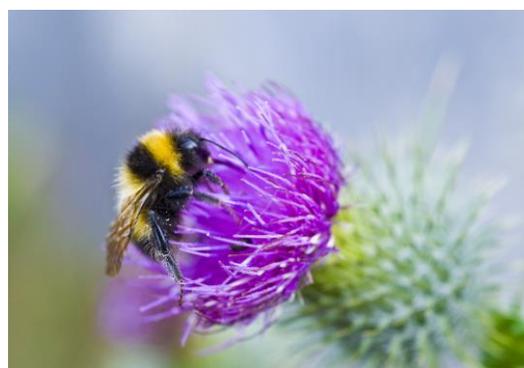# Aberdeenshire Land Use Strategy Pilot

Stage 3 Report

December 2014

Executive Summary

The Scottish Government funded Aberdeenshire Land Use Strategy Pilot began in February 2013, and aims to *"consider existing and future land uses in a collective and integrated way, with a view to optimising the use of the land, and to establish a mechanism to prioritise or guide decisions about possible competing or conflicting uses"*. The Pilot is being delivered in partnership by Aberdeenshire Council and the James Hutton Institute. A Scottish Government specification describes the key expectations, aims and milestones for the Pilot and sets out a three stage process for the Pilots to follow.

Stage 3 of the Pilot, the aim of which was to produce a framework which aids land use change decision making, ended in December 2014. In this stage, the work of the Pilot has been drawn together and two outputs produced – a web based, interactive tool and an overview report on land use change issues and opportunities.

The web-based, interactive tool explores land use change through the lens of woodland expansion. User feedback on the tool has been positive. The tool is a prototype, an example of how such an output could be created. It is not yet ready for use in decision making. If and how the tool might be used will be discussed further with stakeholders in the final months of the Pilot. It is likely that full development of the tool would need to take place beyond the end of the Pilot.

The overview report summarises the broad range of issues encountered during the Pilot. It was created in recognition that the Pilot was unable to tackle every issue directly and chose to focus its work. It aims to be a useful reference but also to stimulate discussions around the Pilot's legacy. It was a challenging document to produce – the need to be both comprehensive and succinct perhaps presenting the greatest difficulty. A draft was sent to stakeholders for feedback. A broad range of comments was received, with many asking for more detail on a range of subjects. A final version of the report will be produced early in 2015.

The Pilot will finish at the end of March 2015. In its final months, the Pilot will revise the web based tool and the overview report based on feedback received, complete the Strategic Environmental Assessment process, carry out further engagement activities, draw together its work in a final report for Scottish Government and begin discussions to secure a legacy from the process.

1.0   Introduction

1.1   This report presents the work carried out during Stage 3 of the Aberdeenshire Land Use Strategy Pilot (the Pilot) and introduces the process that will be followed in ending the Pilot and reporting back to Scottish Government.

2.0   The Land Use Strategy Pilots

2.1   Two Land Use Strategy Pilots are being funded by Scottish Government, one being delivered by Aberdeenshire Council and the other by Scottish Borders Council. The aim of these Pilots is to:

> *"…consider existing and future land uses in a collective and integrated way, with a view to optimising the use of the land, and to establish a mechanism to prioritise or guide decisions about possible competing or conflicting uses."*

Both Pilots began in Spring 2013. Scottish Government specified a three stage process for the Pilots to follow:

    Stage 1: Baseline mapping
    Stage 2: Constraints and opportunities
    Stage 3: Production of the framework

2.2   The final deadline for the Pilots is March 2015. The process taken by the Pilots and the outputs they produce will inform the next review of the national Land Use Strategy, due in 2016.

3.0   Aberdeenshire Pilot set up and Stage 1

3.1   Full details of the set up phase and the work carried out during Stage 1 of the Pilot can be found in the [Stage 1 report](), produced in December 2013. In summary, Aberdeenshire Council are working in partnership with the James Hutton Institute to deliver the Pilot. Scottish Government provided a specification for the work of the two Pilots which set out the key expectations, aims and milestones as well as providing links to a wide range of data and information sources. James Hutton Institute and Aberdeenshire Council used this document to scope out the process to be followed, and outputs to be delivered.

3.2   The key aim of the Pilot is to explore the creation of a spatially based framework/tool that will aid land use change decision making. The framework will focus on the benefits the environment delivers to people and society, identifying where land use changes might be beneficial or detrimental for the delivery of these 'ecosystem services'. Potential users are seen as those planning, administering, funding and/or responding to land use change, including public agencies such as Scottish Natural Heritage, Scottish Environment Protection Agency, Forestry Commission, Rural Payments Inspectorate Division and Aberdeenshire Council. It is hoped that individuals and organisations operating at a landscape or catchment scale would also find the framework useful to explore the consequences of different land use options. It is recognised that the process undertaken in delivering the Pilot is as important as the final outputs.

