priority peatland habitats 'in Scotland derived from existing soil and vegetation data. The derived 'Carbon and Peatland'(2014) map updated earlier work undertaken by SNH for the identification of natural heritage features of national importance. The intention behind developing and publishing this map is to give greater understanding to a wide range of audiences, as to where Scotland's peatlands are to be found. .The new map and associate information may be used to:

- Provide greater appreciation and transparency around where Scotland's peatland are
- Support strategies and projects related to the management and restoration of Scotland's peatland habitats
- Support the implementation of the forthcoming Scotland's National Peatland Plan
- Assist in identifying peat and other carbon rich soils for development plans
- Facilitate mapping of wind farm spatial frameworks in line with the new Scottish Planning Policy (SPP) (2014)
- Support the siting of proposals that could impact on the soil resource and design of mitigation to avoid or reduce such impacts

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 potentially high conservation value and restoration potential respectively. (SNH, 2015)

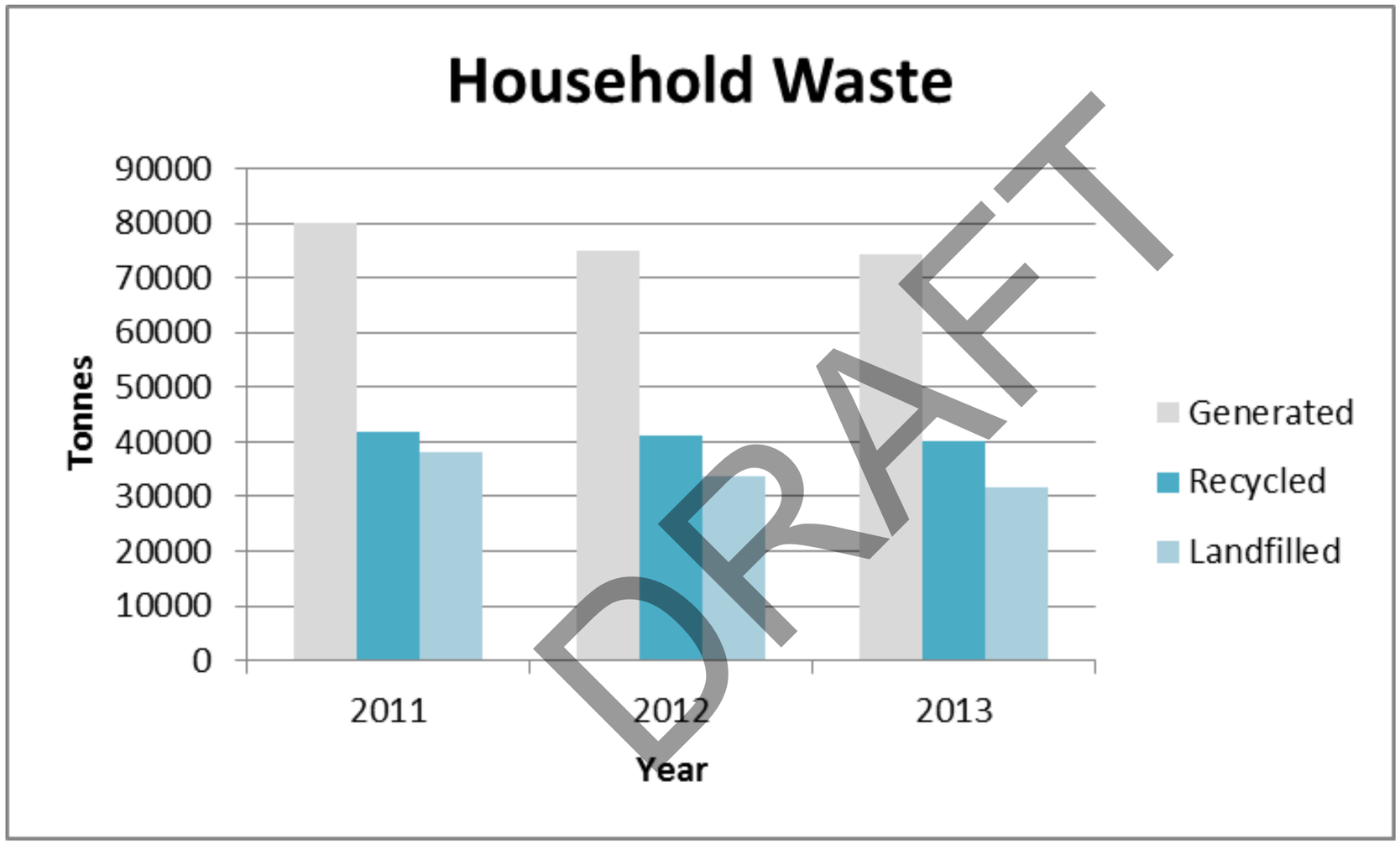
Relevance of this indicator

Healthy soils provide a range of environmental, economic and social benefits, which include providing the basis of the agricultural and forestry industries.

Threats to soil functions are erosion and compaction related to land management, contamination, sealing, loss of biodiversity, acidification from acid rain, climate change and loss of organic matter.

Sources James Hutton Institute, Scottish Government

Supporting Services – Household Waste



Current position

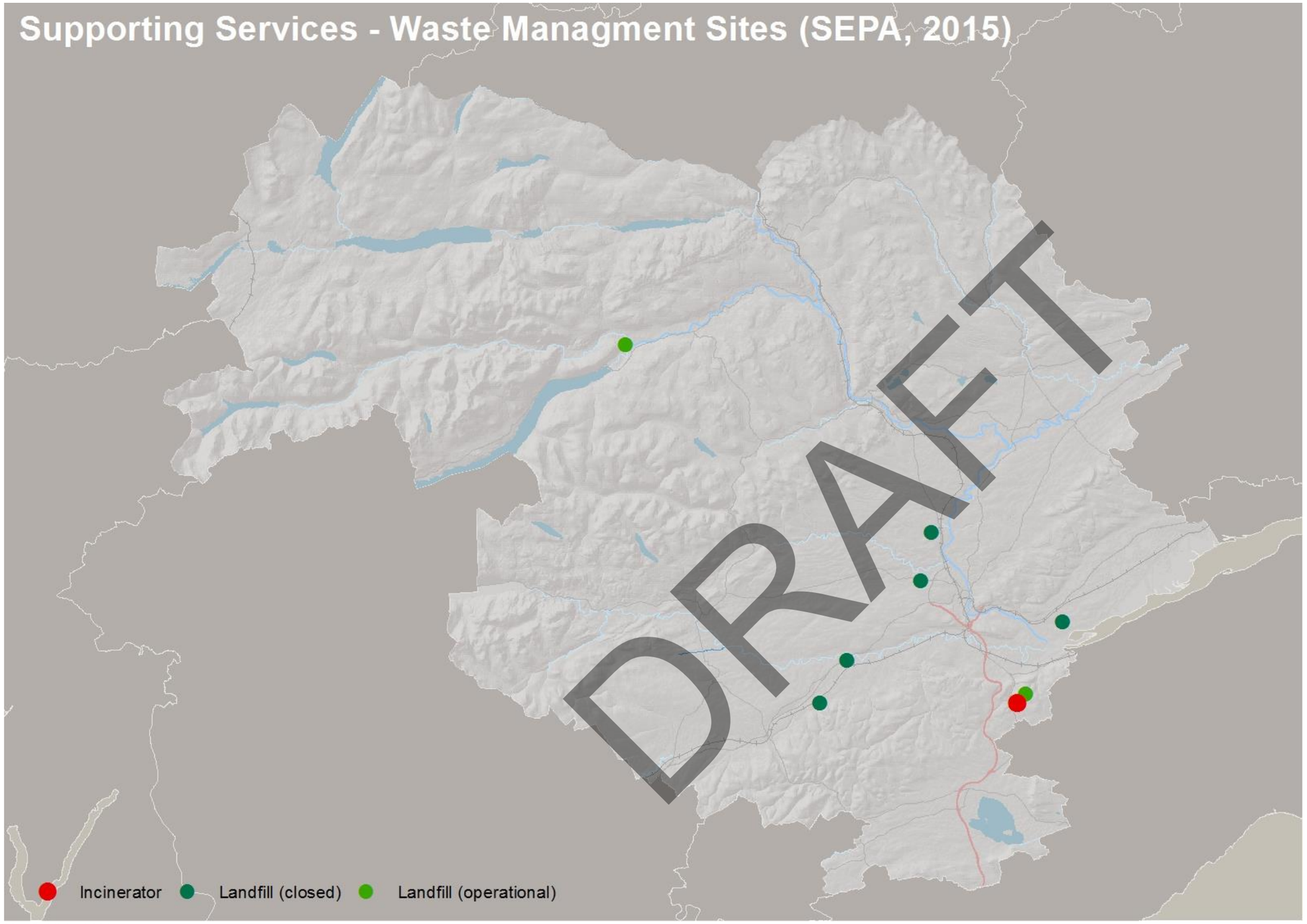
Total Household waste generated within Perth and Kinross has declined from 79918 tonnes in 2011to 74267 tonnes in 2013. As well as this the volume of waste sent to landfill has decreased and recycling rates have shown an increase of 2% between 2011 and 2013.

