



Getting the best from our land

A land use strategy for Scotland

Progress Statement

2015

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Foreword



The publication of the first Land Use Strategy in 2011 was a significant milestone for Scotland. It marked a shift in our approach to land use and set the direction for our ambitions for land use to 2050 in line with the aims of the Climate Change (Scotland) Act 2009. The complexity of land use issues remains and the need to respond to climate change pressures is pressing – as it was in 2011.

The Strategy has been the catalyst for change and this Progress Statement outlines the many activities which have contributed to that change including the restoration of Scotland's peatlands, low carbon approaches to agriculture, integrated land management projects such as the Carse of Stirling and the Land Use Strategy Regional Pilot projects and improving access to data and information which are important to land use decisions.

Climate change is a key focus of the Strategy. Scotland's peatlands will benefit from the good work being carried out as a result of the Peatland Action Project which will help manage, protect and restore peatlands to maintain their natural functions, biodiversity and benefits. This is on track to restore peatland and sequester carbon through 107 peatland management agreements and grants across Scotland. In order to demonstrate the benefits and practical implications of adopting climate change measures on their businesses, the Farming for a Better Climate budget was increased by 37% in 2014 allowing the number of focus farms to be doubled.

Putting the Land Use Strategy into practice at a regional level is vital to delivering meaningful change in the way that we use our land. Two Regional Land Use Pilots projects in the Scottish Borders and Aberdeenshire were established in 2013 to test how that might be done. These local authority led projects, which have now concluded, took an innovative approach to land use decision-making by considering existing and future land use in a collective and integrated way rather than a sector by sector approach. Evaluation of the projects has been carried out and early findings suggest that the outputs have a range of potential practical applications, although clearly we need time to assess and consider the findings.

Looking forward, I believe that the Land Use Strategy will continue to stimulate debate about how our land is used; inspire change in the way that we manage land and influence and motivate all those involved to work together to deliver sustainable land use for future generations.

Aileen McLeod MSP
Minister for Environment, Climate Change and Land Reform

1. Introduction

This fourth Land Use Strategy (LUS) Progress Statement 2015 provides details of how the Strategy has been delivered for the period May 2014 – June 2015. It contains information on the milestone actions associated with the Strategy Proposals as well as information on the activities of the regional land use pilot projects in Aberdeenshire and the Scottish Borders. The information in this report is supplemented by information on the Scottish Government [LUS](#) webpages and this includes information on the trends demonstrated by the ten LUS indicators which can be found in the [monitoring](#) section of the LUS webpages. The most up-to-date information about the Strategy can found on these pages.

1.1 Scotland's Agenda for Sustainable Land Use

The Land Use Strategy sets a long term Vision towards 2050 with three clear Objectives relating to economic prosperity, environmental quality and communities. To help deliver these Objectives and move us towards the Vision for Scotland, the Strategy identifies ten [Principles for Sustainable Land Use](#) which reflect Scottish Government's priorities for land use. The Principles are relevant for all those taking significant decisions about changes in land use and everyone involved in planning for the future of land use in Scotland.

Vision for Scotland's land to 2050

A Scotland where we fully recognise, understand and value the importance of our land resources, and where our plans and decisions about land use deliver improved and enduring benefits, enhancing the wellbeing of our nation.

Objectives

1. Land-based businesses working with nature to contribute more to Scotland's prosperity
2. Responsible stewardship of Scotland's natural resources delivering more benefits to Scotland's people
3. Urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use

In 2011 the Strategy set out a series of [Proposals](#) for action which are being taken forward by Scottish Government (SG) and their delivery partners during the five-year lifetime of the current Strategy up to March 2016. The Proposals encompass a range of milestone actions which, taken together help deliver the Strategy. A second Strategy will be published in 2016 and information about its development is contained on the Land Use Strategy webpages.

2. Delivery of the Strategy

2.1 Regional Land Use Pilots

A new approach to land use decision-making was trialled by two regional land use [pilot projects](#) led by Aberdeenshire and Scottish Borders Councils. They developed regional land use frameworks for their local authority areas using an ecosystems approach to consider existing and future land uses in a collective and integrated way. Land uses which fall outwith the statutory planning system, for example agriculture, forestry, peatland restoration, the water environment, habitat management, biodiversity etc were the focus of the projects.

Local stakeholders from a range of land use interests worked together towards the development of a land use framework to ensure that multiple benefits were realised for their areas. The new approach enabled an exploration of land use choices where a wide range of benefits and implications of land use choices were considered. The pilot projects were asked to develop a framework and tools which could be used to guide decision-making and provide information about the potential options for land use and the opportunities to deliver multiple benefits.

Links to the final reports, the frameworks and tools can be found on the Land Use Strategy [webpages](#).

2.2 Delivery of the Proposals

Details of progress in the delivery of the thirteen [Proposals](#) (Annex B) and their associated milestone activities are provided in this section. Activities are listed under each Proposal with a summary of the lead and key partners, deliverables, milestone actions and their progress. The final table shows the milestone activities no longer being taken forward and why.

Proposal 1 Publish an action plan following publication of the Strategy.

Proposal 2 Provide an annual progress statement on the Land Use Strategy.

This Progress Statement 2015 meets the requirements of Proposal 1 and Proposal 2 above.

Objective 1 - Proposal 3 Align land use regulations and incentives with Land Use Strategy Objectives.