3.3 In June 2013, an awareness raising event was held in Banchory jointly between Aberdeenshire Council and the James Hutton Institute. During Stage 1 itself, a baseline of policy and natural asset information of relevance to land use change was gathered in GIS format for use in the subsequent two stages. Also during this stage the first of three workshops in the Pilot's two Local Focus areas also took place where local knowledge was gathered to supplement that collated in GIS. Further details on the Local Focus Areas can be found in Section 10.

4.0 Stage 2 – Constraints and Opportunities

4.1 As defined in the specification, the Pilots were required to explore constraints on and opportunities for land use change in their respective regions during Stage 2. Full details of the work carried out can be found in the report of Stage 2 produced in August 2014. In summary, Aberdeenshire Council and James Hutton Institute, in consultation with various stakeholders, decided to focus their exploration of constraints and opportunities by asking a series of questions under five key policy themes. The five themes were identified by James Hutton Institute as being the most significant in the Land Use Strategy. They were:

1. The low carbon economy
2. Sustainable food production
3. Sustainable water management
4. Halting biodiversity loss
5. Enhancing recreational and community opportunity

4.2 Under these five themes, a series of questions were asked which considered some of the key land use change issues for Aberdeenshire. The questions explored the consequences of certain policy directions on land use, identifying issues and opportunities resulting from these policies and proposing methodologies which could aid in future planning. The focussed approach was taken in recognition that the Pilot could not cover every issue of relevance with the time and resources available to it.

5.0 Stage 3 – Production of a Framework

5.1 The specification set out a number of expectations and suggestions for how the final Pilot framework might be produced, what it could do and how it may look. As a summary, it says the following:

> *'Stage 3 – Production of a framework. The aim is to produce a framework to guide decisions about land use change in the area so as to better deliver policy objectives, reduce conflicts and maximise complementarities. This will feed into other plans and strategies such as Flood Risk Management Plans, the local development plan or regional low carbon strategies. The frameworks may also influence individual decisions for example on Scottish Rural Development Payments funding by the local Regional Proposal Assessment Committee on both land management and land use change. The aim is to produce a final framework which is dynamic and able to respond to changing circumstances such as the grants regime, livestock prices, land owner preferences etc. A 'master plan' approach is unlikely to be successful, and certainly not if adopted in isolation.'*

5.2   The Pilot, in producing outputs in Stage 3, used and built on the work done to date in Stage 1 and particularly Stage 2. In setting up the Pilots, two key requirements set out by Scottish Government were that an 'ecosystem approach' should be taken and that all significant land uses in the region should be encompassed. The Pilot has had these guiding principles in mind and has endeavoured to follow them as much as is possible. However, the breadth and complexity of doing so has been a significant challenge. As a result, the Pilot has often only been able to present partial pictures and/or been unable to explore issues in the depth required. Aberdeenshire is a very large area, land use is diverse. An ecosystem approach requires a levels of understanding, involvement and coordination that the Pilot has tried to build towards but would certainly not claim to have fully achieved. As a result of this, in moving into Stage 3, the Pilot did not feel it had assembled the data, knowledge, methods or level of stakeholder engagement that would allow it to produce a fully encompassing land use change framework for the region. However, it was felt that the Pilot had the means to produce outputs which could be both unique and helpful in the context of land use change planning in Aberdeenshire, and that these could promote the more integrated, holistic approach championed by the LUS.

5.3   The initial proposal for a Stage 3 output, made to the Pilot's Project Board, was to further develop the constraints and opportunities GIS mapping process that had been developed in Stage 2 in relation to woodland expansion. The Pilot would aim to produce a web-based, interactive tool that would allow users to set priorities and explore the consequences of land use change on other land uses but also on the delivery of ecosystem services. It would be an aid to decision making, targeted at strategic planning and grant funding processes. The Board approved the production of this output but also asked for a second – a report which provides an overview of the land use change issues and opportunities for Aberdeenshire. The report would draw on the work of the Pilot to date, but go beyond the key issues it had focussed on to give a broader overview. The production of both outputs was taken forward in Stage 3 as described in the following sections.