Relevance of this indicator

Waste management and disposal issues have significant implications for the environment and sustainable development. Disposal of waste to landfill contributes to greenhouse gas production and land degradation. Scotland's first Zero Waste Plan, published, 09 June 2010 sets out key actions, including new targets, to tackle the near 20 million tonnes of waste produced by Scotland annually. A Waste Management Plan (2010) has been produced in response and sets out actions to move away from landfilling waste, promoting waste minimisation and recycling and composting as alternative disposal methods.

Data source: SEPA

Data availability: Annual



Map Published 2015

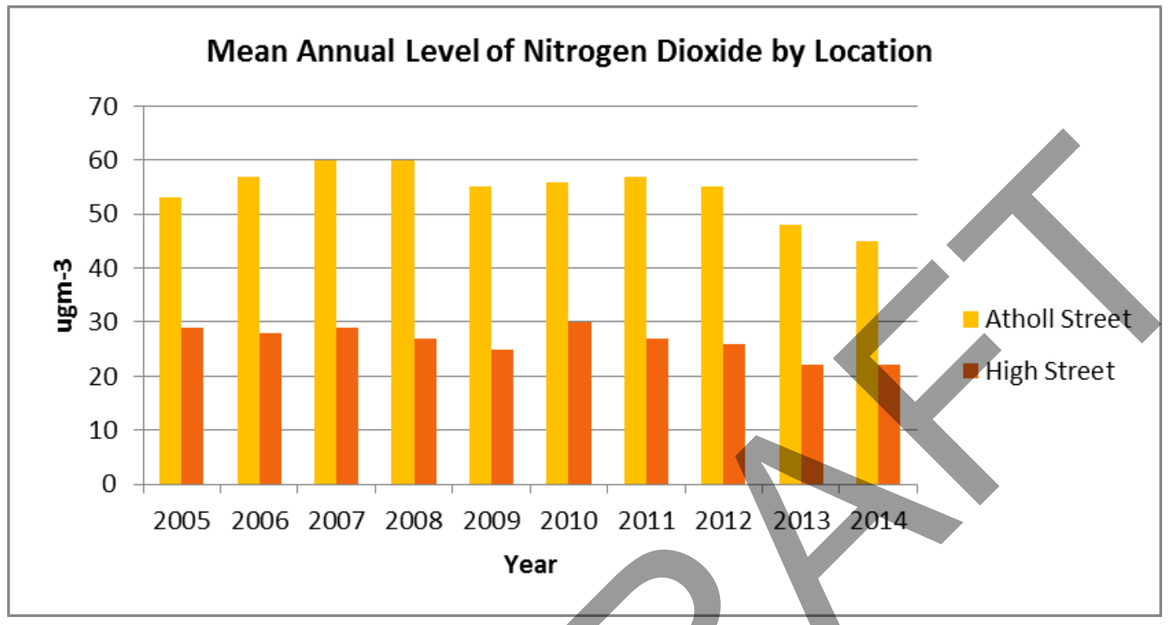
Current position
There are 41 Waste Management Sites within Perth and Kinross with an annual capacity of 1,422,433 tonnes (SEPA, 2013). These sites include 1 Incinerator facility and to landfills as shown on this map. This map also illustrates closed landfills showing the shift from landfill as a method of waste disposal.

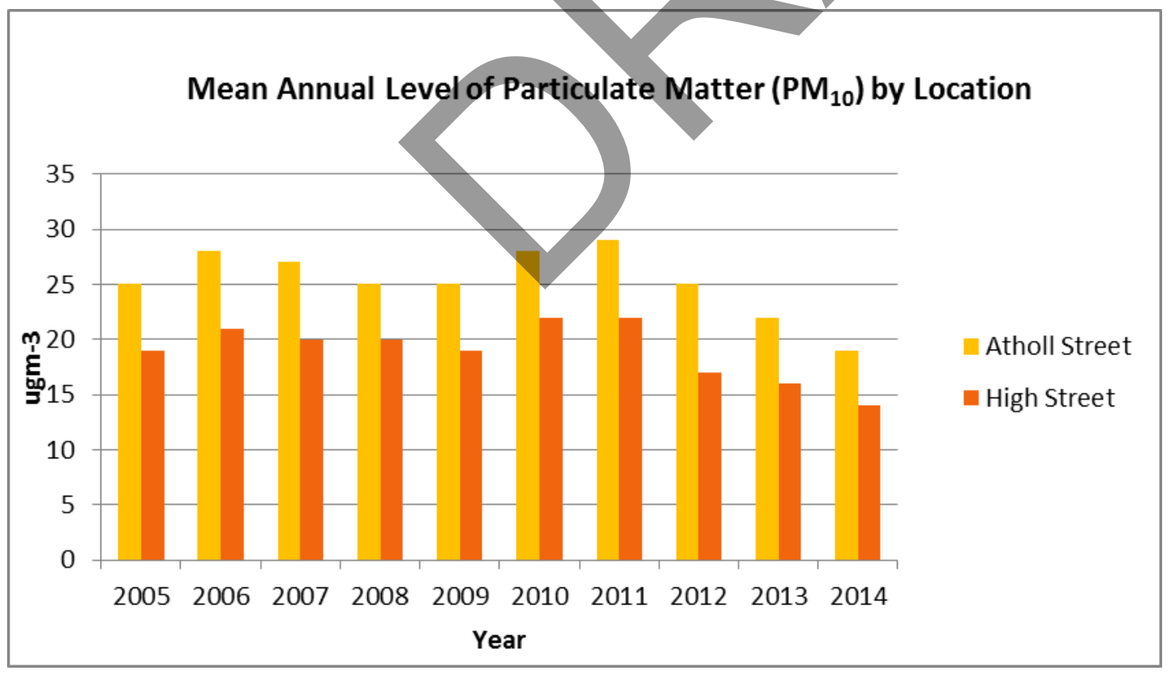
Relevance of this indicator
Waste management and disposal issues have significant implications for the environment and sustainable development. Disposal of waste to landfill contributes to greenhouse gas production and land degradation. Scotland's first Zero Waste Plan, published, 09 June 2010 sets out key actions, including new targets, to tackle the near 20 million tonnes of waste produced by Scotland annually. A Waste Management Plan (2010) has been produced in response and sets out actions to move away from landfilling waste, promoting waste minimisation and recycling and composting as alternative disposal methods.

Data source: SEPA

Data availability: Annual

Supporting Services – Mean Annual Levels of Key Air Pollutants





Current position

The primary cause of poor air quality in Perth and Kinross is emissions from road traffic. Perth and Kinross meets all of the Government's targets for air quality except at a few traffic hotspots in Perth and Crieff. It should be noted that these locations were selected for monitoring as they represent the worst case scenario for air quality in Perth and Kinross.

Atholl Street is the main area of Perth for which the objectives for NO2 and PM10 are unlikely to be met. Data for 2014 shows a slight decrease (3ug-3) for NO2 against the previous year, continuing to exceed the legislative limit of 40ugm-3. There was also a decrease of (3ug-3) for PM10 (Fig 2), exceeding the legislative limit. The levels of both NO2 and PM10 for Perth High Street are both within the legislative limits and a pattern of declined is beginning to emerge from 2011.

2014 data shows fairly constant levels of NO2, thought there has been a slight decline since 2010. PM10 levels are gradually decreasing for the two areas monitored.

