Ecosystem Approach Initiatives in Scotland

Sally Thomas
• Policy context
• Activities across Scotland
• Carse of Stirling project
• Land Use Strategy pilot projects
Policy Context

Vision

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

Land Use Strategy Objectives:

• Land based businesses working with nature to contribute more to Scotland’s prosperity
• Responsible stewardship of Scotland’s natural resources delivering more benefits to Scotland’s people
• Urban and rural communities better connected to the land, with more people enjoying the land and positively influencing land use
Policy Context

• Protect and restore biodiversity …
• Connect people to the natural world …
• Maximise the benefits…
Policy Context
Policy Context

Three key steps

• Consider natural systems and how they work
• Take account of the services that ecosystems provide to people
• Involve people
Activities across Scotland

Snapshot of activity across Scotland

14 project case studies presented on the Ecosystems Knowledge Network

• Drivers
• Approaches
• Tools
• Scale
Activities across Scotland

Key
1. Tweed catchment project
2. Valuing Nature Network initiative
3. SEPA Clyde project
4. CoastAdapt programme
5. Machairs project (a series of case studies)
6. Isle of Harris project
7. The Great Trossachs project
8. Ayrshire pollution project
9. Perth and Kinross initiatives
10. Midlothian project
11. Assynt-Coigach living landscapes project
12. Estates management project
13. South Lanarkshire project
14. Scottish Borders project
15. Carse of Gowrie project
16. Argyll & Bute project
17. Inner Forth project
18. UNESCO – Biosphere project
19. Climate change conversations projects
20. Stirling EA demonstration project
Activities across Scotland

Drivers
• Single focus policy driver - Climate change
• Multiple policy drivers – policy integration

Approaches
• Community based
• Research based
• Conflict resolution
Activities across Scotland

**Tools**
- Community dialogue toolkit ‘Talking about our place’, SNH
- Planning guidance
- Development of models and methodologies -
- Development of evidence

**Scale**
- Farm/management unit
- Catchment
- County
Carse of Stirling Project
Carse of Stirling Project

Project ambitions:

• Identify priority actions within the Project area to deliver improved benefits from nature in a way that integrates public policy objectives and local perspectives;

• Demonstrate the benefits of applying an ecosystems approach to land use, and a way of doing this that is practical and realistic
Carse of Stirling Project

- Agency initiated
- Consultant facilitated
- Stakeholder led
### Project elements

<table>
<thead>
<tr>
<th>Panel Meeting 1: Introduction to the project and to benefits from the land</th>
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</thead>
<tbody>
<tr>
<td>Panel Meeting 2: Mapping benefits</td>
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<tr>
<td>Panel Meeting 3: Past present and future change</td>
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<tr>
<td>Panel Meeting 4: Scenarios for the future</td>
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<tr>
<td>Panel Meeting 5: Vision and action</td>
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</table>
Carse of Stirling Project

Lessons learned:

Engagement and involvement of stakeholders

It’s about empowering communities
Carse of Stirling Project

Lessons learned:
Who benefits?

Think about the geographical and social distributions of who might win or lose.
To engage people everyone has to feel that they will benefit
Carse of Stirling Project

Lessons learned:

People understand the need to make the most of natural assets and the tensions/ trade-offs that this involves.
Carse of Stirling Project

Lessons learned:

Keep it simple
Carse of Stirling Project

Vision

The Carse of Stirling is recognised as a place that delivers a broad range of benefits in terms of the products we get from the land, the regulation of our environment, its contribution to cultural and our quality of life and its role in supporting plant and animal life. The Carse of Stirling is economically, socially and environmentally resilient, vibrant and viable.
Land Use Strategy Pilot Projects

Purpose:

To test & evaluate the practicality of preparing regional land use frameworks
Land Use Strategy Pilot Projects

Aim:

To pilot a mechanism which uses an ecosystems approach to consider existing and future land uses in a collective and integrated way, with a view to optimising the use of the land, and establishing a means to prioritise of guide decisions about possible conflicting or competing uses of land.
Land Use Strategy Pilot Projects

Objective:

To produce a regional land use framework which will facilitate the delivery of policies, strategies and objectives in relation to integrated land use by providing a framework to guide decisions about land use.
Land Use Strategy Pilot Projects

Aberdeenshire
Scottish Borders
Land Use Strategy Pilot Projects

[Map of Scotland with highlighted area]

[Image of countryside with trees and buildings]

[Image of trees with autumn leaves]

[Logo of The Scottish Government]
Land Use Strategy Pilot
Projects
Land Use Strategy Pilot Projects

Key Stages:

1. Baseline mapping
   - Policy mapping
   - Resource/asset mapping

2. Identification of constraints and opportunities

2. Production of a framework
Land Use Strategy Pilot Projects

Timescale:

Stage 1 - complete by Autumn 2013

Stage 2 - complete by Spring 2014

Stage 3 - complete by Autumn 2014
# Carbon and climate change – Soil carbon storage

**NEA Classification: Regulating Services**

<table>
<thead>
<tr>
<th>Ecosystem Service Typology</th>
<th>Significant effects</th>
<th>Data used</th>
<th>Example attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topography suitable for soil carbon accrueement</td>
<td>Slope</td>
<td>Little slope, Steep slopes</td>
<td></td>
</tr>
<tr>
<td>Vegetation cycle accrues / releases soil carbon</td>
<td>Land cover</td>
<td>Semi-natural wetlands, Semi-natural woodlands, High intensity agriculture</td>
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<tr>
<td><strong>Cultural goods:</strong> Recreation (non-motorised access)</td>
<td>Presence of significant features</td>
<td>Bathing waters, Scotland’s Great Trails, Promoted Paths, Paths around other key settlements in 5km buffer, common land, CycleRoutes, Historic Gardens_and_Designed_Landscapes (that intersect with paths), Borders Designed Landscapes (that intersect with paths), LDP Greenspace, National Scenic Areas, NNR Scotland, SWT reserves, properties in care, canoeing - river access points.</td>
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### NEA Classification: *Provisioning Services*

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<td>Recreation (Other Sporting &amp; tourism)</td>
<td>Presence of significant features</td>
<td>tourist attractions (weighted by visitor numbers)</td>
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<td></td>
<td>Can any of the classifications be scored?</td>
<td>Iconic Views</td>
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<tr>
<td></td>
<td></td>
<td>Gardens and designed landscapes</td>
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<td></td>
<td></td>
<td>Game management</td>
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<tr>
<td></td>
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<td>Rivers and Lochs</td>
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<td>Fisheries</td>
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Trees for timber (Current Timber Provision)

Legend
- SBC Area
- Gala Water
- Tweed Lowlands

Timber
- High
- Low

Current Timber Provision (Draft)
August 2013

NEA Classification: Provisioning Services

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<td>Provision of coniferous plantation</td>
<td>Habitats</td>
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<tr>
<td></td>
<td>Forestry management</td>
<td>Management</td>
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<tr>
<td></td>
<td></td>
<td>High forest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other woodlands</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other management</td>
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Land Use Strategy Pilots

- Stakeholder engagement
- SEA
- Evaluation
Strategic Research Programme – Ecosystems Theme

- Mapping the supply of Ecosystem Services
- Indicators of Ecosystem Services
- Sustainability and resilience of Ecosystem Services
- Valuation
- Development of an Ecosystem Services accounting method
- Applying the Ecosystems Approach