Lead + key partners Scottish Government + SEPA, SNH, FCS.

Deliverables

- The embedding of Land Use Strategy Principles into new regulatory approaches and incentives.
- Guidance document focussing on the Land Use Strategy Principles which is aimed at policy and decision makers in the land use environment. This will be designed to support the development of new legislative proposals and incentivisation initiatives.

Milestones

Achieved

Output

3.1	SG/SEPA led better environmental regulation programme including creation of Environment Crime Taskforce.	Report Nov 2013. Environmental Crime Taskforce Conference November 2014.
3.2	Common Agricultural Policy (CAP) reform input –throughout 2012/13.	See Proposal 5.
3.3	Guidance on local flood risk management strategies. 2012	See flooding publication
3.4	SNH/Scottish Government-led process for better alignment of SSSI consents and SRDP Rural Priorities approvals.	Early 2012. SSSI consents .
3.5	Research project to consider approaches to incentivisation of natural flood management by rural land managers. Completion winter 2011/12.	Results presented at annual flood risk management conference in May 2012.

3.6	Implementation of the Regulatory Reform (Scotland) Act.	Act now passed and implementation programme ongoing.
3.7	Incorporation of Land Use Strategy Principles (where appropriate) in new legislation and incentives.	Ongoing See Proposal 5 SRDP Scottish Planning Policy
3.8	Planning and other development consent regimes – explore options to simplify and speed up overall consents process.	Work to align planning permission with the Water Environment (Controlled Activities) (Scotland) Regulations has not progressed due lack of suitable pilot cases with planning authorities. Resources have been diverted into other planning reform projects which aim to simplify and streamline planning processes.
3.9	Consolidated Planning Advice Note PAN on flooding, water and drainage.	Due to resource constraints, work on the consolidated PAN was halted. Instead planning advice on flood risk only has been prepared. Online advice available. Spring 2015.
Currently underway		Progress
3.10	Contaminated land guidance.	Research to consider a 'benchmark' dose for potential contaminants commissioned. This is currently being peer reviewed before publication.
Not taken forward		Reason
	<ul style="list-style-type: none"> Guidance on the application of the Land Use Strategy Principles in regulations and incentives. 2012 	Not achieved due to the diversion of resources to other priorities such as the delivery of the Regulatory Reform (Scotland) Act and need for action overtaken by a number of other actions.

Objective 1 - Proposal 4 Further encourage land-based businesses to take actions that reduce land-based greenhouse gas emissions and that enable adaptation to climate change threats and opportunities.

Lead + key partners Scottish Government + FCS, SNH, SRUC – Scotland’s Rural College (Delivery Agency for Farming for a Better Climate (FFBC) and Climate Change Focus Farms), Agriculture and Climate Change Stakeholder Group, SEPA and partner organisations involved in River Basin Management and Flood Risk Management Planning.

Deliverables

- Agricultural industry contributing to greenhouse gas emission reduction targets and maximising opportunities through on-farm renewables generation.
- Increase woodland creation to 10,000 hectares per year (see Proposal 7).
- Implementation of River Basin Management Plans (RBMPs), including specific action plans to reduce diffuse pollution and morphological impacts.
- Implementation of Flood Risk Management Plans (FRMPs) including working with the land to manage flood risk and adapt to climate change.
- Develop a range of research projects designed to support delivery of integrated catchment management.

Deliverables on peatlands and carbon storage are referred to under Proposal 9.

Milestones

Achieved

Output

4.1	Inclusion of comprehensive statements in relation to agricultural Greenhouse Gas GHG emissions in the statutory Report on Policies and Proposals. 2011 and 2013	Low Carbon Scotland: Meeting our Emissions Reduction Targets 2013-2027. The Second Report on Proposals and Policies
4.2	Complete analytical work to establish indicators for uptake of abatement measures on farms. 2012	Report published Dec 2011.
4.3	Complete research on influencing behaviours in agriculture to underpin Communications Strategy. 2012	Report published Oct 2012.
4.4	Publish Woodland Carbon Code July 2011 and guidelines on Forests and Climate Change. Nov 2011	Woodland Carbon Code published Jul 2011. Guidance on Forests and Climate Change published Nov 2011.

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| 4.5 Develop guidance on planning for future forests in a changing climate. Summer 2012 | Achieving Diversity in Scotland's Forest Landscapes published May 2012. |
| 4.6 SNH to work with industry groups to promote actions to minimise the impacts on climate change associated with deer management. Late 2013 | As part of the Wild Deer National Approach Action Plan work was carried out to look at the carbon footprint of venison production. Findings published in a report on the ' Lifecycle analysis of venison '.
Work to assess the impacts of deer on blanket bog. A report on 'A deer population and habitat-impact assessment of the Monadhliath SAC, Inverness-shire, UK' published 2013. |
| 4.7 Development of an Agri-Renewables Strategy addressing barriers to renewables uptake on farms. | Agri-renewable Strategy published 2014. |
| 4.8 Research to refine UK GHG inventory methodology with the aim of better reflection of on-farm activity. 2015 | Ongoing. Work is ongoing to refine the inventory, see details . |

Currently underway

Progress

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| 4.9 Reviews and updates of RBMPs by 2015, 2021 and 2027. | Current Condition and Challenges for the Future: Scotland basin district published 2014
Second cycle (2015-2021) RBMPs due to be published Dec 2015. |
| 4.10 Production of high level Flood Risk Management Strategies by end 2015, and Local Flood Risk Management Plans by June 2016. | On track to publish Flood Risk Management Strategies by Dec 2015. |
| 4.11 Raise awareness of available carbon accounting tools to encourage land based businesses to reduce their carbon footprint. | From 2016 the Farm Advisory Service will promote the use of a new carbon audit tool which helps to reduce a farm's environmental impact whilst improving resource efficiency. |

Objective 1 - Proposal 5 Use the Land Use Strategy Objectives to influence negotiations on CAP reform.