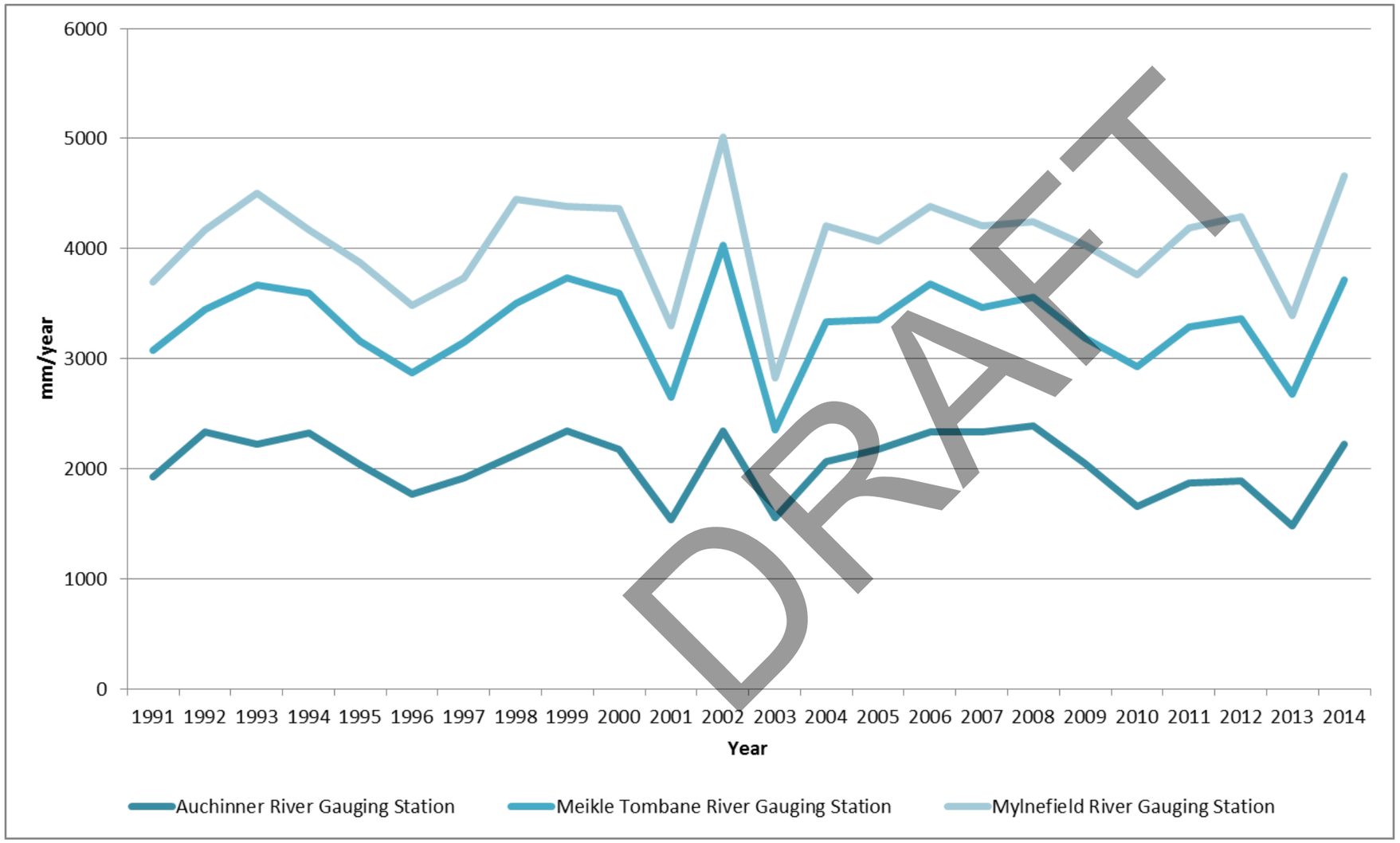
Relevance of this indicator

Good air quality is critical for the health of residents and visitors to Perth and Kinross as well as the condition of the area's wildlife, habitats and built environment. Air quality in most areas of Perth and Kinross is generally good. The main factor behind these emissions is transport, and indications are that traffic volumes are increasing. There are no significant industrial or domestic sources of air pollutants in Perth and Kinross.

Data source: Perth and Kinross Council

Data availability: Annual

Supporting Services – Annual Precipitation at Key Weather Stations



Current position

Rainfall data from key gauges in Perth and Kinross show that over the last 30 years there has been no clear upward or downward trend in total or seasonal rainfall in Perth and Kinross. However figures calculated at the national level show that there was a significant increase in winter and annual rainfall throughout Scotland as a whole, 58% and 20% respectively. The report containing these figures indicates a 5 to 50% increase in rainfall across Perth and Kinross between 1961 and 2004, with the greatest increases in upland areas[1].

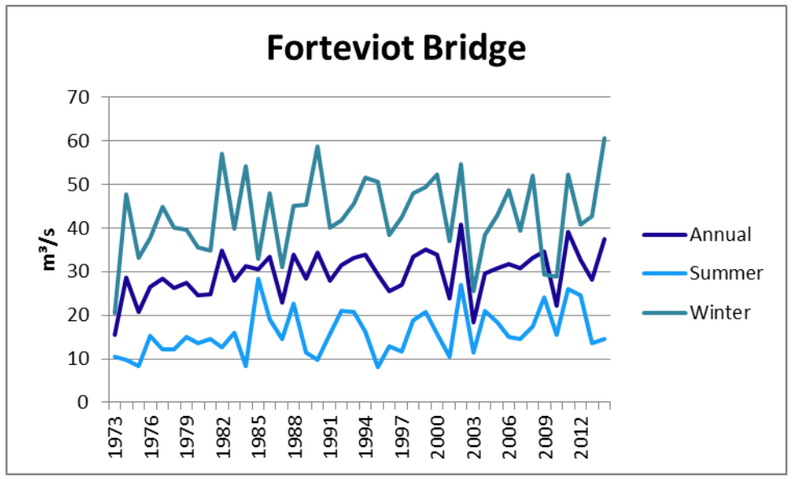
Relevance of this indicator

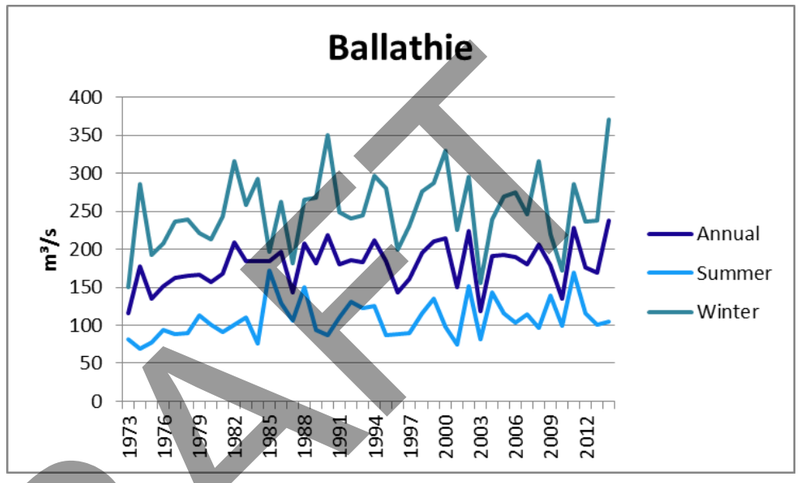
Water quality has significant implications for human health and for fauna coming into contact with or living within the water environment. A high level driver putting pressure on the inland water environment, primarily through alteration of rainfall and snow cover patterns, is climate change.

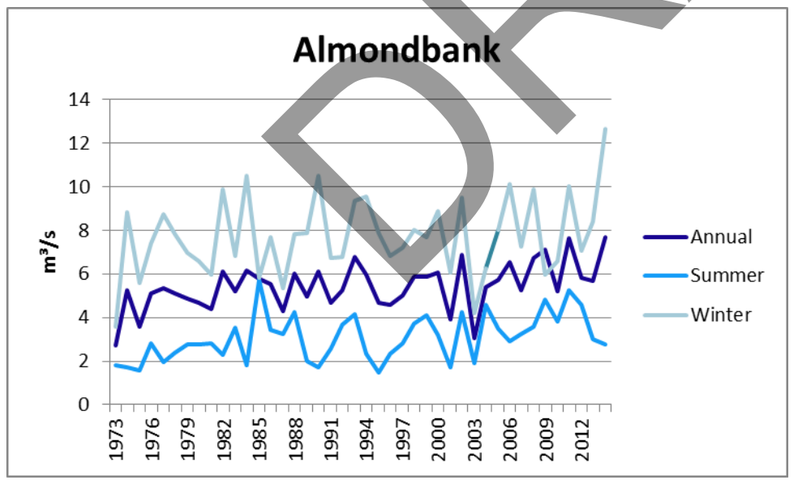
Data source: SEPA
Data availability: Annual

[1] Barnet, C; Hossell J; Perry M; Procter, C and Hughes, G (2006) *A handbook of climate trends across Scotland.* SNIFFER project CC03

Supporting Services – Mean Daily Flow at Key Gauging Stations (1975-2014)







Current position

Scotland's 2014 State of the Environment Report (managed by Scotland's Environment Web Partnership) predicts less overall summer rainfall, and higher autumn/winter rainfall which will lead to higher annual river flows. This along with an increased frequency of extreme precipitation events, a higher temperature in all seasons and sea-level rise is predicted to have an adverse impact on the environment through loss of habitat, increased pollution and increased flooding.

This indicator shows trends in mean annual, winter and summer daily flows at key gauges in Perth and Kinross.