6.0   Web-based, interactive tool

6.1   During Stage 2, under the low carbon economy theme, the Scottish Government policy goal of an expansion in woodland coverage was explored. The Pilot created a GIS based woodland suitability mapping process which considered a range of factors and calculated the suitability of areas for planting new woodland. Factors considered ranged from the presence of prime agricultural land, water quality issues and peat rich soils to habitat connectivity. A full explanation of the work can be found in the Stage 2 report. In progressing this work, it became clear that exploring land use change through the lens of woodland expansion was both possible in terms of data and knowledge availability, but also illuminating in that it linked a range of other land, water, access, carbon and biodiversity issues. Woodland expansion was a clear policy target that resulted in land use change. Its consideration was highly relevant. The Pilot felt that further development of this work in Stage 3 was desirable.

6.2   It was considered that there was a need for those planning land use change, particularly those working at the strategic level, to have a means to assess the suitability/desirability of land use changes. Allowing planners to explore the consequences of pursing different policy goals was also considered to be potentially

helpful. The Pilot chose to build on the woodland expansion model and create a web-based, interactive tool which responded to these needs and opportunities.

6.3   James Hutton Institute developed the tool and have made it available to via this web address: http://rlup.hutton.ac.uk/. The tool presents a picture of the suitability of areas for woodland planting across Aberdeenshire. Suitability is assessed based on a series of criteria which score an area based on the potential benefits and impacts of planting woodland. The resulting suitability is shown as a map based output. However, the map based output is not static. Tool users have the option to reconfigure the map by up or down-weighting some of the criteria which are used to assess suitability. Users can thus input their preferences or follow certain 'policy goals' and see how the map of woodland suitability changes. Options within the tool allow for maps of only the 'best' areas for woodland expansion to be shown as well as overlays of the potential impacts on some ecosystem services. For full technical details of the website, please contact Pilot staff. We would encourage anyone to 'have a go' with it and to feedback to j.davidson@aberdeenshire.gov.uk.

6.4   As with many of the elements of the Pilot, the process of developing the output and peoples' reaction to it are as important and informative as the output itself. Developing the tool has highlighted a number of issues to do with knowledge and data. Many of these are covered in the report of Stage 2. There have also been a number of issues raised on technical aspects of the creation of such a website. The difficulties of creating a tool which did 'live' analysis of data based on user interaction (cached maps for every possible iteration of the woodland maps were created rather than doing this live analysis); variability in stakeholders' internet network speeds, and variability in the versions of internet browsers they use, all present challenges. Perhaps most significant is the challenge of creating something useful, usable and relatively straightforward from a broad range of data and a complex subject area. Further details on all development issues will be included in the final report of the Pilot.

6.5   To explore user reactions to the tool and to gather suggestions for further development, Aberdeenshire Council and James Hutton Institute hosted a number of workshops in November and December 2014. The tool was demonstrated to internal officers in Aberdeenshire Council at two separate events; to the North East Scotland Agricultural Advisory Group; to the Woodland Group of the North East Scotland Biodiversity Action Plan, and to Aberdeenshire Councillors at two separate events. An earlier version of the tool had been shown to the Project Board in late September.

6.6   Feedback at these events was on the whole very positive. The tool was praised as usable and relatively straight-forward. The technical challenge in creating it was recognised. The interactive nature was probably the element that most interested and impressed those who saw it. Those working on the Pilot made sure the various limitations of the tool were communicated. Where site specific suggestions for use were made, the limitations of the tool were further emphasised. There were a range of questions and concerns raised about the data used and the issues the tool didn't encompass. There were a number of suggestions that we should look at commercial woodland (the tool considers native broadleaf woodland currently) and that there should be a final output of the 'best' places for woodland in the region based on an amalgamation of various woodland expansion scenarios presented. Many did question how it would actually be used and who could be expected to use it. A

number of other engagement exercises on the tool (and the Pilot more widely) are currently being planned for February and March 2015, so further feedback will be gathered.

6.7   The tool is a working prototype. It is an example of how such a tool could be created rather than something to be immediately used in decision making. In particular, a number of the criteria used and assumptions made within analysis process would need further stakeholder input and validation before any real world use. There is the time and resource for some further engagement and development before the Pilot ends in March 2015. However, it is likely that a full consideration of the potential applications of the tool, and any associated further development required, would need to take place beyond the formal end of the Pilot. That being said, the tool is fully accessible for all via the internet, and further feedback and suggestions for use are welcomed.

7.0   Overview report

7.1   Aberdeenshire Council led on the production of a report entitled 'Land Use Change Issues and Opportunities for Aberdeenshire'. The aim of the report is to provide a broad overview of the land use change issues for the region, drawing on the work of the Pilot but also on the comments and input of stakeholders throughout the process. As requested by the Project Board, it fills in some of the gaps in the Pilot's work and presents a fuller picture than the woodland expansion-focussed interactive tool. A relatively brief and accessible report was the goal: something that could be a useful point of reference for those planning, funding and administering land use change in the region.