Lead + key partners Scottish Government + [SEARS](#) partners and CAP Stakeholder Group.

Deliverables

A revised CAP that enables the Strategy's Objectives and Principles to be delivered via the new incentives regime post 2013.

Milestones

Achieved

Output

5.1	Draft Regulations published Oct 2011.	12 Oct 2011. See Information on CAP .
5.2	Regular meetings of Common Agricultural Policy Stakeholder Group Nov 2011, Jan 2012, Mar 2012.	Ongoing - further meetings throughout 2013, 2014 and 2015. See minutes and papers on: CAP Stakeholder meeting papers
5.3	Common Agricultural Policy consultation end Nov 2011 to Feb 2012.	2012 See consultation report
5.4	Final EU Regulations agreed. 2013	2013
5.5	Pillar 1 and 2 Consultations on implementation. Dec 2013 – Spring 2014	2014 See consultation reports – Pillar 1 and Pillar 2
Direct Payments (Pillar 1)		
5.6	DEFRA/Devolved Administrations discussions in advance of Scottish Government participation in EC working groups from 2011 onwards.	Regular meetings undertaken – phase of work now completed.
5.7	Approval of Scottish scheme 2014.	Delegated Acts and Implementing Regulations published 2014. Relates to item 5.8

<p>5.8 Decisions on implementation of Direct Payments notified to Europe. Included decision to take a more ambitious approach to delivering Pillar 1 greening than other UK countries and strengthened protection for hedgerows and watercourses under cross compliance. Aug 2014 to Jan 2015</p>	<p>Completed</p>
<p>5.9 Launch of new direct payments regime. Jan 2015</p>	<p>Launched. Scheme guidance can be found online.</p>
<p><u>Scotland Rural Development Programme (Pillar 2)</u></p>	
<p>5.10 SRDP submitted to Europe with the proposals complimenting the LUS Objectives and Principles. Includes a new £10m Environmental Cooperation Action Fund to support delivery of landscape-scale benefits. May 2014</p>	<p>Completed. SRDP was submitted to Europe in Jun 2014. After lengthy negotiations a revised SRDP was submitted in Apr 2015.</p>
<p>5.11 Launch of new SRDP Jan 2015. Delivery of the SRDP will contribute to the three LUS Objectives.</p>	<p>The first grant schemes opened to applications in Jan 2015, with further schemes opening in the coming months. Scheme guidance can be found online.</p>
<p>5.12 European Approval of SRDP Nov/Dec 2014</p>	<p>Approved 26 May 2015. Later than expected due to delays in the European approval process.</p>

Currently underway

Progress

Direct Payments (Pillar 1)

<p>5.13 CAP P1 workstreams to provide advice to Scottish Government throughout the CAP reform process (including impact assessment).</p>	<p>Workstream phase completed. Partial Business and Regulatory Impact Assessment BRIA and Strategic Environmental Assessment determination completed. Full BRIA near completion.</p>
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| 5.14 Roll out of new incentives (Schemes) in Scotland ongoing from Jan 2015. | Relates to/see item 5.9 |
| 5.15 Regular meetings of CAP Stakeholder Group throughout 2015. | Ongoing in 2015. Terms of reference have been revised as CAP is now in the implementation phase. |
| 5.16 Development of proposals to implement greening through an equivalent certification from 2016, including a new climate change measure on grassland farms, subject to Commission approval. | Proposals will be submitted to the Commission by Aug 2015. |

Scotland Rural Development Programme (Pillar 2)

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| 5.17 Review of Less Favoured Area Support in line with Regulatory requirements 2015 (which can take account of the LUS's Objectives and Principles). | The first meeting of the review group was in May 2015. The review is to be completed in 2017, with a replacement scheme in place in 2018. |
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Objective 1 - Proposal 6 Use demonstration projects to determine the best means by which land use and land management practice can contribute to climate change objectives.

Lead + key partners Scottish Government and FCS + SRUC and the Agriculture & Climate Change Stakeholder Group.

Deliverables

Climate Change Focus Farms are leaders in sustainable farm practices. Focus farmers and their discussion groups look at a range of options that can be implemented on farm to improve resource efficiency and increase business resilience.

Milestones

Achieved

Output

<p>6.1 Focus Farms are demonstrating practical implications of adopting abatement measures (GHG emission reductions and the business impacts of actions) as follows:</p> <ul style="list-style-type: none"> • 4 farms selected representing key sectors: dairy, arable, upland livestock, diversification; • regular topical events held on focus farms; • farmers discussion groups established; • information arising from events, including advisory notes communicated through FFBC webpage. Focus farms also demonstrate the benefits of creating and managing farm woodlands. 	<p>See information on Farming For A Better Climate</p>
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| <p>6.2 Completion of initial 3 year Focus Farm programme and progress report evaluating findings. End 2013
Completion of initial 3-year Focus Farm programme and progress report evaluating findings. End 2013</p> | <p>Reports of findings from Torr Farm and Glenkilrie are available on the FFBC website.
Torr Farm
Glenkilrie
Focus farms</p> |
| <p>6.3 Further development or continuation of FFBC will depend upon outcome of evaluation in 2013.</p> | <p>Focus Farm reports are available on the FFBC website)
In 2014 the FFBC budget was increased by 37%, allowing the number of focus farms to be doubled to 8.

