

Aberdeenshire Land Use Strategy Pilot

Final Report

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Executive Summary

The Scottish Government funded Aberdeenshire Land Use Strategy Pilot began in February 2013, and aimed 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”.

A Scottish Government specification described the key expectations, aims and milestones for the Pilot and set out a three stage process for the Pilots to follow.

Aberdeenshire Council and the James Hutton Institute jointly rose to the challenge of delivering the Aberdeenshire Pilot and have gained significantly as a result. With the extensive and generous input of a wide range of stakeholders, groups and organisations, valuable and progressive work has been completed.

Time, knowledge and data constraints mean that no over-arching framework to aid land use change was delivered by the Pilot. However, a number of potentially beneficial aids to land use change decision making have been created, including an Overview Report of land use change in the region and a web-based interactive tool, both of which have been received positively. The forum and focus the Pilot has provided to discuss and explore rural land use has also been widely welcomed by those who participated. Many contacts between stakeholders have been made or reinforced, providing a network that can be built on.

Key messages to emerge from the process were:

- ***Set up strong partnerships with those who have relevant expertise***
The diversity of sectors and interests represented on the Project Board helped to give the process legitimacy. Aberdeenshire Council benefited greatly from joining with the James Hutton Institute to deliver the Pilot.
- ***Define goals and main issues first, then gather and map data***
The specification provided to the Pilot defined the first stage as a gathering of baseline data. However, defining key issues ahead of data gathering, with regard to project capacity, may have been more efficient.
- ***Acknowledge complexity, take care if focussing activity***
Undoubtedly rural land use issues are complex and the Pilot aimed to reflect this complexity. It also aimed to create relatively simple and accessible engagement processes and outputs. The choice by the Pilot to focus its activity was a source of comment and controversy with stakeholders.
- ***There are a diversity of perceptions, viewpoints and sectoral interests***
The Pilot sought and gathered a wide variety of viewpoints from across the region, certainly a broad diversity of views exist. However, the Pilot enjoyed extensive goodwill and benefitted greatly from stakeholder input. The extent to which such goodwill would remain if policy had been proposed and on-the-ground decisions discussed is unclear.

- ***Consultation at both the local and regional level greatly benefitted the process***

Consultation was an essential element of the Pilot and, by its nature, a time consuming and resource intensive exercise. A twin-track approach to consultation was instigated, with work at both the regional level and in two Local Focus Areas. Although consultation at both levels shaped the process, a more structured relationship between the local and regional levels may have been desirable.

- ***Is a regional planning scale appropriate and workable?***

Although the Pilot was not explicitly set up to answer this question, it has found that helpful aids to land use change decision making can be created at a regional level. However, on-the-ground application beyond the strategic level would require local involvement and more extensive local land use and environment data than the Pilot was able to access.

- ***There is strong support for more integrated, holistic rural land use planning***

The Pilot found overwhelming support for a more integrated and holistic approach to rural land use planning. Although many stakeholders acknowledged the difficulty of creating and implementing such an approach, the majority supported its consideration and saw a range of potential benefits from its implementation. No consensus on how such an approach should be developed or what issues it should encompass emerged; however, the Pilot has suggested pathways for taking this forward.

- ***Is a Local Authority based placed to deliver improved rural land use planning?***

Again, the Pilot was not explicitly set up to answer this. However, it is suggested that the choice of Local Authorities to deliver the Pilot was a pragmatic one, based on their relatively neutral position and democratic accountability. The extent to which they should be seen as delivery bodies going forward is for others to decide; however, the Pilot would highlight significant resource issues in Local Authorities currently and for the foreseeable future.

It is clear that to achieve a shift towards a more integrated approach to rural land use planning, further work is required, building on that which has been achieved by the Pilot and others. The exact nature and direction of that work is in part dependent on recommendations contained in the revised Land Use Strategy (due in 2016). However, it is also within the gift of stakeholders within Aberdeenshire to collectively shape the future of the approach.

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1.0 Introduction

- 1.1 This report presents the work carried out by the Aberdeenshire Land Use Strategy Pilot (the Pilot). The Pilot was a Scottish Government funded project delivered by Aberdeenshire Council and the James Hutton Institute. It aimed to create a framework to aid rural land use change decision making. The Pilot took place between March 2013 and March 2015. It was timed so as to inform a refreshed Scottish Land Use Strategy due in 2016.
- 1.2 This final document is a summary of the project; fuller descriptions of the various elements of the work can be found in reports on the Pilot's webpage:
<http://www.aberdeenshire.gov.uk/energy/AberdeenshireLandUseStrategyPilot.asp>
- 1.3 The report is split into 4 parts:
- Part 1 introduces the Pilot and describes the process taken in setting it up.
 - Part 2 summarises the three stages of work that took place to deliver it.
 - Part 3 describes the main outputs of the process.
 - Part 4 describes the benefits of the process, and identifies key issues and lessons learned.

Part 1: The Land Use Strategy Pilots

2.0 The Land Use Strategy Pilots

2.1 Between March 2013 and March 2015, Aberdeenshire Council and Scottish Borders Council delivered two Regional Land Use Strategy Pilots. These were one element of the work supporting and embedding the [Land Use Strategy \(LUS\)](#). The Pilots also formed part of Scottish Government's response to the recommendations of the Woodland Expansion Advisory Group. They were directly funded by Scottish Government and timed so as to inform the 2016 revision of the LUS. Despite the overarching land use focus of the LUS, the Pilots were asked to specifically **focus on rural land use**.

2.2 The aim of these Regional Land Use Strategy Pilots was 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."

2.3 Scottish Government supplied a detailed specification to the two Local Authorities. This set out a three stage process for the Pilots to follow:

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

2.4 The specification provided by Scottish Government also set out a number of **requirements and expectations**. This included an expectation that the Pilots would produce regional land use frameworks for their locality which:

- Reflected Scottish Government policies relevant to land use;
- Had regard to the 10 Principles for Sustainable Land Use contained within the LUS, and support the delivery of the Objectives and Vision;
- Expressed regional/local policies relevant to land use;
- Were at a sufficiently detailed scale to enable grant funding decisions to be made;
- Considered all the major land uses in the relevant area;
- Provided clarity for decision makers about the opportunities and constraints within an area;
- Had been prepared in partnership with all locally relevant land use sectors and has been consulted upon;
- Took an ecosystems approach;
- Were a meaningful tool to guide decisions about land management, land use change and funding; and;
- Could take account of changing circumstances and cumulative impacts of land use change.