7.2   The initial draft of the document was 19 pages long. Following a request for additional information by the Project Board, the final draft for feedback totalled 28 pages and was split into three parts. Part 1 briefly introduces the Pilot, presents an overview of the key drivers of land use change in the region and describes the methods used, and consultations carried out by the Pilot. Part 2 contains five policy themed sections. Within each policy theme, a series of land use change issues and opportunities are explored. The work of the Pilot under these themes is briefly summarised. This section also introduce a number of key issues that the Pilot was not able to explore fully. Part 3 sets out a list of suggested actions for Aberdeenshire and suggests future steps.

7.3   It is hoped that the report will help frame discussions with stakeholders about the legacy of the Pilot for Aberdeenshire. It suggests a series of actions that could be followed to build on the work of the Pilot and to further the goals of the Land Use Strategy. The actions are seen as 'suggested' as they need further discussion and input from stakeholders; they should serve to stimulate involvement and further debate. The report closes with an invitation to readers to get involved in the continued debate on the integrated, holistic planning of land use change for Aberdeenshire. Suggested actions are split into those for the Aberdeenshire and those that need national level action, as follows:

Regional Actions

RA 1: *Explore a more integrated and inclusive approach to rural land use planning which has a strong emphasis on the public interest.*

RA 2: *Ensure the potential effects of climate change on rural land use are given greater attention.*

RA 3: *Explore the scope for, and implications of expanding woodland in Aberdeenshire.*

RA 4: *Explore the provision of direct, local, on-the-ground advice for land managers.*

RA 5: *Continue work to describe and map the natural assets and benefits delivered by Aberdeenshire's environment.*

National Actions

NA 1: *Explore a national assessment of land use opportunities and constraints*

NA 2: *There should be a greater focus on the reduction of total carbon dioxide emissions resulting from food production.*

7.4   Initially the Pilot proposed to send the overview report out for public consultation in autumn 2014, possibly in conjunction with the Environmental Report of the Pilot's Strategic Environmental Assessment (SEA). However, the Project Board suggested that the report be initially sent to those who had had involvement with the Pilot to date, including those who had attended workshops and other events. The Pilot could then revise the report based on feedback, and produce a final version in early 2015. The report was sent in draft to 48 contacts on 28th October 2014 with a feedback deadline of 28th November 2014, and an invite to send the report on to others that might have an interest. A further two contacts were emailed for responses in mid-October giving a total of 50. Throughout the draft document, a series of questions were posed so as to guide responses. A response sheet was included in the consultation.

7.5   Ten responses were received as a result of the call for feedback on the overview report. A number of those received were from organisations rather than individuals and amalgamated the comments made by a number of emailed contacts. Appendix 1 lists the respondents. Ideally there would have been a greater response rate, and reasons for the low level of return are not clear. Engagement with the Pilot to date has be extensive by those emailed and there has been no lack of interest. Although speculation, it may be that a 28 page document was too long for a thorough read in people's busy schedule. The implications of the low response rate need to be considered further as a final version is produced.

7.6   Those that did respond spent considerable time and effort doing so. A broad diversity of comments across the varied aspects of the report were received. Many asked for greater detail and further consideration on a variety of topics. Available time and the desire to the keep the report relatively short makes this difficult. It is clear that to give a broad but shallow overview of the issues is challenging: there are so many elements to consider, that demands for greater depth are inevitable. The Pilot has focussed on certain elements throughout its work. Despite aiming to give the broader

overview in the report, some of the focus choices made were apparent and questioned by respondents.

7.7   The Pilot chose to not only provide an overview in the report but also to summarise its work and suggest actions to take forward. Perhaps this is overly ambitious for a short document. However, there was a desire to have something to aid discussions of the legacy of the Pilot for the region, hence the inclusion of suggested actions. Arguably the report does stray too far from an 'overview' into making statements and suggestions. There were a number of concerns raised about the justification/evidence for elements of the report. Various questions and uncertainties were also raised about the future direction of the Pilot's work and who might take forward the actions. The ability of a local authority to strongly influence rural land use change issues was included in these uncertainties.

7.8   The report reflects a common conundrum for the Pilot – how to encompass all issues of relevance in a manageable and accessible way. A final version will be produced early in 2015, and it is hoped that this will be both a useful reference for all interested parties and an aid to planning the Pilot's legacy. The Pilot thanks those who responded to the draft.