Work ongoing to develop a monitoring framework to better assess the impact of FFBC.</p> |
| <p>6.4 Integration of FFBC messages into other demonstration projects.</p> | <p>Regular liaison with other programmes.</p> |
| <p>6.5 Based on the success of the initiative, the Scottish Government will consider the amplification of FFBC through the advisory services to be delivered under the new SRDP from 2015.</p> | <p>The FFBC and focus farm model is included in the tender for the new Advisory Service.</p> |

Currently underway

Progress

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| <p>6.6 Develop best practice programme for sporting land businesses building on the Wildlife Estates Initiative and the Wild Deer Best Practice programme. 2015</p> | <p>On track. 250 estates have entered Wildlife Estates Initiative Level 1; around 30 of these have been assessed through to Level 2. This has allowed sporting estates to demonstrate how they can contribute to gathering biological data particularly for key species, e.g. waders.

Existing moorland management guidance has been reviewed. Relevant guidance will be published under Scotland's Moorland Forum in 2015. Gaps in guidance are being addressed.

Wild Deer Best Practice guidance: Guides on habitat impact assessment and analysis have been developed.</p> |
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6.7 Provide information on land use demonstration projects which contribute to the uptake of climate change measures.

Training on following best practice guides at estate level has been expanded and is contributing to more effective deer management.

On track

Objective 1 - Proposal 7 Identify more closely which types of land are best for tree planting in the context of other land-based objectives, and promote good practice and local processes in relation to tree planting so as to secure multiple benefits.

Lead + key partners FCS + a range of other partners including members of the Woodland Expansion Advisory Group (WEAG) which consists of farming, forestry, conservation, community and land experts.

Deliverables

- Achieving 100,000 hectares of new woodland over the next 10 years (period 2012-2022), by planting the “right trees in the right place”, integrating with other land uses and contributing to sustainable economic growth.
- Publication of the UK Forestry Standard and associated environmental guidelines.
- Development of Forestry and Woodland Strategies by local authorities.
- WEAG report produced, and subsequent recommendations implemented so as to promote woodland creation that is integrated with other land uses.
- Publication of forestry options under the forthcoming SRDP (due to open in 2015) that will support woodland creation and the sustainable management of existing woodlands (woodland improvement grants).
- Continuing to secure woodland creation on the National Forest Estate while promoting land use integration and helping meet Scotland’s greenhouse gas reduction targets.

Milestones

Achieved

Output

7.1	WEAG Report to Cabinet Secretary. Jun 2012	See information on WEAG
7.2	Publication of an Action Plan and implementation of key early actions including:	WEAG Action Plan published Jan 2014.
•	Guidance for tree planting on agricultural land	The guidance for tree planting on agricultural land was published in 2014 and is available from the FCS website .
•	Pilot approaches to strategic land use planning and analysis	Three regional forestry-focused pilot projects have been evaluated against the principles of sustainability as highlighted in the Land Use Strategy. The evaluation report has been published on the FCS website .

<ul style="list-style-type: none"> • Developing forestry courses for agricultural students 	<p>Since the merger of Scotland’s three main land-based colleges to form SRUC, there has been positive engagement with the university and other higher education providers to discuss future options for a more integrated and collaborative approach between agriculture and forestry teaching at a higher education level. Discussions are now underway concerning the incorporation of forestry modules into SRUC agricultural and land management courses.</p>
<ul style="list-style-type: none"> • Promoting woodland creation to crofters. 	<p>Research was commissioned in 2013 to investigate the barriers to woodland creation on croft land and to propose possible solutions. The research identified finance and cash flow as one of the critical barriers, as well as issues around the terms of conditions of SRDP contracts and claims and administration. A partnership project, led by Woodland Trust Scotland, is intended to be set up to offer advice and to promote the benefits of woodland establishment on croft land. An officer was recruited in Mar 2015 to coincide with the launch of the new SRDP programme.</p>
<p>7.3 Achieving woodland creation of 100,000 hectares over the period 2012 - 2022, with the “right trees in the right places” and with woodland creation being integrated with other land uses and contributing to sustainable economic growth.</p>	<p>Ongoing. FCS publishes figures on woodland planting areas for Scotland as part of the Forestry Statistics that can be accessed here.</p>

Currently underway	Progress
<p>7.4 Specific actions and longer term milestones have been identified in the WEAG Action Plan available on the FCS website. `</p>	<p>On track. The WEAG programme continues to be implemented and a progress report will be published in Sep 2015.</p>

Objective 2 - Proposal 8 Demonstrate how the ecosystem approach could be taken into account in relevant decisions made by public bodies to deliver wider benefits, and provide practical guidance.

Lead + key partners Scottish Government + the [Main Research Providers](#), FCS, SEPA, SNH, Centre for Ecology and Hydrology (CEH) and the Centres of Expertise.