3.0 Aberdeenshire Land Use Strategy Pilot

- 3.1 The Aberdeenshire Land Use Strategy Pilot (the Pilot) was delivered by Aberdeenshire Council and the James Hutton Institute. The Pilot was tasked with the delivery of a regional land use framework **for the entire local authority area**, including where this overlaps with Cairngorms National Park. This is an area of approximately 6,300 km² in the north east of Scotland. The area has a population of approximately 250,000.
- 3.2 There is a diverse mix of land cover in Aberdeenshire. The west of the region is bordered by some of the highest mountains in Scotland, with the Cairngorms plateau the largest area of land over 1000m elevation in the country. The hills reduce in size moving east, down to the fertile agricultural plains of Buchan and Kincardine. With approximately 50% of the area either arable or improved grassland, intensive farming is a highly significant land use in the region. However, a 25% coverage of heather moorland and montane habitats emphasises this diversity. Approximately 18% of the region is covered in woodland.
- 3.3 Further details on the Aberdeenshire region, its land use, and the challenges and opportunities facing it can be found in the report '[An Overview of Land Use Change Issues and Opportunities for Aberdeenshire](#)' (Ctrl+click to access) produced by the Pilot. The process of producing this report is discussed in Section 9.
- 3.4 In the early stages of the Pilot, staffing requirements were assessed and a Project Board established, comprising Aberdeenshire Council staff and stakeholder representatives. Members of the Board and the staffing resource are listed in Appendix 1.
- 3.5 In June 2013, in conjunction with the James Hutton Institute, a stakeholder event was held in Banchory as a precursor to wider stakeholder engagement. A report of the Banchory event is available on the [Pilot's webpage](#). In mid-July, a full time Project Officer for the Pilot began work with Aberdeenshire Council.
- 3.6 The value of involving the James Hutton Institute in the Pilot was recognised in its early stages. The institute had extensive experience of working on land use issues both in and out with Aberdeenshire. Its staff were already engaged in research funded by the Scottish Government's Strategic Research Programme on ecosystem services and the ecosystem approach; they had expertise in stakeholder engagement as well as in-house Geographic Information System (GIS) skills. Prior to work commencing on Stage 1 therefore, a collaborative working arrangement was set up between Aberdeenshire Council and the James Hutton Institute to deliver the Pilot.
- 3.7 James Hutton Institute and Aberdeenshire Council used the specification document provided by Scottish Government to scope out the process to be followed and outputs to be delivered by the Pilot.
- 3.8 The key aim was to explore the creation of a **spatially based framework that would aid land use change decision making**. The framework would focus on the benefits the environment delivers to people and society, identifying where land use changes might be beneficial or detrimental.

- 3.9 Potential users of the framework were 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 Scotland, Scottish Government Rural Payments and Inspectorate Division and Aberdeenshire Council. It was 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.
- 3.10 It was recognised that the **process undertaken in delivering the Pilot was as important as the final outputs**, and that documenting and reporting at key points in the process was crucial.
- 3.11 The Pilot was structured around the three stages identified in the specification. Stakeholder engagement activities were carried out during each stage, and reports were produced at the end of each stage. Appendix 2 presents the full list of reports produced by the Pilot with hyperlinks to them. The reports are also referenced and hyperlinked at relevant points through-out the report.
- 3.12 This document is the final report of the Pilot. It summarises the work done and describes the benefits, issues and conclusions that can be drawn from the process. Fuller details on the work can be found in the stage and workshop reports on the [Pilot's webpage](#).
- 3.13 This report presents the views of Aberdeenshire Council, the James Hutton Institute and also members of the Project Board in relation to the Pilot. In addition, an independent review of both Pilots has been carried out for Scottish Government, the outputs of which will be made publicly available.

Part 2: Three Stages of the Pilot's work and Local Focus Areas

4.0 Aberdeenshire Pilot Stage 1

- 4.1 Full details of the work carried out during Stage 1 of the Pilot can be found in the [Stage 1 report](#), produced in December 2013.
- 4.2 The aim of Stage 1 was to gather a baseline of information of relevance to land use change. This information could then be used in the subsequent stages of the Pilot. Two types of information were gathered: firstly, information on the natural assets (ecosystem services – see 4.4 to 4.6) of the Pilot region, and secondly, policy information **of relevance to land use**.
- 4.3 As suggested in the specification, **spatial mapping and analysis was to be a key element** of the Pilot. Thus, the information collected during Stage 1 needed to be in a mappable format.
- 4.4 The Pilots were tasked with taking an ecosystem approach to their work - this necessitates the mapping of 'ecosystem services'. The direct mapping of ecosystem services was found to be challenging, with many services having poor or no data coverage in Aberdeenshire. In common with other projects with similar mapping aims, the Pilot has found 'cultural' and 'regulating' services harder to map than 'provisioning' services. In some cases, the need to map at the regional scale limited available datasets - one notable example being baseline habitat data, for which Aberdeenshire Council has a very detailed dataset, but one that does not provide full coverage of the region.
- 4.5 The data layers gathered in Stage 1 are variable in both geographic scale and time scale - an obvious split being those which provide a snapshot of actual delivery (for example crop land, grazing land and hydropower generation) and those which describe potential delivery (such as land capability or wind power capability).
- 4.6 Given the lack of data available on ecosystem services and variability in that which was collected, it was decided to call this dataset '**natural assets**' rather than ecosystem services.
- 4.7 Baseline mapping of relevant policy was the second element of Stage 1. To fully spatially map key policies was, in a number of cases, difficult. For example, directly mapping national targets for renewable electricity generation or woodland expansion is not possible. Sticking to elements strictly defined as 'policy' may also be limiting and may miss key drivers and issues. It was decided in this initial stage, that the Pilot should focus on those policies, or elements derived from policy, that were capable of being spatially mapped at the regional scale.
- 4.8 During Stage 1, fifty layers of GIS information were collected on natural assets and policy.
- 4.9 The process taken, and baseline generated, during Stage 1 were reviewed at a stakeholder workshop on 7th November 2013. A full report of the workshop is available on the Pilot's webpage [here](#). Participants identified data gaps, **notably**

socio-economic data, encouraged a greater consideration of trends and changes over time, and suggested wider stakeholder engagement in the short term.

- 4.10 The Pilot's specification left the option open for a more local focus as well as the required regional work. During Stage 1, two Local Focus Area (LFA's) for the Pilot were chosen: the upper Dee and the area around Huntly. Within these, the James Hutton Institute carried out engagement exercises on land use change. Section 7 describes that work.
- 4.11 A further activity during this stage was the setting up of the [Pilot's webpage](#). This was hosted on the Aberdeenshire Council website. It briefly describes the project, providing contact details for the project staff and contains PDF downloads of all major reports produced during the project.
- 4.12 Webpage viewing statistics indicate an average of thirty unique user visits per week. It is felt that those visiting the webpage had 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.

5.0 Stage 2 – Constraints and Opportunities

- 5.1 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](#) on the Pilot's webpage.
- 5.2 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
- 5.3 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 pursuing these policies in particular ways and proposing methodologies which could aid in future planning.
- 5.4 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. Focussing on certain issues and not others was controversial with stakeholders, as comments received at the Stage 2 workshop (see Section 5.7) show.
- 5.5 The Pilot created six policy based questions, two under 'The low carbon economy' and one under each of the subsequent four themes. In answering four of the six questions - relating to woodland expansion, agricultural change, habitat networks

and recreational access - the Pilot developed a GIS based opportunity and constraint mapping process, and also used ecosystem service modelling tools. The remaining two questions - one on drinking water, one on renewable energy - were answered using data and outputs from others working in the James Hutton Institute and Aberdeenshire Council.