8.0   Webpage

8.1   The [Pilot's webpage](), hosted on the Aberdeenshire Council website, was set up in December 2013. It briefly describes the project and provides contact details for the Project Officer. It also contains PDF downloads of all the major reports that have been produced during the process. Page view statistics to date indicate an average of 30 unique user visits per week. We have received a small number of enquiries as a result of the webpage. However, although there are no specific statistics to illustrate this, it is felt that that those visiting the webpage have been engaged in the Pilot through talks, workshops or articles, or have heard about the Pilot as part of the national LUS process, rather than first encountering it via the webpage.

9.0   Strategic Environmental Assessment

9.1   The Pilot is carrying out a Strategic Environmental Assessment (SEA) of its work and outputs. Pilot staff and a number of members of the Project Board had some reservations about the relevance of SEA to the Pilot. They saw the project as an iterative process which would not be producing any set plan or programme, but rather exploring a range of issues and producing aids to decision making. As the translation of these aids into 'on-the-ground' decisions was dependent on the user and their objectives, any assessment of the potential environmental effects of the outputs (which were changeable) was difficult. However, SEA was strongly suggested in the Pilot's specification and consequently, the Pilot felt it should engage in the screening process and deliver according to its findings.

9.2   Structuring the SEA in a way which is appropriate for the nature of the Pilot's work has been difficult. SEA has certain procedural requirements and the work required needed to be proportionate to that which was being carried out for the Pilot itself. It had been strongly hoped that co-production of the Pilot and the SEA would result in them jointly informing each other. However, the highly iterative nature of the Pilot meant it was difficult to progress the SEA in the early stages – the outputs were uncertain. Now

that the Pilot is in its final Stage, the SEA has moved on at greater pace and a means of aligning the two processes has been found. It is hoped that the Pilot can begin to gain from the SEA process in its final months.

9.3   Throughout Stage 3 of the Pilot, Aberdeenshire Council have been working on the environmental report. The report will be sent out for consultation in mid-December 2014 for 8 weeks. Following this, the Pilot will review and respond to the responses received. There may be a need to modify some of the final outputs as a result.

10.0   Local Focus Areas

10.1   The third and final workshops in the Pilot's Upper Dee and Huntly 'Local Focus Areas' (LFAs) took place to support Stage 3. These followed on from workshops supporting stages 1 and 2 of the Pilot. The aim of this set of workshops was to understand how land managers and local communities view the goods and services that the natural environment delivers to them; explore the factors that influence land use change decision making; consider why land use change might occur and how this would affect delivery of ecosystem services and benefits. The workshops were led by the James Hutton Institute and findings have informed the work of the Pilot. More information on the LFA workshops can be found on the [Pilot's website](#) including reports of workshops to date.

10.2   During the Stage 3 workshops, attendees commented on and reviewed results from models of land use change decision making that had been produced by the James Hutton Institute. The resulting discussions on land managers' decision making processes under different future scenarios and how these choices might impact on delivery of multiple benefits were interesting and informative. For example, initial results suggest that regulating services may be negatively affected under all three contrasting future scenarios, suggesting that more action may be required to mitigate environmental impacts of food and timber production. In common with the other LFA workshops, the on-the-ground perspective has shaped the Pilot's work, highlighting key challenges and opportunities; and participants were both able and willing to think about land use systemically, which is a prerequisite for building a framework for delivering the Land Use Strategy. Final conclusions and outputs from the LFA process will be produced by the James Hutton Institute early in 2015. The Pilot will describe more fully the impacts of the Local Focus Areas on its work in its final report.

11.0   Final phase and reporting to Scottish Government

11.1   The Pilot will formally end on 31st March 2015. This report closes the three stages of work set out in the specification for the Pilots. The focus for the final months is to:

- Revise both the overview report and the web based tool in response to feedback received.
- To complete the SEA and carry out any revisions required to outputs following a 9 week period of consultation which will finish in mid-February.
- To carry out further stakeholder engagement. Workshops with land managers, practitioners from other local authorities, agricultural students and Royal Society of Arts members are anticipated.
- To draw together all the work of the Pilot regionally, in local focus areas, through engagement activities and for the SEA into a final report for Scottish

Government. This will include clear identification of the benefits and challenges of the process.

- Discuss and plan the legacy of the Pilot with the Project Board and other stakeholders.

Aberdeenshire Council and James Hutton Institute
19th December 2014

Appendix 1

Aberdeenshire Council Environment Team
Aberdeenshire Council Planning Policy Team
Aberdeenshire Council Sustainability Officer
James Hutton Institute
Gordon McKilligan, farmer and Aberdeenshire Outdoor Access Forum
Historic Scotland
RSPB
Scottish Water
SEPA
SNH