Deliverables

- Further examples and lessons learnt on the ecosystems approach to support existing decision-making.
- Case studies (including statutory plans) incorporating an ecosystems approach as a core methodology.

Milestones

Achieved

Output

8.1	Interim Case Examples. 2013	Selection of case studies from Scotland on Ecosystems Knowledge Network
8.2	Water environment mapping by SEPA of key ecosystem services; practical indicators of their status; and relevant pressures acting upon them. 2012	Maps of ecosystem services associated with water environment and where possible indicators of level of provision and value of provision were published as part of SEPA - Current Condition and Challenges for the Future consultation Dec 2013. This information is being used in objective setting for next RBMPs.
8.3	Proposals and guidance for building natural capital through the National Ecological Network. 2012	The 2020 Challenge for Scotland's Biodiversity (June 2013) sets out proposals and guidance towards setting priorities for building natural capital at a regional/catchment level based on ecosystem health indicators agreed in 2013 that will enhance Scotland's national ecological network.
8.4	Projects which demonstrate the benefits of adopting an ecosystem approach to developing the National Ecological Network.	All projects which improve ecosystem health at a strategic scale will contribute to a national ecological network, as highlighted in the 2020 Challenge for Scotland's Biodiversity, Jun 2013.

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| 8.5 Create online directory of data resources for the application of an ecosystems approach. 2016 | Scottish Government Land use data directory available 2015. Many useful and relevant datasets are now available on the Scottish Spatial Data Infrastructure and used as resources by Scotland's Environment Web (SEWeb) and other websites. |
| 8.6 Research exploring the potential for compatibility between Environmental Impact Assessment/SEA tools and the ecosystems approach. 2014 | Completed. Information to be provided on James Hutton Institute website in due course. |
| 8.7 Report on lessons learnt in the Carse of Stirling project 2014. Taking forward the vision report. 2015 | Lessons learnt form part of the report published in 2014 - SNH Commissioned Report 676: Carse of Stirling - an ecosystems approach demonstration project: Technical Report |
| | The Carse Of Stirling Partnership has been formed as a Scottish Incorporated Charitable Company, which will help secure further funding for future projects. See their Facebook page. |

Currently underway

Progress

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| 8.8 An ecosystem health and state of ecosystem services view of Scotland's environment on SE Web. State of Environment Report to be published 2014. See Proposal 13 | <p>Exploratory work on ecosystem health is progressing. The EUNIS¹ habitat context layer has been developed and used to produce a first draft of the connectivity indicator for woodland. Work is ongoing for pilot data sets for Site Condition Monitoring; Invasive Non-native Species; and Water Quality. A draft method is under review for terrestrial breeding birds and other indicators are under development.</p> <p>Scotland's State of the Environment report was published on 5th June 2014. Benefits from the environment have been assessed and reported in the section about People and the Environment.</p> <p>Work is progressing to make available the first 6 ecosystem health indicators on SE Web by the end of 2015.</p> <p>Presentation of Ecosystem Health Indicators on</p> |
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¹ EUNIS stands for 'The European Nature Information System' and is a pan-European habitat classification system use for habitat mapping.

	<p>SE Web - Requirements have been submitted and are being analysed to develop new data visualisation tools (Discover Data) within SE Web Phase 3² for :</p> <ul style="list-style-type: none"> • Ecosystem Health Indicators High Nature Value farming and forestry: extent and distribution.
<p>8.9 Prepare an information note on Strategic Environmental Assessment (SEA) and an ecosystem approach. 2015</p>	<p>On track In the interim, a guide to SEA and the ecosystems approach is available on the Ecosystems Knowledge Network. SEPA have successfully trialled an ecosystem services approach to the SEA of flood management plans.</p>
<p>8.10 Report on current good practice in applying an ecosystems approach with supporting examples and case studies. 2015</p>	<p>On track</p> <ul style="list-style-type: none"> • SNH's sharing good practice document. • SE Web provides links to case studies within the Land Use Strategy section of the State of the Environment report. • 3 Case Studies will be published on SE Web in Spring 2015 <ul style="list-style-type: none"> • Ecosystem Services Assessment – Land Use Case Study: Scottish Border Land Use Strategy Pilot • Ecosystem Services Assessment – Land Use Case Study: Aberdeenshire Land Use Strategy Pilot • Ecosystem Services Assessment – Land Use Case Study: Carse of Stirling Demonstration Project
<p>Not taken forward</p>	<p>Reason</p>
<ul style="list-style-type: none"> • Interim Field Guide to implementation of the ecosystems approach 2012. 	<p>Good practice examples already on the Ecosystems Knowledge Network</p>

² Scotland's Environment Web LIFE Project and financial support from the European LIFE Programme concludes in August 2015. SEPA have confirmed ongoing permanent support for Scotland's Environment Web beyond the LIFE project – Scotland's Environment Web Phase 3 (Aug 2015 and beyond).

Not taken forward as there are good practice examples already on the Ecosystems Knowledge Network.

- Full Field Guide with range of sectoral and cross-sectoral examples.

Good practice examples already on the [Ecosystems Knowledge Network](#)

Not taken forward as there are good practice examples already on the Ecosystems Knowledge Network.

Objective 2 - Proposal 9 Develop a methodology to take account of changes in soil carbon for carbon accounting purposes; improve understanding of potential benefits from conservation and management of carbon-rich soils; and deliver measures to help secure long-term management of all land-based carbon stores.