5.6 The themes and questions **were worked into the two local focus area workshops** held in late Spring 2014.

5.7 The process taken and outputs created during Stage 2 were reviewed at a stakeholder workshop on 6th May 2014. A full report of the workshop is available [here](#) on the Pilots webpage. Comments made by attendees included:

- the Pilot had only created a partial picture of the issues influencing land use change decision making in the region;
- there was an overly strong woodland focus in the work;
- cautioning against the creation of complex final outputs; and;
- suggestions that a national prioritisation exercise should precede any regional analysis of the type the Pilot is carrying out.

6.0 Stage 3 – Production of a Framework

6.1 The focussing of the Pilot's work in Stage 2 was seen as necessary. However, it was recognised as falling short of the requirements of the specification which asked for an all-encompassing exploration. Stage 3, the final stage of the Pilot, asked for the production of a framework which would aid land use change decision making; one which allowed better realisation of policy objectives, reduced conflicts and maximised complementarities. In doing this, the Pilot had to build on the work of Stage 1, and particularly, Stage 2. Thus given the partial picture generated in these stages, the creation of a single, all encompassing, land use change framework was not possible.

6.2 Despite the difficulties encountered and limitations in the scope of the analysis, 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. Such outputs could promote the more integrated, holistic approach championed by the LUS. It was also felt that the **outputs created could provide a strong foundation for subsequent work in the region.**

6.3 The initial proposal for the main 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** not only 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.

6.4 The Board approved the production of the web-based tool, but asked for a second output – **a report providing an overview of 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 picture.

Both of these outputs were taken forward and are described in more detail in Sections 8 and 9.

- 6.5 Following the close of Stage 3, the Pilot held two engagement events for stakeholders. The first event was targeted at land use planning practitioners from outwith Aberdeenshire. Attendees included representatives for other local authorities, the national parks, government agencies and project such as Southern Ayrshire Biosphere. The event was an interactive session at the Scottish Environment Protection Agencies computer training suite in Perth. Attendees were given the opportunity to use the web-based tool produced by the Pilot and to provide feedback.
- 6.6 On 26th February 2015, the Pilot held a stakeholder event jointly with the Royal Society of the Arts, and with the support of Scottish Land and Estates, Confor and the National Farmers Union of Scotland. At the event, the key messages arising the Pilot and its legacy were discussed (key messages and potential legacy are described in Part 4). A report of this event has been produced by the James Hutton Institute and is available on the [Pilot's webpage](#).

7.0 Local Focus Areas

- 7.1 In addition to the regional approach required by the specification, the Pilot carried out engagement work at the local scale also. **Two local focus areas (LFAs) were selected in order to work intensively with a set of local stakeholders over one year.** The LFAs were the Upper Dee catchment from the boundary of the National Park to the headwaters, centred on Ballater; and the Huntly area, consisting of six river sub-catchments surrounding the town. More information on the LFA workshops can be found on the [Pilot's webpage](#) including the workshop reports.
- 7.2 Upper Deeside has a distinctive biophysical and socio-economic profile, dominated by large estates and almost 50% of land cover unavailable for producing food or timber. Huntly has a mosaic of forestry, grassland and arable land covers; managed by a mix of owned or tenant agricultural businesses. Both areas are influenced by their proximity to Aberdeen and occupy distinct niches in the tourism and recreation markets. Based on an analysis of climate change data, both areas showed potential for expansion in the area of prime agricultural land by 2050, raising interesting questions about how land managers might respond.
- 7.3 The LFAs were **a means of knowledge exchange** – to share scientific information and data with participants and increase their awareness of the issues; and to elicit local knowledge about the land use systems and local preferences or priorities. The aim of these 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.
- 7.4 The workshops were organised and implemented by researchers from the James Hutton Institute with participation at the workshops from Aberdeenshire Council. Other participants at the workshops represented local land users and owners (e.g., estate owners, farmers) as well as different interest organisations (e.g., Royal Society

for the Protection of Birds, Local outdoor access forum, horse riders' group, tourism association) and public bodies (e.g., Scottish Natural Heritage, Scottish Environment Protection Agency, Forestry Commission Scotland, Historic Scotland).

- 7.5 It would have been desirable to have more representation from individual land managers at the workshops, but it is difficult to engage this sector in such an abstract planning process, particularly when competing with meetings on specific aspects of Common Agricultural Policy reform.
- 7.6 Three workshops were held in each of the two LFA's. The workshops corresponded with the three stages of the Pilot:
- The first focussed on the ecosystem services and benefits which local stakeholders felt their areas provided, as well as on factors which influence decision making about land use.
 - At the second workshop, the 5 over-arching themes and related policy questions from the regional work were explored with participants. A systems diagram representing land use changes in the two local areas, including factors which influence decisions about land use change and ecosystem services and benefits which result from land use, was presented.
 - At the third workshop participants were presented with three hypothetical future scenarios and asked to evaluate these according to a range of criteria which had been identified based on the outputs from the two previous workshops.
- 7.7 Throughout the LFA process a range of novel techniques were used to engage participants and to explore potential future land use change issues with them. Examples include a probabilistic model (called a 'Bayesian Belief Network' or BBN) of land use changes and consequent changes in ecosystem services that was developed for the second workshop, and three hypothetical future scenarios developed for evaluation at the third workshop.
- 7.8 The discussions that took place at the LFA workshops were important in informing the regional Pilot process. The local perspective provided was built into the Pilot's outputs, notably the Overview Report described in Section 9. Some of the key messages of strong relevance for the regional Pilot included:
- Ecosystem services provided a descriptive structure that was an effective means of engaging workshop participants.
 - Participants recognised and valued a large range of benefits that their local areas provide.
 - While some benefits are linked to particular locations or types of land cover many others are not, but are dependent on the landscape mosaic.
 - Benefits depend not only on land use but on other factors such as ownership, community and infrastructure which mediate people's access to benefits.
 - Whole chains of benefits are important and not just the immediate benefits derived from land use, e.g. farming is not just important because it produces food and income for the farmer, but also because it supports wider local employment as well as landscape character.

- Conflicts between the interests of rural and urban populations were often perceived, e.g. damage to crops, livestock and habitats resulting from recreation or those who feel impacted by regulations driven by urban interests.
- National or regional approaches could lead to unintended consequences or be inappropriate when they did not take into account local conditions.
- Existing policies were, at times, considered to be conflicting.
- Participants were in favour of more integrated planning approaches within their areas. However, these should take account of local need such as housing and a balanced approach to renewable energy development.
- Some models of predicted land use change were perceived as unrealistic – e.g. many questioned the extent of predicted prime land expansion.