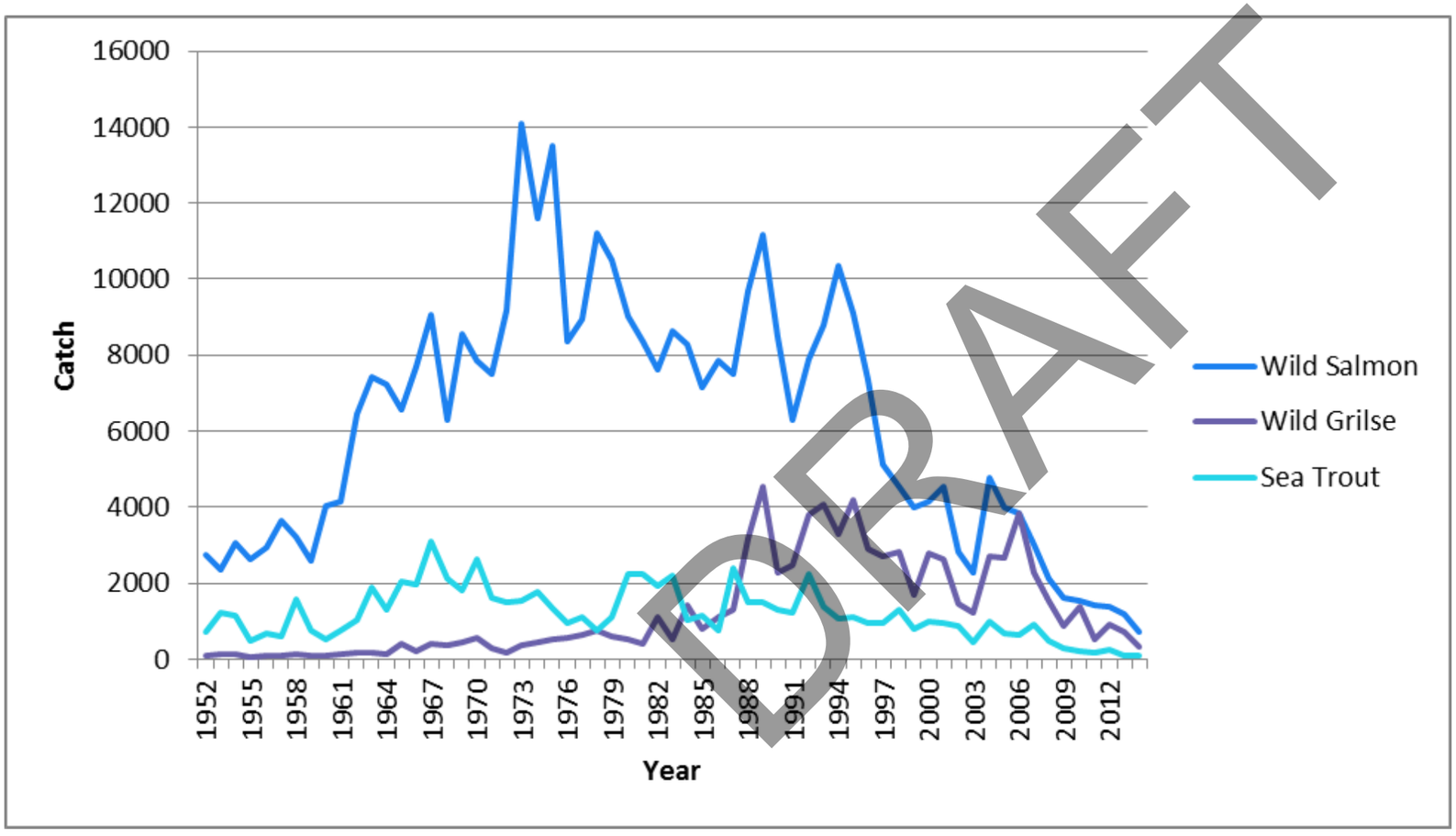
Relevance of this indicator

Water quality has significant implications for human health and for fauna coming into contact with or living within the water environment. A high level driver putting pressure on the inland water environment, primarily through alteration of rainfall and snow cover patterns, is climate change. Local pressures on inland waters include; abstraction and flow regulation including major hydropower and water supply schemes, the building of dams and weirs and the drilling of boreholes to extract groundwater ;and morphological pressures including engineering works to channels

Data source: SEPA

Data availability: Annual

Supporting Services – Tay District Rod Count Data (1952-2014)



Current position

Rod catch data for the Tay district remains relatively stable in 2014 despite annual fluctuations. When considering stock abundance prior to 2006, it should be remembered that there was much higher exploitation of salmon prior to the rod fishery. Today there is very little exploitation of salmon upstream of the rod fishery. Therefore though the rod fishery appears stable, total abundance was higher in 1960s -70s when there was a large net fishery which was bought and closed down in 1996.

Relevance of this indicator

Water quality can affect the local economy through influencing tourism and recreational activity. Fishing contributes significantly to the local economy and fish abundance is also a key indicator of ecosystem health.

Data source: The data used in this graph/figure/table are Crown copyright, used with the permission of Marine Scotland

Data availability: Annual

Perth and Kinross Council

Local Development Plan 2
SEA Environmental Report

APPENDIX C: SITE ASSESSMENT TEMPLATE

December 2015

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PERTH & KINROSS COUNCIL

APPENDIX C: SITE ASSESSMENT TEMPLATE

Site Name:	**Source of site suggestion:**		**Site History/Previous planning applications, existing local plan policies and proposals:**
Settlement:	**GIS Site Ref:** **MIR Site Ref:** **Pre-MIR Site Ref:**	**Outside or adjacent to a settlement boundary?**	
OS Grid Ref:	**Site Size (ha):**	**Within a TAYplan preferred Settlement, if so which settlement tier?**	**Summary Description (topography, features, boundaries, neighbouring issues, access, exposure, aspect etc).**
Current Use e.g. is the site developed, sparsely developed or undeveloped (e.g. agriculture, brownfield etc):	**Proposed Use:**	**Initial Officer Comments:**	

Insert Location Plan

Insert Photographs if available

	Site assessment question (click on links embedded in the text for further guidance)	Related SEA topic if applicable	Comment	Information available – GIS/site visit?	Scoring – pre mitigation	Mitigation/Enhancement if appropriate?	Scoring – post mitigation
Water							
	Could the option result in a negative impact on the water environment? (see notes)	Water		Check on OS map GIS Landuse layer Waste water drainage hotspots Private water supplies (risk assessed) layer			

APPENDIX C: SITE ASSESSMENT TEMPLATE

	Site assessment question (click on links embedded in the text for further guidance)	Related SEA topic if applicable	Comment	Information available – GIS/site visit?	Scoring – pre mitigation	Mitigation/Enhancement if appropriate?	Scoring – post mitigation
	Can the option connect to the public foul sewer?	Water		GIS Layer for existing network			
	Is the site thought to be at risk of flooding or could its development result in additional flood risk elsewhere?	Water, Climatic Factors and Human Health		Check all the GIS Layers for flood risk			
Biodiversity, Flora and Fauna							
	To what extent will the proposal affect biodiversity, flora and fauna interests?	Bio flora and fauna		GIS layers SAC/SPA/SSSI/NNR/ TPO/protected species Loch Leven Catchment Lunan Valley catchment River Tay Catchment			
	Are there any local geodiversity sites or wider geodiversity interests that could be affected by the proposal?			GIS Layers for Geological Conservation Review sites, SSSI, and Tayside Geodiversity Sites			
	How will habitat connectivity or wildlife corridors be affected by the proposal – will it result in habitat fragmentation or greater connectivity?	Bio flora and fauna		GIS aerial map/OS map/site visit			
Air Quality							
	Could the option lead to Local Air Quality Management thresholds being breached within the Perth and Crieff Air Quality Management Areas or lead to the designation of a new Air Quality Management Area (AQMA)? (see notes)	Air					
Service Infrastructure							
	What will be the impact on local/community facilities and infrastructure (see notes)			GIS Layers for school catchments			
	To what extent will the proposal affect the quality and quantity of open space and connectivity and accessibility to open space or result in a loss of open space?	Popl and human health or material assets		GIS layers for core paths and rights of way and maintained open space and existing LDP for open space allocations			

APPENDIX C: SITE ASSESSMENT TEMPLATE

	Site assessment question (click on links embedded in the text for further guidance)	Related SEA topic if applicable	Comment	Information available – GIS/site visit?	Scoring – pre mitigation	Mitigation/Enhancement if appropriate?	Scoring – post mitigation
	Will the proposal create/reduce employment land/opportunities?	Population		Check CFS form			
Soils							
	Is the option on greenfield or brownfield land?	Material Assets and Soils		GIS aerial map/site visit			
	Are there any contaminated land/soils issues on the site? (see notes)	Material Assets and Soils		GIS Layers for carbon richness (which shows whether there is peatland), and prime agricultural land (LCA 50K)			
Deliverability/sustainability constraints							
	Will the site be delivered within the LDP timeframe?	Material assets		Check CFS form			
	Site aspect – does the site make best use of solar gain? Is the site protected from prevailing winds?	Climatic factors		Check CFS form, aerial map and possibly site visit			
	Vehicular Access constraints or opportunities - Road network capable of accommodating traffic generated?	Material assets and climatic factors?					
	Is the site close to a range of facilities? Can these be accessed by public transport?	Climatic factors and human health		GIS layer for bus stops has a 400m buffer so you can see if it is within easy active travel distance Check distance to local services and amenities			
	Is the site within a Health and Safety Consultation Zone or any other site servicing constraints, e.g. electricity pylons, underground gas pipelines etc.	Material Assets and Population and Human Health		GIS layers for pylons, gas pipelines, scottish gas networks network rail buffer Check the health and safety consultations at the back of the LDP (they are not digitised) Check for pylons on OS map and on site visit			
	Does the proposal support a designated National Planning Framework national priority or a site identified in the Strategic Development Plan?	Material Assets		Check NPF3 and TAYplan SDP			
	Will the site make use of existing	Material Assets		GIS aerial map/site visit			