Lead + key partners Scottish Government + DECC, Defra, CEH, MRPs, FCS, SEPA, SNH, SRUC, ClimateXChange, Centre of Expertise on Water, NGOs.

Deliverables

- Intergovernmental Panel on Climate Change (IPCC) process on development of international reporting rules, 2011 – 2013.
- Methodology to incorporate the impact of peatland restoration measures into GHG inventory.
- Stakeholder consideration of the usefulness of these measures in a Scottish context.

Milestones

Achieved

Output

9.1 Host IPCC science review meeting. Edinburgh. Jan 2012

Completed. 2012

9.2 Support IPCC author meetings. Feb and Jul 2012

Completed. 2012

9.3 IPCC process on development of methods - will conclude post 2014.

IPCC report published and work in hand to consider factors that might be applied in Scotland.

[James Hutton Institute](#) has delivered policy briefings on the implementation of the 2013 IPCC Wetlands Supplement and the 2013 Kyoto Protocol Supplement.

Three [ClimateXChange](#) policy briefings on the implementation of the 2013 IPCC Wetlands Supplement and the 2013 Kyoto Supplement to Scottish Government.

[Policy brief 1](#)

[Policy brief 2](#)

[Policy brief 3](#)

9.4 Pilot areas for peatland restoration identified. Peatland plan being developed.

Ongoing. The Peatland Action project managed by SNH is on track to restore peatland and sequester carbon through 107 peatland management agreements and grants awarded across Scotland covering 5,100 ha. 15 demonstration events are planned.

Scotland's Peatland Plan aims to manage, protect and restore peatlands to maintain their natural functions, biodiversity and benefits and is to be published by Scottish Government and SNH in summer 2015.

James Hutton Institute to lead the [WISE](#) Peatland Choices Decision Support Tool development to visualise potential peatland restoration areas (through ClimateXChange) and contribute to the development of the Peatland Plan. [Progress](#) can be seen here. [Leaflet](#) produced by ClimateXChange

Currently underway

Progress

9.5 Tools to support the understanding and delivery of multiple benefits from carbon rich soils. 2015

On track

- James Hutton Institute is producing a summary report on the multiple benefits of carbon rich soils.
- A framework - a matrix of soil type and function (based on the seven functions in the Scottish Soil Framework), is being developed by James Hutton Institute.

9.6 More robust map of carbon stocks. 2015

On track

Work on improving resolution is being submitted to European Journal of Soil Science (EJSS) Spring, 2015. James Hutton Institute has published a [paper](#) describing methods to improve topsoil carbon content predictions and improve resolution of future mapping (EJSS, 66, 112-120).

Further paper in preparation: Comparison of traditional and geostatistical methods to estimate and map the carbon content of Scottish soils.

Initial versions of maps are being discussed with Scottish Government.

Objective 2 - Proposal 10 Investigate the relationship between land management changes and ecosystem processes to identify adaptation priorities.

Lead + key partners Scottish Government + the MRPs, FCS, SEPA, SNH, CEH, Centres of Expertise.

Deliverables

- Comprehensive mapping of ecosystem services.
- Increased understanding of the linkages between ecosystem processes and drivers of change.
- Increased understanding of the adaptive capacity of environmental assets to deliver ecosystem services under a range of land use changes.
- Assessment of the role of biodiversity in maintaining ecosystem health and function.
- Identification of opportunities for multiple benefits from land, interpreting the ecosystems approach.

Milestones

Currently underway

Progress

10.1 Provision of accessible geographic data and mapping of ecosystem services. 2016

On track.
[James Hutton Institute](#) has prepared maps on nitrogen retention and sediment retention, ecosystem productivity, water yield and snow regime which will be published on SEWeb in due course.

[James Hutton Institute](#) has produced maps for two case study areas and associated topics - afforestation in NE Scotland, and wind-energy vs landscape protection in the Central Scotland Green Network.

Preliminary estimates of pollinators supply are available (as an index). Preliminary versions of these maps have been produced.

<p>10.2 Provisional framework for associating land use management with ecosystem processes and services including identification of drivers of changes in both land management and ecosystems. 2016</p>	<p>On track. <u>Woodland Expansion</u> Preliminary analysis of scenarios of woodland expansion published.</p> <p><u>Peatland Valuation</u> Peatland valuation work has largely focused on developing tools to value the non-monetary and monetary benefits of peatlands and restoration. Two public focus group meetings have been carried out.</p>
<p>10.3 Identification of potential usage of ecosystems approach across a range of scales. Completion March 2016</p>	<p>On track. Research focused on 3 areas:</p> <p>i) Communicating the Ecosystem Approach The need for Clarity and Consistency in Communication Using Ecosystem Terminology: See outputs and previous work.</p> <p>ii) Bringing together knowledge and data to support decision making – papers linking scientific and local knowledge. Summer 2015.</p> <p>iii) Regional Land Use Pilot and its application in Aberdeenshire. Final report including issues and barriers to implementing the LUS at a regional level. Recent outputs Workshop reports Web based interactive tool</p>

Objective 3 - Proposal 11 **Develop the land use aspects of our Climate Change Adaptation Framework to support communities as they adapt to change.**

Lead + key partners Scottish Government and FCS adaptation sector leads. There are also a wide range of organisations identified to deliver the actions in the current Sector Action Plan, including SEPA, SNH, FCS, the MRPs, Scottish Water, Transport Scotland, Historic Scotland and Local Authorities.