Part 3: Pilot Outputs

8.0 Final Output 1: Web-based, interactive tool

- 8.1 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.
- 8.2 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.
- 8.3 It was felt that there was a need for those planning land use change, particularly those working at strategic level, to have a means to **assess the suitability and desirability of land use changes**. Allowing planners to explore the consequences of pursuing different policy goals was also considered 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.
- 8.4 The tool was developed by the James Hutton Institute. It is freely available to explore at: <http://rlup.hutton.ac.uk/>.
- 8.5 The main prediction the tool produces is a map showing the **suitability of each parcel of land (pixel) for woodland planting** across Aberdeenshire. Suitability is assessed based on a set of criteria. Each pixel is scored against each criteria and the scores are displayed as a colour range on the map. However, the tool is **dynamic in that the 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.
- 8.6 One option within the tool allows the user to select the pixels with the highest suitability for woodland, given the priority choices the user has selected, and display where these are – either on the base topographic map or on an aerial image. Another option allows the user to view maps of the potential change from current land use in some regulating ecosystem services (nutrient retention, sediment export and carbon stock) under the woodland expansion scenario the user has selected. For full technical details of the website, please contact Pilot staff.
- 8.7 The tool allows the user to **visualise in a relatively simple way, large amounts of data and complex calculations**. To achieve this, it was developed by producing maps of all possible combinations of the user defined weightings. When the user inputs change the weightings of the criteria, the tool calls up the relevant map and displays it. The alternative would have been for it to carry out all the calculations in real time and whilst this is possible, it was not a realistic proposition within the time frame of the project.

- 8.8 Some of the key benefits of the tool are that:
- It could help with the development of regional level objectives for the management of land.
 - It could aid identification of areas where land use change could deliver multiple benefits and where there are trade-offs.
 - It identifies the effect of land use change on key ecosystem processes such as nutrient retention and sediment export.
 - It explores how climate may affect land cover under a medium climate change scenario by 2050 prompting users to think about change and its implications.
 - It provides a framework to integrate data with different policy objectives.
- 8.9 As with many of the elements of the Pilot, the process of developing the output and peoples' reaction to it were as important and informative as the output itself. Developing the tool has highlighted a number of issues to do with knowledge, data and the technical aspects of developing such an output which are explored more fully in both the Stage 2 and 3 reports.
- 8.10 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 winter 2014/15.
- 8.11 Feedback at these events was on the whole very positive. The tool was found to be **usable and relatively straightforward**. 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 (in terms of data resolution) were communicated. Where site specific suggestions for use were made by stakeholders, the limitations of the tool were further emphasised.
- 8.12 A range of questions and concerns were raised about the data used and those issues the tool didn't encompass. There were a number of suggestions that it should look at commercial woodland (the tool currently considers native broadleaf woodland) 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. A greater consideration of landscape character and biodiversity issues was also encouraged. It was widely felt that the tool was not yet 'ready' for real world use.
- 8.13 The tool is a **working prototype**. It is important to remember that the aim was not to produce an agreed vision of land use change. 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 the analysis process need further stakeholder input and validation before any real world use. However, despite the range of issues and difficulties, the tool has largely overcome the challenge of creating something useful, usable and relatively straightforward from a broad range of data and a complex subject area.

9.0 Final Output 2: Overview report

- 9.1 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 land use change issues for the region, drawing on the work of the Pilot, as well as comments and input from stakeholders throughout the process.
- 9.2 As requested by the Project Board, the report fills in some of the gaps in the Pilot's work, presenting 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.
- 9.3 The resultant report is 29 pages long and 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 methods used and consultations carried out during the project. Part 2 contains five policy themed sections, reflecting those used in Stage 2 of the Pilot. 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 introduces 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 nationally.
- 9.4 It is hoped that the report will **help frame discussions with stakeholders about the legacy of the Pilot** for Aberdeenshire. The suggested actions it contains indicate a path 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 and action. 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 better takes account of, and protects long term, the goods and services provided to all sectors of society by the natural environment.*

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.*

- 9.5 The report was sent out to 50 Pilot stakeholders for feedback in November 2014. 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 keep the report relatively short, made this difficult. It was clear that to give a broad but concise overview of the issues was challenging: there were so many elements to consider, that demands for greater depth were inevitable.
- 9.6 The Pilot chose not only to provide an overview in the report, but also to summarise its work and suggest actions to take forward. Perhaps this was overly ambitious for a short document. However, there was a desire to create something to aid discussion of the Pilot's legacy for the region, hence the inclusion of suggested actions. In consulting, a number of concerns raised 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 the actions forward. The ability of a local authority to strongly influence rural land use change issues was included in these uncertainties.
- 9.7 The report reflects a common conundrum for the Pilot – **how to encompass all issues and perspectives of relevance in a manageable and accessible way**. The final version of the [report](#), along with a [short summary](#), is available on the Pilot's webpage.

10.0 Final Output 3: Exploration and implementation of an Ecosystems Approach

- 10.1 One of the key requirements of the Pilots was that they should take an ecosystems approach in their work. Further details from an ecosystems approach can be found in the Scottish Government Information note '[Applying an ecosystem approach to land use](#)'.
- 10.2 The partnership with the James Hutton Institute meant that the Pilot was contributing to the national research programme into the ecosystems approach, funded by Scottish Government. A fuller analysis of the integration of an ecosystems approach into the Pilot, the benefits, the challenges and the lessons learned will be produced by the James Hutton Institute in summer 2015. What follows in this section is a short summary of activities and issues.
- 10.3 In relation to the Pilot's remit, **an ecosystems approach requires a broad consideration of the benefits society derives from nature**, i.e. ecosystem services, within appropriate land use planning and decision making processes. Issues should not be considered in isolation but holistically. It requires extensive stakeholder involvement in the processes. These requirements became central elements and goals of the Pilot.

- 10.4 The data gathering, analysis and tool development aimed to adequately represent and take account of ecosystem services. As section 4.4 describes, gathering and mapping data on ecosystem services across the region was challenging. **The partial picture that emerged had knock-on effects on the development of outputs** - the Pilot could only account for certain ecosystem services in the web-based tool, for example.
- 10.5 The work of the Pilot on ecosystem services indicates that it is a complex and developing subject area. It **provides a useful framework to better understand how society is reliant on the natural environment**. It is likely that, in time, it could be usefully integrated into land use decision making processes in Aberdeenshire, as a fuller understanding of service delivery in the region emerges.
- 10.6 Stakeholder viewpoints on ecosystem services have been mixed. Within the LFA's it provided an effective means of encouraging discussions on the local environment. However, stakeholders across the Pilot were worried about the complexity of the subject as well as its anthropocentric nature. They were often split on seeing it as valuable tool to increase nature's status in decision making versus an unnecessary re-invention of the wheel. There is certainly more work to be done to communicate the value of considering ecosystem services. The debate **needs to include more actors than the core community of researchers and practitioners** with current, direct involvement.
- 10.7 Overall, an ecosystems approach was found to be a useful means of guiding the project. An ecosystem approach requires levels of understanding, involvement and coordination that the Pilot has tried to build towards but would certainly not claim to have fully achieved. It is suggested that this would be very challenging for any project or process. It would require a fuller understanding of the functioning of ecosystems and more extensive involvement of communities and people in decision making. Thus, **the journey taken in trying to achieve the approach is perhaps its greatest value currently**. Further consideration in all relevant rural land use planning process would be likely to bring benefits and improvements.

11.0 Final Output 4: Strategic Environmental Assessment

- 11.1 The Pilot carried out a Strategic Environmental Assessment (SEA) of its work and outputs. In the early stages of the Pilot, there were some reservations about the relevance of SEA in this context. The project was an iterative process that 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 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.
- 11.2 SEA has certain procedural requirements, and the work required needed to be proportionate to that which was 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 and innovative nature of the Pilot meant it was difficult to progress the SEA in the early stages – the outputs were

uncertain. As the Pilot moved into its final Stage, the SEA was progressed at greater pace and a means of aligning the two processes was found.