APPENDIX C: SITE ASSESSMENT TEMPLATE

	Site assessment question (click on links embedded in the text for further guidance)	Related SEA topic if applicable	Comment	Information available – GIS/site visit?	Scoring – pre mitigation	Mitigation/Enhancement if appropriate?	Scoring – post mitigation
	buildings?						
Landscape Designated sites							
	To what extent will any designated sites be affected – including NSAs, Regional Scenic Areas, and local landscape designations?	Landscape		GIS layers for NSA, and SLA			
Non designated landscape features and key landscape interests							
	Does the proposal ensure that development does not exceed the capacity of the landscape to accommodate it? (see notes)	Landscape		Check existing LDP GIS layer wild land Check the landscape impact using capacity study if one is available Site visit			
	Will the proposal have an adverse impact on the integrity of the greenbelt?	Popl and human health or material assets		GIS layer greenbelt			
Material assets							
	Is the option in the vicinity of a waste management site and could therefore compromise the waste handling operation?	Material Assets and Human Health		GIS layer for waste management sites			
	For potential waste management activity sites (includes allocation for employment, industrial or storage and distribution uses) - does the proposal comply with the locational criteria set out in annex B of the Zero Waste Plan?	Material Assets		Check Zero Waste Plan			
Cultural Heritage							
	Will the option affect any cultural heritage asset or their setting?	Cultural heritage, incl architectural and archaeological heritage (and links with landscape)		GIS layers Listed building, Scheduled Monuments, Conservation Areas, Gardens and Designed Landscape, Battlefields, Archaeology Site visit			

APPENDIX C: SITE ASSESSMENT TEMPLATE

	Site assessment question (click on links embedded in the text for further guidance)	Related SEA topic if applicable	Comment	Information available – GIS/site visit?	Scoring – pre mitigation	Mitigation/Enhancement if appropriate?	Scoring – post mitigation
	To what extent will the proposal result in the opportunity to enhance or improve access to the historic environment? (see notes)	Cultural heritage, incl architectural and archaeological heritage and links with landscape					
Constraints							
	Is the site impacted by/compatible with neighbouring uses?	Could relate to all SEA topics depending on neighboring uses		OS map and site visit			
	Are there any known constraints to development e.g. ownership, marketability etc.	Material Assets		Check CFS form			

Scoring – two columns have been added in the event that is it useful for planning authorities to quickly identify environmental effects from a proposal on a site. Where adverse effects have been identified, it may then also be useful to consider any obvious mitigation measures that might reduce these adverse effects. The second scoring column then allows at a quick glance to see what residual effects might remain following mitigation. There are many scoring techniques currently in use and an example of one option could be:

++	+	0	-	--
Significantly positive	positive	neutral	adverse	Significantly adverse

APPENDIX C: SITE ASSESSMENT TEMPLATE

Key Points to consider when filling out the Site Assessment Tables

Water Environment:

Will the site have a direct impact on the water environment (for example result in the need for watercourse crossings or a large scale abstraction or allow the de-culverting of a watercourse?

Would the site have an impact on the status of a water body or significantly affect a designated water body as identified in the Scotland and Solway Tweed River Basin Management Plan?

Does the site avoid impact on Groundwater Dependent Terrestrial Ecosystems (GWDTEs) i.e. are there any wetlands and boggy areas on the site?

For large scale developments are there any private or public water supplies within 250m of the site which may be affected?

Flood Risk:

Consider whether or not the development of the site helps alleviate any existing flooding problems in the area and note any existing flood measure in place in the area (e.g. flood prevention schemes in Perth, Almond valley etc…)

Biodiversity Flora and Fauna:

Is the site likely to impact an International designation (SAC /SPA if this is the case please highlight need for HRA) or Other designation (SSSI, NNR Local Landscape Area) or are there any Non designated features (trees, TPOs, hedges, woodlands, species rich grasslands), or are there any known Protected Species (e.g. bats, otters etc.).

AIR:

Consider whether or not the option will introduce a new potentially significant air emission to the area (e.g. Combined Heat and Power, an industrial process, large scale quarry or Energy from Waste plant)? And if the option could lead to a sensitive use being located close to a site regulated for emissions to air by SEPA?

Service Infrastructure:

Under community facilities note the primary school catchment and consider the education capacity (primary/secondary), Also note health provision/GP capacity where known. Note whether or not the proposal looks to enhance or create new local facilities.

Under open space consider the impact on core path links or other key access networks such as cycle paths, coastal paths and rights of way as well as the opportunity to enhance the green network through for example the green infrastructure on site.

Soils:

Under soil issues note any contamination issues, is there is any loss of peat, any loss of prime agricultural land (and what category 1,2 or 3) and if there are any soil stability issues.

Non designated landscape features and key landscape interests:

Under this heading consider whether the site is within a current settlement boundaries, the impact on existing townscape and character of surrounding area? Will it affect features of landscape interest, including the distinctive character of the landscape and the qualities of wild land?

Cultural Heritage:

Cultural heritage assets include: scheduled monuments, locally important archaeological sites

(www.rcahms.gov.uk/canmore.html), listed buildings, conservation areas (e.g. demolition of any buildings in conservation area), Garden and Designed Landscape and any historic battlefield on the Inventory Historic Battlefield.

Perth and Kinross Council

Local Development Plan 2
SEA Environmental Report

APPENDIX D: CONSULTATION AUTHORITIES COMMENTS ON SCOPING REPORT

December 2015

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PERTH & KINROSS COUNCIL

APPENDIX D: CONSULTATION AUTHORITIES COMMENTS ON SCOPING REPORT

Issue/Concern	Individual/ Organisation	Comments	How it has been Addressed
General Comments			
General	**Historic Scotland**	No comment	
General	**Scottish Natural Heritage**	The approach to combining the SEA and site assessment is strongly supported. We would welcome your feedback following the use of this approach. We have made recommendations for the proposed assessment based on experience of the specific significant environmental effects identified in the previous Local Development Plan (LDP) SEA, and the Council's new guidance on green networks. We suggest a clear link between the SEA for the higher level TAYplan and the LDP. It is important to ensure the requirements which the TAYplan ER identifies for LDPs are addressed – for example the mitigation measures referred to for LDPs. We recommend summarising the key findings of the SEA in the Main Issues Report for each site and policy. This shows how the SEA is working to inform the LDP, as well as providing transparency in identifying preferred sites. If sites are included in the Proposed Plan which differ significantly in extent/nature from those in the MIR or are new, these need to be assessed through the SEA in the same way.	Noted It is not felt this is necessary as the impact of the SEA on the LDP will be highlighted through the post-adoption statement.

General	**Scottish Environment Protection Agency**	No comment	
Introduction			
Scope of the Environmental Assessment	**Historic Scotland**	The scoping report provides a clear description of the approach to the assessment and I can confirm that I am content with the scope and level of detail proposed for the SEA.	Noted
Scope of the Environmental Assessment	**Scottish Natural Heritage**	We agree with the scope of the assessment as set out in Table 1.	Noted
Scope of the Environmental Assessment	**Scottish Environment Protection Agency**	Within Table 1 – Scope of the Environmental Assessment we recommend that the reason for scoping in Soil should include potential for development to disturb carbon rich soils (CRS) and result in the loss of the carbon stores through the release of greenhouse gases (GHG) to the atmosphere. The release of GHGs is contrary to the targets set out in Part 1 of the Climate Change (Scotland) Act 2009 (CC Act) and efforts to mitigate climate change by reducing greenhouse gas emissions at source. Furthermore we suggest that the reason for the Air topic could be expanded to clarify that emissions from road transport have the potential to have negative effects on air quality and greenhouse gas emissions.	Environmental Report amended accordingly. Environmental Report amended accordingly.