Deliverables

The land use aspects of the Adaptation Framework that support communities in current actions in Sector Plans. Examples which have links to land use and communities are:

- Health & Wellbeing - Core path plans: encouraging local authorities to provide opportunities for everyday journeys and recreation.
- Transport - Collect and analyse information to determine areas of transport network susceptible to environmental hazards and future actions required.
- Spatial Planning & Land Use - Integrate adaptation into Development Plans.
- Forestry - Investigate the role of forestry in sustainable flood management through the establishment of catchment scale integrated land use studies.
- Biodiversity - Promote restoration of natural processes and promotion of wetland networks in catchments as a means of increasing resilience.

Milestones

Achieved

Output

11.1 Details of specific target dates for each action and key milestones, where appropriate, are [available online](#) with links made to information sources for communities under Proposals 12 and 13.

A list of actions, target dates and deliverables were available at the time of LUS publication and no changes have been made to this.

11.2 Second progress report on Sector Action Plans – 2012.

[Progress report](#) on climate change adaptation action in Scotland published Mar 2011. The Scottish Government’s independent advisers, the Adaptation Sub-Committee, published a progress report in Nov 2011 on '[How Well is Scotland Preparing for Climate Change?](#)' Following publication of the Scottish Climate Change Adaptation Programme in 2014, further progress reports to be published as required by the Climate Change (Scotland) Act 2009.

11.3 Many of the actions in the Sector Action Plans will be delivered before 2013.	See 11.1 above.
11.4 The Scottish Adaptation Programme will supersede the Adaptation Framework and Sector Action Plans. 2014	Published in May 2014. The first annual report on progress was published in May 2015. Work on the Programme's policies and proposals continues.
11.5 Land use will feature as appropriate in the Scottish Adaptation Programme post publication.	Ongoing
11.6 Collate examples of climate change adaptation projects that show good practice. Adaptation Scotland have published a number of case studies .	Ongoing. Case studies continue to be collated and available showing good practice – further case studies have been published by SNH.

Objective 3 - Proposal 12 Identify and publicise effective ways for communities to contribute to land use debates and decision-making.

Lead + key partners Scottish Government + FCS, SNH, SEPA, local and National Park Authorities.

Deliverables

- Provide information on current statutory, and where appropriate non-statutory, opportunities for communities to contribute to land use related plans and decisions. Provide easy access to these opportunities through links on [Scotland's Environment Web](#) (SE Web).
- Identify good practice examples of community involvement in land use related plans and decisions on the Scottish Government website/SE Web.
- Raise awareness about how land is used, through education-based and knowledge transfer activities.
- Relevant Scottish Government and agency consultations to make appropriate reference to the Land Use Strategy and its Principles.

Milestones

Achieved

Output

12.1 Information on statutory opportunities and where appropriate non-statutory opportunities. Mar 2012	Good practice examples on influencing land use decisions .
12.2 Consult on policy proposals for the Community Empowerment and Renewal Bill. Spring 2012	Consultation on the Community Empowerment (Scotland) Bill
12.3 Good practice examples. End 2012	Good practice examples
12.4 Resources, channels of communication and examples of good practice will be updated as they develop and change.	<p>Ongoing</p> <ul style="list-style-type: none"> • See Objective 2 Proposal 8 – SE Web publication of case studies. • Links between the Scottish Land Use Data Directory and SE Web will be established from May 2015 – from the Data Directory page for each dataset which is available on SE Web, there will be a link that displays that dataset in MapView. <p>Ongoing</p>

12.4 Extend communications about land use and land management activities involving and led by communities. 2016

[Case studies](#) involving land use can be found on the Scotland National Rural Network.

- New land infographics ([animated](#) and [static pdf](#)) have been published on SE Web – Get Informed.
- The publication of the case studies and the links to Scottish Land Use Data viewable on MapView will be promoted on SE Web Social Media.

Objective 3 - Proposal 13 Provide a Land Use Information Hub on the Scottish Government website.

Lead + key partners SEPA and range of data-holding partners including Scottish Government, Historic Scotland, SNH, MRPs, Environment Link, NHS, FCS and many others.

Deliverables

- Development of website resources for access to land use and environmental data, information and guidance.
- An opportunity for the public and stakeholders to access data and contribute to our understanding of Scotland's environment.
- Enable greater public involvement with the collection, use and understanding of environmental data.

Milestones

Achieved

Output

13.1 Launch of SE Web – 28 Nov 2011.
Initially, the content will be based upon SEPA's State of the Environment Report, an inventory of environmental information and map-based means of accessing and assessing data.

[SE Web](#)

13.2 Further development of the site's data sources and functionality.

On going
Creating a gateway to data and information through a range of applications, SE Web helps people connect with their environment, providing access to :

- Over 2000 information resources published by a wide range of organisations – of these, 1230 are related to and/or make reference to land. *(via the home page SEARCH)*
- 18 different tools that make it easy for users to find information, interpret and analyse data. These tools transform a range of spatial and non-spatial data published by multiple organisations in varying open and linked data formats.