- 11.3 The statutory SEA consultation authorities were consulted at various points throughout the process. This allowed the Pilot to gain a greater understand of their needs but also for them to understand the nature of the project and the approach proposed for the Environmental Report.
- 11.4 The draft Environmental Report for the SEA was sent to the consultation authorities and put on public display in mid-December 2014 for a period of 9 weeks. A Habitats Risk Assessment was included. Prior engagement with the consultation authorities meant that they were largely content with the report. It was suggested that the historic environment be better represented in the report and a commitment to better encompass it in future work was included as mitigation.
- 11.5 Following consultation, the [Environmental Report](#) was subsequently revised and a final version produced along with a [Post Adoption Statement](#) and a revised [Habitats Risk Assessment](#). These documents are available on the Pilot's webpage at the hyperlinks provided. An Equalities Impact Assessment was also produced.

Part 4: Benefits, lessons learned and conclusions

12.0 Benefits and legacy

- 12.1 In essence, the aim of the Pilot was to foster a more integrated and holistic approach to rural land use change decision making in Aberdeenshire. Even before the Pilot began, it was clear that **those elements which influence decisions about rural land are multiple, complex and take time to change**. Inevitably therefore, the impact of the Pilot's work on such decision making processes are difficult to judge at its close.
- 12.2 The Pilot was an iterative, developmental piece of work. Creating measures of success in the early stages was difficult. Delivering the programme of work, creating useful outputs, clear communication of progress and process, and engaging stakeholders were the success measures seen as most significant. Measured against these criteria, those involved in the Pilot feel it has achieved a significant amount, and that a number of tangible benefits have been derived from the process.
- 12.3 Two of the Pilot's main outputs, the web-based tool and the Overview Report, certainly have potential to further the debate and increase the likelihood of 'buy-in' to a more integrated planning approach. Undoubtedly both outputs are start-points rather than end-points. Their aim is to increase understanding, and to encourage further dialogue and involvement on how the approach might further develop in Aberdeenshire. The positive response to both outputs, and the willingness from stakeholders to continue engagement suggests they have a strong potential to do this. It is clear that further steps will need directed effort and time. Ultimately their impact needs to be judged against their ability to facilitate a wider consideration of issues in land use change decision making yielding greater benefits for society and the environment.

Benefits to stakeholders/participants

- 12.4 Throughout the process, there has been a wide range of stakeholders and participants involved. Overall **the response has been extremely positive**. The majority saw benefit in the discussions facilitated by the Pilot and welcomed the forum it provided.
- 12.5 There was a strong feeling that a holistic, integrated approach was not being adequately addressed at present. Significantly, there was overwhelming support for such an approach. Although it is likely that there would be disagreement on the nature and scope of any future process, there is certainly a willingness to consider it and a validation that this is required in some form. The majority of stakeholders expressed interest in further involvement beyond the close of the project.
- 12.6 Repeated attendance by a number of participants at LFA workshops showed their willingness to invest time and effort in a processes about how land could and should be used in the future. However, the abstract nature of the LFA's, and the fact that they were not premised as consultation on a particular policy with direct impacts on the local area, may have put some participants off. Numbers attending did reduce over time. Notwithstanding this, the Pilot concludes that there is certainly an appetite for involvement in strategic land use planning from those that attended.

- 12.7 One of the benefits participants identified by LFA participants was **the opportunity to talk to a range of stakeholders from different sectors** and share ideas. The LFA workshop evaluation results suggest that the majority of participants had increased their knowledge about the multiple issues related to land use, and had more understanding of potential changes in the future as a result of these discussions and the provision of scientific data. However, participants would have liked more information about how their ideas and views would be used in future policy making and implementation. The lack of a defined pathway from these activities into future policy processes, including the revision of the LUS, was a drawback to the pilot.

Benefits to Aberdeenshire Council

- 12.8 The Pilot gave Aberdeenshire Council a direct, lead role in an area where it has traditionally had little statutory remit: rural land use. Undoubtedly, statutory planning process, flood risk management, the creation of Forestry and Woodland Strategies and the hosting of groups such as the North East Scotland Agricultural Advisory Group were pre-existing activities of relevance. However, this degree of involvement in areas where it had no formal mandate, was new.
- 12.9 Involvement has afforded the Local Authority **greater insight into both the issues and opportunities of an integrated approach**. Its understanding should be to the benefit of the people it serves. Certainly many of the pre-existing duties could stand to benefit from involvement, as described in the proposed legacy activities below.
- 12.10 It is also suggested that there are benefits, both to the process itself and also the Local Authority, of being in the position of facilitator. The opportunity and ability to perform this role, in addition to the possession of a democratic mandate provided by the Council, were reasons for giving Local Authorities lead roles within the Pilots. It is true that few parties within such a process would be viewed as fully neutral by all participants – all have roles, aims, goals and constraints. However, in Aberdeenshire the Local Authority had least direct interest in rural land use issues and was able to foster good-will from participants. There is no obvious alternative body to fulfil the exact role demanded by the Pilot specification in the region.
- 12.11 There are also reputational benefits to the Local Authority of being seen as an advocate for progressive change, both within Aberdeenshire but also on a wider stage.
- 12.12 The opportunity for Elected Members of the Council to engage with the process has been welcomed and beneficial for the Pilot. It is hoped that the Pilot has raised awareness of rural land use planning issues with Members and that this will have relevance for Council decision making and policy setting.

Benefits to the James Hutton Institute

- 12.13 The Pilot fostered a **profitable relationship between Local Authority planners and land use researchers** and has led to innovations in methods and more directly relevant policy related research. Partnerships between research and end users that address issues over policy implementation are invaluable so as to ensure **public money spent on research has impact**. In contributing to the Pilot, James Hutton Institute were also able to further work on the national research programme on ecosystem services for which they are funded by Scottish Government.

- 12.14 It is felt that the project has achieved a great deal in the two years it has been running (less than two years operational time) but it is recognised that there is a need to **build on this through continued engagement over the foreseeable future** if the approach is to be developed and refined.

Legacy activities

- 12.15 As described above, it was difficult to measure the legacy of the Pilot at the point of close-down. Indeed, independent evaluation of both Pilots will continue for a year after close-down, to gather information on their impact and legacy. Those involved do consider the work as a starting point and agree that it should continue. The exact nature of any future approach is **dependent on recommendations contained within the revised LUS**, expected to be available in spring 2016. In the meantime, Aberdeenshire Council proposes to take forward a range of activities which build on the Pilot's work.
- 12.16 These will include the development of a new Forestry and Woodland Strategy for the region. Much of the Pilot's work is highly relevant to the creation of a new strategy, and the broad overview of land use issues, coupled with the tools developed by the Pilot, will aid its production. There will also be an exploration of how the approach developed by the Pilot might influence statutory planning processes, notably Local and Strategic Development Planning.
- 12.17 In advance of the revised Land Use Strategy (LUS2), there will be an exploration of the need for, and willingness to input into, a regional land use forum for the region. This, coupled with the LUS2 recommendations, will help shape the future approach in Aberdeenshire.
- 12.18 These activities align with the recommended actions contained in the Overview Report. As described, to a certain extent the future approach is dependent on LUS2. However, it is hoped that the legacy work will encourage further stakeholder involvement in the short term. The direction taken regionally can be strongly shaped by the collective will of those who get involved.

