Agriculture and the Environment X
Delivering Multiple Benefits from Our Land:
Sustainable Development in Practice

Carse of Stirling Project

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Outline

- Background – why, where, when
- Summary of methods

What we learned:

- the practicalities and benefits
- the language and communications tools
- engaging stakeholders
Project Ambitions

- Identify priority actions
- **Demonstrate** the benefits of applying an ecosystems approach to land use
| Panel Meeting 1: Introduction to the project and to benefits from the land | Defining the project area  
Identifying current land uses  
Benefits from the land |
|---|---|
| Panel Meeting 2: Mapping benefits | Mapping benefits  
Who benefits |
| Panel Meeting 3: Past present and future change | Changes and impacts  
Developing future scenarios |
| Panel Meeting 4: Scenarios for the future | Scenario display and review by the Panel  
• Business as usual  
• Maximising food production  
• Farming and wildlife  
• Flood management  
• Carbon management  
• Sustainable communities |
| Panel Meeting 5: Vision and action | Presentation of Draft Vision and Action Plan  
Detailed feedback on Draft Action Plan  
Implementing the Action Plan  
Next steps |
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People’s interest in the area

- own or manage land
- live here
- work here
- recreation
- agency/organisation with interest in the area
- other
Flood management

- Some woodland expansion on higher ground and upper parts of the catchment – to intercept rainfall
- Management of mosses to absorb and hold flood water
- Improvement of drainage on the Carse to reduce soil moisture
- New wetlands and riparian planting to accommodate flood water
- Funding mechanisms to compensate land managers when productive farmland floods
- Changed management of areas at high risk of frequent flooding, or with consistently high soil moisture
- Continuous cover forestry to reduce risk of run-off
- Moorland management to reverse drainage and hold rain water in peatlands
- Measures to reduce flooding of the most productive farmland
- Engineered flood defences to protect Stirling
Limited development of existing settlements

Drainage to improve farmland on the Carse results in contraction of the mosses

Intensification of agricultural production on land away from the flat carse lands

Flood protection along the Forth and tributaries to reduce impacts on productive farmland

Gradual landscape change as a result of field enlargement, tree removal and new agricultural buildings

Increased urban flood defences and restrictions on new development

Focus on increasing agricultural production – arable crops and hay – on the best land on the Carse

Max agriculture
Vision

The Carse of Stirling is economically, socially and environmentally resilient, vibrant and viable.

Action plan
The practicalities and benefits of adopting an ecosystems approach in a stakeholder-based project

- Engaged a wide range of people in thinking about land management and multiple benefits from land
- The focus on benefits helped people to think more broadly, beyond their own local issues
- Illustrated land management data requirements, availability and constraints
- The project identified benefits at different scales and also potential trade-offs between providers and consumers of services
“I believe that better farming practices integrated with other management could achieve much more.”

“The Carse has been a prime farming production area for many years, and this should be maintained.”
How successful was the project in engaging stakeholders?

- Some farmers are concerned about agency roles in land management
- Working with a new community group needs investment of time
- Choice of language is important
- People are motivated by different things depending on their life perspective
“Good meeting – very enlightening”

“Discussion at the tables was stimulating”

“I feel we are not getting to grips with a positive demonstration project”
How successful was the project in engaging stakeholders?

- Increased understanding of the concept of services or benefits from nature
- Increased awareness of change in landscape over time and the forces for change
- Provides a realistic action plan
- Created a new community “group” (a new “we”)
- Provides a mechanism for agencies to support the community
What are the lessons from the language and communications tools used in the project?

- Choice of language and technical terms
- Creating a safe space and facilitating dialogue around difficult issues
- Timing, venue and format
- Presentation of information and data
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keep it simple