<p>13.3 SE Web is progressively increasing the amount of open data and information it presents and there is ongoing development of its functionality and design. Mar 2015</p>	<p>Ongoing SE Web now has 239 data sets from multiple organisations available to view and overlap on the Map View. Of this 138 main data set layers and 39 sub-layer data sets relate specifically to land.</p>
<p>13.4 SE Web is a long-term project that is delivering a high quality, user focussed web site. Mar 2015</p>	<p>SE Web will continue to be supported by SEPA and partners, once the European LIFE+ funding contribution concludes later this year. The announcement of future funding for the website was made at the 'Understanding the State of the Environment' conference held in Edinburgh on 13 March 2015.</p>
<p>13.5 Develop a SE Web Search tool to provide increased access to information, guidance and research on land use.</p>	<p>The search tool is on the home page of the web site. It provides users with access to 1230 resources from both within SE Web and published on partners websites (if 'land' is used as the search term).</p>
<p>Currently underway</p>	<p>Progress</p>
<p>13.6 Explore how to better engage stakeholders with delivering multiple benefits from land 2016.</p>	<p>Preliminary exploration of key issues presented to the Land Use Strategy Steering Group Meeting 30 March 2015. See Land Use Strategy Steering Group webpages.</p>

Table 1 Milestones not taken forward

Proposal 3	<ul style="list-style-type: none">• Guidance on the application of the LUS Principles in regulations and incentives – summer 2012. Not achieved due to the diversion of resources to other priorities such as the delivery of the Regulatory Reform (Scotland) Act and need for action overtaken by a number of other actions.
Proposal 8	<ul style="list-style-type: none">• Interim Field Guide to implementation of the ecosystems approach – 2012. Not taken forward as there are good practice examples already on the <u>Ecosystems Knowledge Network</u>.• Full Field Guide with range of sectoral and cross-sectoral examples. Not taken forward as there are good practice examples already on the <u>Ecosystems Knowledge Network</u>.

3. Further Information

Getting the best from our land: A land use strategy for Scotland was published on 17 March 2011. The Climate Change (Scotland) Act 2009 requires a revised strategy to be laid before Parliament no later than 5 years after the publication of the first Strategy. The development of the next Strategy is currently underway. Further details can be found on the [Land Use Strategy](#) web pages.

All documents associated with the Land Use Strategy, as well as other relevant information, can be accessed at:

<http://www.gov.scot/landusestrategy>

If you wish to get involved or comment on any aspect, please contact the Land Use and Biodiversity Team using the following contact details:

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Annex A: Principles for Sustainable Land Use

- a) Opportunities for land use to deliver multiple benefits should be encouraged.
- b) Regulation should continue to protect essential public interests whilst placing as light a burden on businesses as is consistent with achieving its purpose. Incentives should be efficient and cost-effective.
- c) Where land is highly suitable for a primary use (for example food production, flood management, water catchment management and carbon storage) this value should be recognised in decision-making.
- d) Land use decisions should be informed by an understanding of the functioning of the ecosystems which they affect in order to maintain the benefits of the ecosystem services which they provide.
- e) Landscape change should be managed positively and sympathetically, considering the implications of change at a scale appropriate to the landscape in question, given that all Scotland's landscapes are important to our sense of identity and to our individual and social wellbeing.
- f) Land use decisions should be informed by an understanding of the opportunities and threats brought about by the changing climate. Greenhouse gas emissions associated with land use should be reduced and land should continue to contribute to delivering climate change adaptation and mitigation objectives.
- g) Where land has ceased to fulfil a useful function because it is derelict or vacant, this represents a significant loss of economic potential and amenity for the community concerned. It should be a priority to examine options for restoring all such land to economically, socially or environmentally productive uses.
- h) Outdoor recreation opportunities and public access to land should be encouraged, along with the provision of accessible green space close to where people live, given their importance for health and well-being.
- i) People should have opportunities to contribute to debates and decisions about land use and management decisions which affect their lives and their future.
- j) Opportunities to broaden our understanding of the links between land use and daily living should be encouraged.

Annex B: Proposals in the Land Use Strategy

The Scottish Government will:

- 1.** Publish an action plan following publication of the Strategy.
- 2.** Provide an annual progress statement on the Land Use Strategy.
- 3.** Align land use regulations and incentives with Land Use Strategy Objectives.
- 4.** Further encourage land-based businesses to take actions that reduce land-based greenhouse gas emissions and that enable adaptation to climate change threats and opportunities.
- 5.** Use the Land Use Strategy Objectives to influence negotiations on CAP reform.
- 6.** Use demonstration projects to determine the best means by which land use and land management practice can contribute to climate change objectives.
- 7.** Identify more closely which types of land are best for tree planting in the context of other land-based objectives, and promote good practice and local processes in relation to tree planting so as to secure multiple benefits.
- 8.** Demonstrate how the ecosystem approach could be taken into account in relevant decisions made by public bodies to deliver wider benefits, and provide practical guidance.
- 9.** Develop a methodology to take account of changes in soil carbon for carbon accounting purposes; improve understanding of potential benefits from conservation and management of carbon-rich soils; and deliver measures to help secure long-term management of all land-based carbon stores.
- 10.** Investigate the relationship between land management changes and ecosystem processes to identify adaptation priorities.
- 11.** Develop the land use aspects of our Climate Change Adaptation Framework to support communities as they adapt to change.
- 12.** Identify and publicise effective ways for communities to contribute to land use debates and decision-making.
- 13.** Provide a Land Use Information Hub on the Scottish Government website



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