13.0 Key Issues and Lessons Learned

- 13.1 This section presents some of the key issues encountered and lessons learned by Aberdeenshire Council and the James Hutton Institute during the Pilot process. It is hoped that these messages can be informative for Scottish Government in developing LUS2 as well as being of interest to any parties planning or carrying out a similar process to that the Pilot undertook.

Set up strong partnerships with those who have relevant expertise

- 13.2 During early project planning stages, it was recognised that the scientific, stakeholder engagement and GIS expertise that the James Hutton Institute could provide to the Pilot could be beneficial. This relationship could have been a client (Aberdeenshire Council) – contractor (the James Hutton Institute) type arrangement. However, given both the James Hutton Institutes expertise and pre-existing engagement in a national ecosystem services research programme, the Pilot was progressed as a collaborative working arrangement between the two parties.

- 13.3 Much was gained from the arrangement. In particular, Aberdeenshire Council could not have delivered the required scientific and GIS input from internal resources. Further staff appointments would have been required or external contract(s) created, which would have been time consuming and more costly than the arrangement agreed. The Pilot also benefitted from work ongoing with the James Hutton Institute as part of Scottish Government's research programme. James Hutton Institute benefitted in partaking as co-deliverers of the project, as well as through the work feeding back into their own research.
- 13.4 Given their extensive input, all members of the Project Board (see Appendix 1) were seen as partners in delivery. They dedicated a considerable amount of time to the process and their involvement was invaluable. It is hoped that this diversity within the central management of the Pilot has afforded it some legitimacy with a wide audience and will continue to do so.

Define goals & main issues first, then gather and map data

- 13.5 The first step of the Pilot, as defined by the specification, was to gather and map data of relevance to land use in the region. This was certainly a useful exercise and set a baseline for the Pilot. It also aided production of the SEA and is likely to be a resource for Aberdeenshire Council to draw on in future. However, it was a time consuming process and in the end, much of the data gathered was not used during subsequent stages.
- 13.6 On reflection, it is suggested that an initial identification of the key land use change issues and a scoping of the goals and capacity of the Pilot would have resulted in a more focussed approach to the gathering and mapping of data.
- 13.7 A point made by stakeholders was that the baseline of data generated for the Pilot essentially represented a static picture, a snap-shot in time. Of greater benefit, they argued, would have been to focus on trends and change over time. The Pilot would then have been in a better position to reflect and respond to the significant issues.
- 13.8 As identified, this initial data gathering step was a requirement of the specification. It is worth considering how useful it was to have a tightly defined spec for what was to be an innovation. Arguably, it limited potential creativity in terms of delivery of the overall goal. However, on balance it was felt to be beneficial, particularly given the potential complexity of aligning rural land use and the novel remit identified for a Local Authority. The **specification made the project more manageable and less daunting**. It allowed the project to 'hit the ground running' once staff resource and working partnerships were in place, reducing initial planning.
- 13.9 Of note in relation to data and mapping was the **lack of complete habitat survey data across the Aberdeenshire region**. Aberdeenshire Council currently has detailed information available for approximately one third of the region. Complete coverage is only available from Countryside Survey's Land Cover Map 2007, which identifies a lesser detailed level of habitat data. Had a complete habitat survey dataset to Phase 1 level or beyond been available, this could have been of significant benefit in the mapping of ecosystem services and improving the accuracy of tools and outputs.

Acknowledge complexity, take care if focussing activity

- 13.10 Undoubtedly any attempt to take a more holistic approach to the planning of rural land use change will be complex. There are a large number of issues to consider, legislation to reflect and viewpoints to gather. Working across large geographic areas multiplies the issues. A desire to utilise emerging techniques and knowledge on ecosystem services further adds to this complexity. Indeed, part of the rationale for creating the Pilots was this complexity and the need to navigate a path through it.
- 13.11 The complexity of the topic needed to be acknowledged by the Pilot. It resulted in a delicate balancing act and the key challenge for the whole process – **trying to encompass and describe the complexity while creating both useful and useable outputs** for a broad range of stakeholders. Refining outputs based on consultation with stakeholders was an important part of their creation. This is a process that is not yet finished, with further discussion and work required on the Pilot’s main outputs before any real world decision making use.
- 13.12 Fostering an integrated approach to rural land use planning is not easy. The Pilot has highlighted that there are trade-offs between doing things quickly and in creating aids which accurately represent the complexities of the real world. Despite this, the Pilot showed it was possible to develop outputs that could encourage more sustainable decision making in the face of environmental change. Feedback from the Local Focus Areas suggested that participants understood and respected the difficulties with a more integrated approach, but were very supportive of trying to progress it.
- 13.13 One of the responses of the Pilot to complexity was to focus its work on certain topics and issues. As previously described, this was considered necessary by Aberdeenshire Council and the James Hutton Institute in order to deliver the project. It was a factor not only of time and resource, but also available knowledge and data.
- 13.14 The choice to focus on certain issues became a key area of comment and concern with stakeholders. Many individuals and groups wanted certain issues to be given greater consideration. The Pilot was criticised by others for not trying to produce the fully holistic planning approach many were expecting from the process. In managing this, the Pilot’s work was described as a step on the journey towards the goals of the LUS, and it was acknowledged that further dialogue and work would need to take place within Aberdeenshire to further progress these goals.
- 13.15 With hindsight, stakeholders should have been involved to a greater extent in decisions taken to focus work. These decisions were based on what Aberdeenshire Council and James Hutton Institute thought were key issues but also what they considered to be deliverable. Both the Project Board and attendees at the Pilot’s Stage 1 workshop approved a focussing of the work under five broad themes. However, input into the selection of specific issues to be explored may have been preferred.
- 13.16 The most significant result of the complexity and the choice to focus, in terms of delivering the specification, was that no overarching framework for rural land use change was delivered by the Pilot. Aids to decision making were created, but these did not encompass every issue of relevance. The extent to which it is possible to do

every relevant issue justice in such a framework is still open to debate in Aberdeenshire. Some key questions remain:

- How could it be made both useable and accurate?
- Could it achieve legitimacy with all stakeholders?

If stakeholders were to seek such a framework for the region, further work and time would certainly be required to develop it.