Plan Context			
General Plan Context	**Historic Scotland**	No comment	
General Plan Context	**Scottish Natural Heritage**	We welcome the section on the TAYplan but recommend this also refers to the findings of TAYplan's SEA. The linkages between the SEA for the higher level TAYplan and this LDP should be shown to ensure the necessary assessment of significant environmental effects. It is important to ensure that the requirements which the TAYplan ER identifies for LDPs are included here such as specific mitigation measures.	Environmental Report amended accordingly.
General Plan Context	**Scottish Environment Protection Agency**	No comment	
Baseline			
Summary of Environmental Issues for PKC	**Historic Scotland**	I welcome the recognition of the pressures development can put on historic environment resources. In recognising this, the local development plan should consider ways in which this issue can be addressed.	Noted
General Baseline	**Scottish Natural Heritage**	The Environmental Report should include a description of the likely evolution of the environment without the plan to provide a frame of reference for the assessment of the plan.	This will be included within the Environmental Report.
Key baseline facts	**Scottish**	Human Health: Include the number of km of green	The green network mapping is currently indicative. Green

for Perth and Kinross	**Natural Heritage**	networks in Perth and Kinross as baseline information.	networks are not currently measured in number of km in Perth and Kinross.
Data gaps and problems	**Scottish Natural Heritage**	This section is welcomed. The previous LDP ER referred to the lack of information on capacity of the landscape to accommodate development and we recommend this is added.	The Environmental Report has been amended accordingly.
Summary of environmental issues in Perth and Kinross	**Scottish Natural Heritage**	We note it is proposed that the summary remains unchanged from that of the first LDP SEA and acknowledge the statement that 'due to the short timescales for review there has not been enough time for these problems or issues to be resolved' (pg 27). However, we suggest specific mention of increased development pressure on peat rich soil (e.g. wind farms), and the lack of specific standards for water efficiency.	Noted Environmental Report amended accordingly.
General Baseline Comments	**Scottish Environment Protection Agency**	SEPA holds significant amounts of environmental data which may be of interest to you in preparing the environmental baseline, identifying environmental problems, and summarising the likely changes to the environment in the absence of the PPS, all of which are required for the assessment. Many of these data are now readily available on SEPA's website. Additional local information may also be available from our Access to Information unit at our Corporate Office (Telephone 01786 457700 or email dataenquiries@sepa.org.uk).	Noted

		Other sources of data for issues that fall within SEPA's remit are referenced in our Standing Advice for Responsible Authorities on Strategic Environmental Assessment (SEA) Scoping Consultations.	
Key baseline facts for Perth and Kinross	**Scottish Environment Protection Agency**	We note that the wording in Table 2 Key Baseline Facts Air box could be revised to "Generally good air quality in most areas of P&K – 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." We would recommend that a key environmental fact is included with regards Carbon Rich Soils (CRS) to identify the amount of CRS which exists within the PKC area.	Environmental Report amended accordingly. We are awaiting feedback from Patricia Bruneau (SNH) re how we should/could display this information as SPP asks for nationally important carbon rich soils, deep peat and priority peatland habitat but there are Classes 1-4 and X within the SNH's soils dataset which makes it difficult to group important carbon rich soils, deep peat and priority peatland habitat together
Relevant Plans Programmes and Strategies	**Scottish Environment Protection Agency**	Some of the PPS included have themselves been subject to SEA. Where this is the case you may find it useful to prepare a summary of the key SEA findings that may be relevant to the Local Development Plan 2. This may assist you with data sources and environmental baseline information and also ensure the current SEA picks up environmental issues or mitigation actions which may	This will not be done for every PPS; instead it will be shown in the cumulative analysis of other PPS when looking at cumulative effects.

		have been identified elsewhere.	
Environmental Issues in PKC	**Scottish Environment Protection Agency**	We consider that in addition to the environmental problems described the following issues are also of relevance to this assessment. Under the Soil and Climatic factors topics we recommend that loss of carbon stores provided in carbon rich soils is identified as a problem. We appreciate the identification of flood risk in Climatic factors however flood risk is not only a consequence of climate change and therefore we recommend that it is also included within the Water topic. We recommend that the water topic could be split into quality and quantity issues with the need to avoid development on land at risk of flooding and the fact that some existing development is on land at risk of flooding identified as a problem under quantity.	This has been added under "climatic factors". The "soils" topic has been amended to include development pressure on peat rich soil. Environmental Report amended accordingly.
Development of SEA Objectives			
	Historic Scotland	The inclusion of an SEA Objective for the historic environment is welcomed. In terms of the wording of this objective I would advise that it is modified to "Protect and enhance, where appropriate, the historic environment" as this more suitably reflects the policy position of protection/minimum intervention to secure long term preservation of scheduled monuments.	Environmental Report amended accordingly.

		In relation to the proposed indicators that will be used to measure the performance of the plan against the objectives it is key here to identify indicators that relate to the outcomes of the plan. Currently the listed indicators for the historic environment relate to numbers of historic environment sites, a number which can be influenced by a large number of factors outwith the influence of the plan. I would therefore recommend that consideration is given to more tailored indicators that relate to the identified effects of the plan on the historic environment and delivery of the mitigation / enhancement proposed. In recognising the difficulty in accurately monitoring this we would be happy to have further discussion with you on this issue should you consider it beneficial.	The historic environment indicators used reflect the data currently collected by the council.
	Scottish Natural Heritage	The inclusion of very similar objectives to those used for the first LDP is supported (Table 5) and we agree that this will help with comparison and consistency of monitoring. With the recent development of green infrastructure guidance in Perth and Kinross, it would be useful to include an additional objective and indicator. For example, add green networks objective; "Enhance existing green networks and improve connectivity/function, and create new links where needed." The indicator could be the same as that suggested under 'key baseline facts' above. We also suggest an additional indicator for SEA 10 on energy efficiency to assess the likely significant effects of implementing the Council's current building efficiency measures and the alternatives of a Gold or even Platinum	Noted The green network mapping is currently indicative. Green networks are not currently measured in number of km in Perth and Kinross. It has not been included as an objective as there is no clear monitoring indictor. The council currently only measure sustainability levels for new buildings and so we would not have a baseline figure for this. It is proposed that as part of the ongoing

		sustainability label requirement.	monitoring we could record the number of buildings meeting this standard and present these findings in future reports.
	Scottish Environment Protection Agency	We would recommend that the wording of the following SEA objective(s) could be revised as follows to accord with current guidance and legislation: SEA Objective 5 could be expanded to include protection of carbon rich soils SEA Objective 12 could be altered to "meet Zero Waste Plan objectives" We acknowledge the difficulty in identifying indicators that are purely a consequence of the LDP and suggest that a Council-led workshop with the consultation authorities may be beneficial to identify key indicators which are cross cutting for themes and agencies. We recommend that a relevant indicator with regards air quality is included under reference SEA 4 to make the link between air quality and human health. We recommend that the indicator under reference SEA 7 and 11 is amended to % of land at medium-high risk of	Environmental Report amended accordingly. Environmental Report amended accordingly. Noted. Environmental Report amended accordingly. Environmental Report amended accordingly.

		flooding which is developed. We recommend that an indicator is included in reference SEA 10 to identify how much CRS has been disturbed by development.	We are awaiting feedback from Patricia Bruneau (SNH) re how we should/could display this information as SPP asks for nationally important carbon rich soils, deep peat and priority peatland habitat but there are Classes 1-4 and X within the SNH's soils dataset which makes it difficult to group important carbon rich soils, deep peat and priority peatland habitat together.
Proposed Methodology			
General comments on methodology	**Historic Scotland**	Overall the proposed methodology is sound. For the consideration of alternatives it is important to remember that reasonable alternative should be assessed to the same level of detail as that undertaken for any preferred option. In terms of proportionate assessment the comments here are welcomed. As the scoping report notes, the starting point would be a review of the previous assessment and the consideration of where changes have occurred that would require fresh assessment. In particular it will be important to consider any baseline changes that would require assessments of sites to be updated, notably in this area are the additions to the Inventory of Historic Battlefields within the Perth and Kinross Area. As this section notes, the environment report for this plan should be able to be read as a stand alone assessment of	Noted Noted Noted any work carried forward from the previous assessment is clearly highlighted.

		the new plan and not refer back to previous assessments. Therefore the recognition that any finding that is being carried forward should be reported within this assessment is welcomed.	
Ecosystems Services Approach	**Historic Scotland**	The use of an ecosystem services approach to assess the cumulative effects of the plan is noted and I understand the reasoning behind this decision. It will be important that the findings here are reported in a clear manner in order to satisfy the requirements of the SEA.	Noted
Site Assessment	**Historic Scotland**	The approach outlined for streamlining the site assessment process through the use of an integrated site and SEA assessment is particularly welcomed. This joined-up approach should allow for the environmental implications for any given site to influence decisions on both the acceptability (or otherwise) of sites and the identification of mitigation to facilitate their delivery	Noted
Policy Assessment	**Historic Scotland**	I welcome the approach to the assessment of policies against the SEA objectives. However, the layout of the matrix does place a heavy onus on the summary column in both reporting the findings of the assessment and identifying mitigation / enhancement opportunities where applicable. In light of this you may wish to consider an extra column here to facilitate clear reporting.	An additional column will be added to the matrix to address mitigation/enhancements measures.
Mitigation / Enhancement and Monitoring	**Historic Scotland**	The comments here are welcomed. In relation to monitoring, this is most effective when it is clearly linked to indicators that aid in the understanding of the effects of the plan. I would therefore refer to you my previous	Noted

		comments on the indicators related above.	
Proposed scope and level of detail	**Scottish Natural Heritage**	If the assessment method is likely to differ from that proposed, we would be pleased to comment on any draft methodologies as required prior to the commencement of the process.	Noted
Alternatives	**Scottish Natural Heritage**	The intent to assess any alternative options and considered during preparation of the LDP's MIR is welcomed. We would expect this to include any housing land strategy options.	Noted
Site assessment	**Scottish Natural Heritage**	The approach to assessment of both preferred sites and alternatives is supported. For clarification, we expect carried forward sites to be included in the SEA of this LDP.	Noted
Policy assessment	**Scottish Natural Heritage**	Enhancement measures and mitigation for adverse effects should be included, as well as uncertain or neutral effects. The summary commentary column is welcomed but should provide explanation of the specific nature of effects rather than an overall summary. We recommend that any policies rolling forward from the previous plan should be assessed by including a screening exercise to assess their effects and then show any mitigation measures if necessary. Scoring: the inclusion of post-mitigation scoring is welcomed.	Noted
Mitigation and enhancement	**Scottish Natural Heritage**	There should be a clear link in the ER between any adverse environmental effects identified and the mitigation/enhancement measures required including changes to the final LDP. If significant environmental effects are predicted, mitigation measures could include a	Any significant changes to the plan as a result of the SEA will be reported as part of the Post-Adoption Statement.