There are a diversity of perceptions, viewpoints and sectoral interests

- 13.17 As described, the Pilot enjoyed extensive good-will from stakeholders and there was a general welcoming of its goals. The diversity of involvement in the process has highlighted the huge diversity of perceptions, viewpoints and interests in relation to rural land use and the actors involved, across the region. Although this is certainly not an unexpected finding, it is hoped that the forum the Pilot provided has increased understanding and awareness of this diversity. **It is also hoped that there is greater understanding and interest in the joined up approach the Pilot promotes and the fact that compromise will be needed to achieve multiple benefits.** Time will tell if these hopes are realised, but they would certainly need to be supported by a level of institutional and societal change.
- 13.18 There are further barriers to address in the complex interplay of land use, environment and individual/societal benefit. The Pilot has reinforced the point that many rural land use issues are considered in isolation or at least sectorally. Legislation and policy can serve to emphasise divisions, rather than reconcile sectoral goals.
- 13.19 An issue to emerge at various points throughout the project has been that of **private versus public interest and how to reconcile the two**. That is not to say there are not perceived conflicts been a variety of interest considered 'public', such as conservation versus recreation or habitat connectivity versus the spread of invasive species.
- 13.20 However, many of the issues the Pilot explored involved, to a greater or lesser extent, trade-offs between land managers and the benefits to the wider public/society. Environmental pollution, renewable energy generation, public access, biodiversity conservation, flood risk management and carbon emissions are examples where private and public interests can be seen to be at odds. These issues, and others, result in strong feelings from stakeholders and can be a source of disagreement and conflict. However, the LFA process also showed that land managers take their stewardship and moral roles seriously (see 13.23) indicating this is far from and insurmountable issue.
- 13.21 As noted in Section 7, LFA participants were able to articulate very complex interactions regarding land use, land management and ecosystem services but it was impossible to include all these in final outputs. The knowledge was useful - it often provided fresh insights into the trade-offs or synergies in the local area. The forum provided in the LFA's highlighted the value in supporting local level deliberation as part of a healthy democracy. However, knowledge is not neutral and can be deployed to advance specific interests or views on the world. Therefore, local knowledge is not a simple method to fill gaps in scientific knowledge. It adds

richness but also complexity, as it can raise new dimensions to the problem and/or contradict established scientific data about environmental processes.

- 13.22 It was clear from the LFA's that there was support for planning for public benefit. Although participants were often thinking of their own, or their organisation's specific objectives for land use, the discussion was often focussed on what would be best for the area - or Scotland - even if it was not ideal for them. It is, of course, unclear if such altruism would be expressed in practice, but **the desire to plan for the 'greater good' was strong**. There was a strong moral dimension to discussions – exploring what was 'fair' and 'stewardship' of the land was often mentioned as a significant driver of decisions.
- 13.23 The Pilot sought to create processes and outputs which were mutually acceptable to stakeholders and which aimed to maximise the multiple benefits that can be achieved with land use change. The test for these outputs and the Pilot process overall will be if and when they influence decision making on the ground. The Pilot was always careful to point out that it was an exploratory process – no set plan for the future would be created within its lifespan. If and when the Pilot outputs influence policy, planning and funding mechanisms, the extent to which the good-will would remain is unclear.
- Consultation at both the local and regional level greatly benefitted the process***
- 13.24 Consultation in a broad diversity of forms was an essential element of the Pilot. It was a time consuming and resource intensive exercise that needed to be planned with care. A twin-track approach to consultation was instigated with work at both the regional level and in the two LFA's.
- 13.25 Aberdeenshire Council and the James Hutton Institute feel they achieved an appropriate balance between the need to consult extensively and the demands of doing so. Much was gained, both in terms of shaping the Pilot process and outputs but also in terms of good-will, through the consultations undertaken. Clearly consultation is a two-way process and, both at the local and regional scales, the Pilot greatly benefitted from stakeholder input. Many busy people gave their time to the process and a balance had to be struck between gaining their input and potential 'stakeholder fatigue'.
- 13.26 Despite the efforts put into consultation, undoubtedly important perspectives and voices in the debate have been missed because some stakeholders did not have the time or resources necessary to become involved. Considerable resources have yielded only a very small proportion of views that will exist throughout Aberdeenshire communities.
- 13.27 In the early phases of the work, the Pilot presented a broad outline of its work to a wide range of audiences. However, once this initial contact had been made, it was some time before the Pilot felt it had a significant number of 'new' things to say. The work needed to progress before the nature of the final outputs became clear due to the iterative nature of the work. As such, engagement during Stages 1 and 2 of the Pilot was more limited (the exception being the workshops held at this time). This quieter phase may have been the root cause of calls for greater engagement at this time.

- 13.28 An area where improvements could have been made in relation to consultation was a fuller integration of the thoughts and messages coming out of the Local Focus Area workshops into the regional Pilot process. With hindsight, the relationship between the LFA's and the regional work was too ad hoc, the links should have been explicit from the outset. The Pilot certainly gained much from the LFA's, it was a chance to discuss local perspective and explore issues on the ground. Attendance by Pilot staff at the LFA events shaped the Pilot's outputs. However, a more structured feedback would have been desirable. This situation partly arose as the Pilot adopted a piece of work on-going with the James Hutton Institute as part of Scottish Government National Research programme on ecosystem services.
- 13.29 The lack of a structured relationship between the local and regional process may have partly fuelled perceptions that the Aberdeenshire Pilot has been predominately a top-down project with the regional Project Board and Pilot staff steering the process and outputs. However, it is argued that the Project Board itself is representative of a broad diversity of views (see membership in Appendix 1) from national, regional to local level and across sectors and interests. Also, the various engagement exercises, workshops, meetings, written consultations on outputs, including those on the LFA's, all shaped the Pilot extensively. Consultation with elected members of the Council meant a broad diversity of local views were included. Making these influences more explicit may have avoided this perception.

Is a regional planning scale appropriate and workable?

- 13.30 Issues around geographic scale were numerous within the process. The Pilot did not explicitly set out to identify which scale was most appropriate for rural land planning. It was tasked with exploring and implementing a regional approach with the option to look locally also.
- 13.31 What has emerged is that there are many different scale options, including local/community, parish, river catchment, district, region, national and beyond. Indeed, a combination of scales could be appropriate across the issues with some level of local/community involvement and planning likely to be essential.
- 13.32 The regional scale asked of the Pilots has benefits in terms of administration and, assuming a degree of consensus, seems likely to offer an appropriate scale to set goals and targets. The Pilot has also demonstrated that tools and information can be created at this scale as aids to decision making. Indeed, as the Pilot predominately used available data and knowledge, creating outputs such as the web-based tool for field scale application may not have been possible for the whole of Aberdeenshire. However, it is also the case that a regional approach requires consideration of a broad range of issues and necessitates a summarising of detail that can reduce confidence in any on-the-ground application.
- 13.33 A clear message from the LFA's was that an iterative and multi-scale approach to land use planning is essential – one which takes a long-term view. It was strongly felt that local level knowledge was required to tailor policies designed to influence land use and land management. It was also highlighted that individuals needed to better understand how their choices affect, and are affected by, the state of our natural resources. A consistent point was that **land use was not only about environmental issues but social and economic ones also**. It was also clear that

individual choices were influenced by international, UK and Scottish level drivers of change, including market and policy signals.

There is strong support for more integrated, holistic rural land use planning

13.34 The Pilot found **over-whelming support for a more integrated and holistic approach to rural land use planning** as is highlighted at various points above. Although many stakeholders acknowledged the difficulty of creating and implementing such an approach, the majority supported its consideration and saw a range of potential benefits from its implementation.

13.35 However, the Pilot has not produced a consensus on the means of developing and implementing a more integrated approach or the issues it should encompass. As described, the Pilot benefitted from extensive stakeholder input and good-will. However, attitudes to the process may well have been different if policy changes were being proposed and on-the-ground decisions were being made. The diversity of interests and views noted by the Pilot were certainly extensive.

13.36 One of the suggestions made by the Pilot, was that an approach at the catchment level shows promise. However, as picked up by stakeholders, through the existing work of SEPA and partners in the Water Framework Directive process, it is perhaps the existing mechanism with greatest potential to deliver LUS requirements in relation to rural land use. Thus its identification may be as much to do with it being ‘the only show in town’ as it being the most suitable vehicle.

13.37 Stakeholders did give the impression, arguably more at the regional than local level, of a lack of appetite for complete re-invention in relation to rural land use planning. Perhaps this stems less from a rejection of the need for change, and more from a sense of apprehension of what it might bring. Stakeholders did emphasise that planning and policy setting needed to take a longer term approach than was currently common. On that basis, ‘evolution rather than revolution’ would appear the more acceptable approach. In addition, in a time of squeezed budgets and staff resource, the ability of public bodies to deliver an entirely new approach is questionable.

13.38 Notwithstanding the lack of appetite and willingness for extensive change, there were a number of voices saying this was exactly what was required. For example, they highlighted the unsustainable nature of our resource use (which had to be considered in the global context) or that those objecting to extensive change currently monopolised the benefits of rural land use.

Is a Local Authority based placed to deliver improved rural land use planning?

13.39 The Pilots were not explicitly set up to answer whether a Local Authority was best place to deliver. It is a question that, in many respects, is for others to judge. Paragraphs 12.8 to 12.11 set out a number of issues worthy of consideration in this respect.

13.40 Delivery of the Pilots themselves by Local Authorities is suggested to have been a pragmatic choice. There are few other relevant bodies who are perceived as being more neutral relation to rural land use and who have the same democratic accountability. Aberdeenshire Council has welcomed and benefitted from the opportunity.

- 13.41 The Pilot would like to voice a note of caution in relation to an over-reliance on Local Authorities in this respect however. Shrinking budgets and staff resource would present severe challenges in relation to the delivery of new duties and processes. However, emphasising both the organisational and societal benefits of a revised approach could help to 'sell' it.
- 13.42 Any revised approach needs extensive involvement from a wide range of stakeholders and, importantly, strong government support, to have the greatest chance of success. Hopefully such involvement and support can coalesce around LUS2.

14.0 Conclusion

- 14.1 The Regional Land Use Strategy Pilots were provided with a challenging specification in recognition of the complexity and challenges, but also the considerable opportunities, of rural land use planning. Aberdeenshire Council and the James Hutton Institute rose to the challenge of delivering the Aberdeenshire Pilot and have gained significantly as a result. With the extensive and generous input of a wide range of stakeholders, groups and organisations, valuable and progressive work has been completed.
- 14.2 A number of potentially beneficial aids to land use change decision making have been created, including an Overview Report of land use change in the region and a web-based interactive tool. The forum and focus the Pilot has provided to discuss and explore rural land use has been widely welcomed by those who participated. Many contacts between stakeholders have been made or reinforced, providing a network that can be built on.
- 14.3 The majority of stakeholders see the need for a more holistic, integrated approach to rural land use planning in the region. It is clear that to achieve this, further work is required, building on that which has been achieved. The exact nature and direction of that work is in part dependent on the recommendations contained in the revised Land Use Strategy. However, it is also within the gift of stakeholders within Aberdeenshire to collectively shape the future of the approach. Further input is welcomed and encouraged.

15.0 Thanks

- 15.1 The Pilot wishes to thank Scottish Government for the opportunity to carry out the Pilot and for their support in doing so. Aberdeenshire Council and the James Hutton Institute are thanked for their willingness to be involved and for the time and space they allowed staff so as to deliver the project.
- 15.2 The Pilot is greatly indebted to all members of its Project Board who gave considerable time and effort to the process and shaped it extensively.
- 15.3 Workshop participants and consultation respondents, including those in the Pilot's two Local Focus Areas in the upper Dee and around Huntly, are thanked for their good natured debate, their pertinent questions and their constructive criticism.

15.4 The Pilot would also like to thank Scottish Borders Council, Tweed Forum and Dundee University staff involved in the delivery of the Scottish Borders Land Use Strategy Pilot for their strong support and understanding in issues of mutual interest.

Appendix 1: Members of Project Board and staffing resource

Project Board – at close on 31st March 2015

Robert Gray (Chair)	Aberdeenshire Council
Maureen Corley	Aberdeenshire Council
Jamie Farquhar	Confor
Lorna Paterson	National Farmers Union of Scotland
Andrew Midgley	Scottish Land and Estates
Gina Ford	Scottish Enterprise
Hamish Trench	Cairngorms National Park
Sally Thomas	Scottish Government
Vicki Swales	Scottish Environment Link
Gavin Clark	Scottish Natural Heritage
Jim Dewar	Forestry Commission Scotland

Other Project Board members during project

Neil Langhorn	Scottish Government
Zoe Kemp	Scottish Government
Scott Petrie	Scottish Land and Estates

Aberdeenshire Council Pilot staff

Irina Birnie	Project Manager	0.3FTE, March 2013 to March 2015
James Davidson	Project Officer	1FTE, July 2013 to March 2015

James Hutton Institute main contributors

Justin Irvine	James Hutton Institute Project Lead
Alessandro Gimona	
Andrea Baggio	
David Donnelly	
Kirsty Blackstock	
Anja Byg	
Inge Aalders	
Sarah Dunn	
James Sample	

Appendix 2: Aberdeenshire Land Use Strategy Pilot Reports

Set-up workshop report

- [Joint James Hutton Institute and Aberdeenshire Council workshop in Banchory June 2013](#)

Stage reports

- [Stage 1 stakeholder workshop November 2013](#)
- [Stage 1 report December 2013](#)
- [Stage 2 stakeholder workshop May 2014](#)
- [Stage 2 report July 2014](#)
- [Stage 3 report December 2014](#)

Local Focus Area reports

- [Upper Dee first workshop report October 2013](#)
- [Huntly first workshop report January 2014](#)
- [Huntly second workshop report May 2014](#)
- [Upper Dee second workshop report June 2014](#)
- [Huntly third workshop report March 2015](#)
- [Upper Dee third workshop report March 2015](#)

Strategic Environmental Assessment

- [SEA Screening report November 2013](#)
- [SEA Determination Notice January 2014](#)
- [SEA Environmental Report March 2015](#)
- [Habitats Regulations Assessment March 2015](#)
- [SEA Post Adoption Statement March 2015](#)

Final Outputs

- [Prototype web-based decision making aid](#)
- [Overview report of Land Use Issues and Opportunities FULL](#)
- [Overview report of Land Use Issues and Opportunities SUMMARY](#)
- Final Report March 2015

Appendix 3: Selected references used to underpin the development of the outputs from the Aberdeenshire Regional Land Use Pilot

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