		modification to the plan to ensure significant adverse effects are avoided. For sites this could be a recommendation for deletion of the site or amendment of site boundaries. We note there will be consideration of the transfer of site specific mitigation identified through the SEA into LDP developer requirements. We support this approach; it is important to ensure SEA mitigation can be transferred into developer requirements. The ER should include descriptions of the measures to mitigate significant adverse effects identified by the assessment; PAN 1/2010 (para 5.22) recommends that "it is useful to define each action, explain the reasons for them and identify responsible partners." It also recommends timescales for mitigation and linking measures with monitoring. We have recommended that these measures could be usefully included as a new column in the assessment matrix, so there is a clear link between any significant effects identified and the mitigation measures proposed. The ER should include the mitigation/enhancement requirements which the TAYplan ER identifies for LDPs.	Noted Noted. The Environmental Report highlights measures to mitigate against significant adverse effects. An additional column will be added to the policy assessment matrix to address mitigation/enhancements measures. Noted – this will be brought through in TAYplan section.
Monitoring	**Scottish Natural Heritage**	Monitoring is a requirement of the Act and we note the ER will contain a proposed framework for monitoring. We welcome Table 5 and encourage consistency of monitoring effects through the replacement LDPs.	Noted

Alternatives	**Scottish Environment Protection Agency**	We note that alternatives are still being considered. Any reasonable alternatives identified during the preparation of the plan should be assessed as part of the SEA process and the findings of the assessment should inform the choice of the preferred option. This should be documented in the Environmental Report.	Noted
Proportionate Assessment	**Scottish Environment Protection Agency**	In general the SEA should be a 'stand-alone' document showing the environmental effects of the new LDP. A full assessment should therefore be carried out according to the SEA Guidance and the PAN 1/2010. New significant environmental effects can arise not only as a change to a site or policy, but also as a change to the baseline and to the sensitivity of the environment due for example to new legislation or new information being available. For example the new flood risk maps published in January 2014 by SEPA can give raise to new significant environmental effects previously not identified. Where the effects are the same as the ones from the previous LDP, the results from the previous assessment can be brought forward (e.g. through 'copying and pasting' from the previous assessment). We would welcome reference to the effects that have not changed from the previous LDP (e.g. different colour / font or footnotes). As per the guidance in paragraphs 4.16-4.19 of PAN 1/2010 the aspects which are not changing should be identified and explanation of why this is the case provided within the assessment.	Noted, any work carried forward from previous SEA will be clearly highlighted, and reconsidered in light of baseline changes.
Scoping in/out of	**Scottish**	We agree that in this instance all environmental topics	Noted

Environmental topics	**Environment Protection Agency**	should be scoped into the assessment.	
Methodology for assessing environmental effects	**Scottish Environment Protection Agency**	Including a commentary section within the matrices in order to state, where necessary, the reasons for the effects cited and the score given helps to fully explain the rationale behind the assessment results. This allows the Responsible Authority to be transparent and also allows the reader to understand the rationale behind the scores given. Where it is expected that other plans, programmes or strategies are better placed to undertake more detailed assessment of environmental effects this should be clearly set out in the Environmental Report. We would expect all aspects of the PPS which could have significant effects to be assessed. We support the use of SEA objectives as assessment tools as they allow a systematic, rigorous and consistent framework with which to assess environmental effects. When it comes to setting out the results of the assessment in the Environmental Report please provide sufficient information to clearly justify the reasons for each of the assessments presented. It would also be helpful to set out assumptions that are made during the assessment; and	A commentary column is provided within assessment matrices. This will be highlighted within the Environmental Report (for example SEA of supplementary guidance – more likely that this information will be presented in the addendum which will accompany the proposed plan). Noted Noted Noted.

<table>
<tr>
<td></td>
<td></td>
<td>difficulties and limitations encountered.

It is helpful if the assessment matrix directly links the assessment result with proposed mitigation measures such as in the example below:

<table>
<tr><th>SEA ISSUES - CHECKLIST QUESTION</th><th>Yes or No</th><th>Effect</th><th>COMMENT and OPPORTUNITIES TO MITIGATE OR IMPROVE</th></tr>
<tr><td>Is the allocation at risk from fluvial or coastal flooding?</td><td>Y</td><td>Negative</td><td>Part of site found to be at risk now removed from allocation.</td></tr>
<tr><td>Could the allocation have a physical impact on existing watercourses?</td><td>Y</td><td>Negative</td><td>Site dissected by watercourse. Developer Requirements includes statement "watercourse to be integrated as positive feature of the development. No culverting."</td></tr>
<tr><td>Can the allocation currently be connected to the public sewerage system?</td><td>Y</td><td>Positive</td><td>Developer Requirement includes statement "connect to public sewer"</td></tr>
</table>
</td>
<td>This information is provided within the assessment matrices. It is not felt there is a need to repeat this.</td>
</tr>
<tr>
<td>Ecosystem Services Approach</td>
<td>Scottish Environment Protection Agency</td>
<td>We note the intention to undertake an ecosystem services approach. We would request that in presenting the findings:

• it is demonstrated how the requirements of the SEA legislation have been met, in particular, the requirements of Schedule 3 of the Act; and that
• the Environmental Report is a separate and easily identified component of the wider assessment.

Please note that when consulted we will only comment on the environmental components of the assessment in accordance with our statutory SEA responsibilities and competencies.</td>
<td>Noted</td>
</tr>
</table>

Policy Assessment	**Scottish Environment Protection Agency**	We are content with the matrix approach, however we recommend that additional columns to specify mitigation and enhancement opportunities are included in the table and that the summary should show both positive and negative effects, not a sum or a trade off. Furthermore we advise that additional options of effect are included to cover neutral and unknown effects.	An additional column will be added to the policy assessment matrix to address mitigation/enhancements measures. The assessment criterion has a **+/-** option to highlight where both positive and negative impacts are found. A blank column has been included within the assessment criterion to cover unknown effects.
Site Assessment	**Scottish Environment Protection Agency**	When it comes to assessment of the effects of allocations or sites we advocate a rigorous methodology which clearly assesses potential effects on all environmental topics. Our experience in relation to assessment of allocations is that it can be a much easier and useful exercise for the plan-maker if the assessment is made against a range of related questions, rather than directly against the environmental topics. This allows a very practical assessment to take place which clearly highlights the environmental benefits and costs of each individual allocation. As an example, assessing the allocation against the question "Can the allocation connect to public sewage infrastructure?" gives a clear practical view on how this allocation is likely to affect the water environment. We welcome the use of the LDP and SEA joint site assessment pro-forma but note that a more up-to-date and comprehensive version available from this link. In order that enhancement opportunities are considered we advise that 'enhancement' be added to the mitigation	Noted – we believe this has been done through the site assessment tables. The assessment table used is based on the example provided by SNH and SEPA but has been modified slightly where appropriate.

		column in the site assessment table. We expect all sites in the new LDP to be assessed, as required by the PAN 1/2010, including those legacy sites which are to be rolled over from the existing LDP. SEPA will provide information which can then be used to inform or revise the assessment (i.e. comments on co-location, water-body or environment pressure and flood risk) as part of the MIR consultation. New information which should be considered for the baseline and the assessment, in addition to the new flood risk maps include changes to pressures on the water environment, peat maps, presence of ground water terrestrial ecosystems, new co-location issues, heat maps. Cumulative effects are often air quality issues and emissions due to new development and resulting changed in traffic patterns.	Noted Noted
Predicting the effects of Implementation	**Scottish Environment Protection Agency**	With regards the last bullet point in this section please remember that the SEA Act (Schedule 3 (6)) also makes reference to interrelationships between SEA topics, short, medium, effects, permanent and temporary, secondary and synergistic effects.	Environmental Report amended accordingly.
Mitigation and Enhancement	**Scottish Environment Protection Agency**	We would encourage you to use the assessment as a way to improve the environmental performance of individual aspects of the final option; hence we support proposals for enhancement of positive effects as well as mitigation of negative effects.	Noted

		It is useful to show the link between potential effects and proposed mitigation / enhancement measures in the assessment framework. We would encourage you to be very clear in the Environmental Report about mitigation measures which are proposed as a result of the assessment. These should follow the mitigation hierarchy (avoid, reduce, remedy or compensate). One of the most important ways to mitigate significant environmental effects identified through the assessment is to make changes to the plan itself so that significant effects are avoided. The Environmental Report should therefore identify any changes made to the plan as a result of the SEA. Where the mitigation proposed does not relate to modification to the plan itself then it would be extremely helpful to set out the proposed mitigation measures in a way that clearly identifies: (1) the measures required, (2) when they would be required and (3) who will be required to implement them. The inclusion of a summary table in the Environmental Report such as that presented below will help to track progress on mitigation through the monitoring process.	This is shown in the assessment matrices. Noted. Noted. Any significant changes to the plan as a result of the SEA will be reported as part of the Post-Adoption Statement. It is not felt it is necessary to include a separate table as mitigation and enhancement measures are clearly highlighted throughout the assessment. The monitoring framework has been amended to clearly highlight who is responsible for monitoring each indicator.

<table>
<tr><td></td><td></td><td><table>
<tr><th>Issue / Impact Identified in ER</th><th>Mitigation Measure</th><th>Lead Authority</th><th>Proposed Timescale</th></tr>
<tr><td>Insert effect recorded in ER</td><td>Insert mitigation measure to address effect</td><td>Insert as appropriate</td><td>Insert as appropriate</td></tr>
<tr><td>etc</td><td>etc</td><td>etc</td><td>etc</td></tr>
</table></td><td></td></tr>
<tr><td>Monitoring</td><td>Scottish Environment Protection Agency</td><td>Although not specifically required at this stage, monitoring is a requirement of the Act and early consideration should be given to a monitoring approach particularly in the choice of indicators. It would be helpful if the Environmental Report included a description of the measures envisaged to monitor the significant environmental effects of the plan.</td><td>Noted</td></tr>
<tr><td colspan="4">Next Steps</td></tr>
<tr><td>Timescales</td><td>Historic Scotland</td><td>I note that it is proposed that the Main Issues Report and its environmental report be out for a consultation of 10 weeks. I can confirm that I am content with the consultation period proposed.</td><td>Noted</td></tr>
<tr><td>Timescales</td><td>Scottish Natural Heritage</td><td>We are content with the 10 week consultation period for the draft Environmental Report from October to December 2015. We understand the finalised Environmental Report will be issued in September 2016.</td><td>Noted</td></tr>
<tr><td>Timescales</td><td>Scottish Environment Protection Agency</td><td>We are satisfied with the proposal for a 10 week consultation period for the Environmental Report.</td><td>Noted</td></tr>
<tr><td colspan="4">Appendices</td></tr>
</table>

Appendix A	**Historic Scotland**	This section relates an appropriate background. However, for clarification it should be noted that the Scottish Historic Environment Policy (SHEP) supersedes the policy elements of Passed to the Future.	Appendix Amended
Appendix A	**Scottish Natural Heritage**	We suggest inclusion of the following PPS in Appendix A: Human health - national PPS: • Let's Get Scotland Walking – The National Walking Strategy. • Cycling Action Plan for Scotland 2013. • A Long-Term Vision for Active Travel in Scotland 2030 Design quality: • Creating Places. • Green Infrastructure: Design and placemaking. • Designing Streets. Landscape: • Fitting Landscapes - Scottish Government's policy statement on design and management of transport corridors. We also recommend that the Land Use Strategy for Scotland is included as a relevant policy document. As the LUS is an attempt to address best use of Scotland's land, we suggest this is included under Material Assets.	Appendix Amended
Appendix B	**Scottish**	Carbon rich deep peat and priority peatland map: we	SNH's 2014 'Carbon and peatland map' has not yet been

	Natural Heritage	welcome the mapping of carbon rich soils. SNH's 2014 'Carbon and peatland map' should be finalised shortly and we recommend it is included in the ER if available in time. Strategic green networks map: we support the inclusion of a baseline on green networks. It is not possible to differentiate between the legend for some of the maps (e.g. green networks) and we recommend these are updated for the ER and use contrasting colours to enable the routes/legend to be shown. We recommend the inclusion of all of 'Scotland's Great Trails'; it is not clear from the map whether the Rob Roy Way is shown: http://www.snh.gov.uk/enjoying-the-outdoors/where-to-go/routes-to-explore/scotlands-great-trails/ 4 Given the first LDP SEA included some comparable baseline data, it would be useful to identify any significant changes or trends which have taken place since then.	published and so there have been no changes made to the map. Appendix amended. Noted
Appendix C	**Scottish Natural Heritage**	We strongly support the proposed integrated SEA and LDP site assessment process. This approach should be less resource-intensive, save duplication, and will help to ensure better integration between the LDP, SEA and HRA. Thank you for forwarding a draft assessment methodology for our informal comment in May. While we note the guidance to users has been revised, we maintain our recommendation for subdividing the first biodiversity, flora and fauna question into the specific interests affected i.e. 1) international sites (this also provides a link with HRA), national, local and non-designated, 2)	Noted It is felt that these issues are covered within the table and addition guidance note and so will be considered by officers when making the assessment.

		likelihood of protected species and 3) it is important to include a question for impacts on trees, hedges, woodland and whether this is in in the Ancient Woodland Inventory. We found this was an particular issue for some of the more rural proposed allocations in the previous LDP. Water: We recommend rewording "can the option connect to the public foul sewer" to "will the site connect to a public waste water treatment works with adequate capacity" as this more precise wording can inform HRA screening for sites. Service infrastructure – insert questions on improving access and green network links. For example, "are there links or potential for connection to core paths or other key access" and "has the option potential to improve/connect with green networks" (e.g. as identified by the Council's new supplementary guidance on green infrastructure. Soils – insert question as to whether the option is on carbon rich land.	
Appendix A	**Scottish Environment Protection Agency**	We recommend that Scotland's Land Use Strategy is included as a relevant plan under the Soil section of Appendix A as it provides a strategic framework bringing together proposals for getting the best from Scotland's land resources. Published by the Scottish Government in March 2011 it: • sets out a new vision to guide thinking about the use of land and sets objectives relating to the	Appendix Amended

		economy, environment and communities; • provides a set of principles for sustainable land use to guide policy and decision making; • builds on the Government's current activities and includes further proposals to help meet the objectives. We recommend that the Report on Proposals and Policies is included under the Climate Change (Scotland) Act 2009 in Appendix A as it sets out how Scotland can deliver annual targets for reductions in emissions from 2010 to 2022. We recommend that the following plans are included as relevant plans under the Material assets section of Appendix A: • Safeguarding Scotland's Resources – Blueprint for a more resource efficient and circular economy - this programme commits to actions that will make an impact on Scotland's resource consumption, encouraging a reduction in the amount of raw material we consume by wasting less and using our finite resources more efficiently. • SEPA Thermal Treatment of Waste Guidelines – sets out SEPA's approach to permitting thermal treatment of waste facilities and our role as a statutory consultee of the land use planning system.	

		We recommend that the following plans are included as relevant plans in the Human Health section on Appendix A: • Equally Well – a public health strategy for Scotland with a focus on health inequalities. A key principle is reducing people's exposure to factors in the physical and social environment that cause stress, are damaging to health and wellbeing and lead to health inequalities. • Good Places Better Health – the Scottish Government's strategy on health and the environment. This approach recognises that the physical environment has a significant impact on the health of Scotland's people and that action is required to create health-nurturing environments for everyone. • "Climate Change and human health risks" - this WHO publication reports on current scientific understanding of global climate change, including international views on the IPCC Third Assessment Report and the implications that this may have on human health. We recommend that The Loch Leven Catchment Management Plan could be included in the Water section of Appendix A.	
Other			

	Historic Scotland	No further comments.	Noted
HRA	**Scottish Natural Heritage**	The HRA for the current LDP is an example of best practice, and we recommend this new HRA follows the same process. Most of this HRA's structure, assessment methods and site information can be simply re-applied for this LDP. We note from your comment on the site assessment form that it is intended to undertake HRA at Proposed Plan stage; however the site assessment table will highlight sites when Appropriate Assessment would be needed. The latter implies that HRA screening will be carried out at the Main Issues Report stage, and we support this approach. Following experience from the previous LDP, HRA and SEA we have made specific recommendations in relation to the site assessment table which will enable more efficient screening for HRA. We would be pleased to provide advice as the Appraisal progresses for the Plan, and are content for the HRA to be included as a separate Annex of the ER. The ER should make clear the outcome of the Habitat Regulations Appraisal process regarding impacts on European sites, and the approaches and links between the SEA and Habitats Regulations Appraisal (HRA) processes should be fully explained.	The same method for HRA will be used. HRA and Screening and Appropriate Assessment will be published at propose plan. Although the site assessment table will highlight the potential for a site to have an impact on a SAC/SPA full screening will not be carried out at this stage. It is now proposed that the HRA should be a standalone document. Noted.
Outcomes of the Scoping exercise	**Scottish Environment**	We would find it helpful if the Environmental Report included a summary of the scoping outcomes and how comments from the Consultation Authorities were taken	This summary will be provided as an Appendix.

	Protection Agency	into account. We welcome proposals for the inclusion of a summary of how the comments provided by the Consultation Authorities at the Scoping stage have been taken into account in the preparation of the Environmental Report.	