

## Adaptive management evaluation framework

RESAS1.4.3a Deliverable M2: AM evaluation framework developed (December 2016)

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## **Introduction to the adaptive management evaluation framework and its proposed use**

This evaluation framework has been produced as part of the current RESAS Strategic Research Programme Work Package 1.4 on Sustainable and Integrated management of Scotland's Natural Assets. Specifically it forms part of the research under RD1.4.3 'Practical interventions to realise multiple benefits and manage trade-offs'. It has been informed by:

- ) our review of the adaptive management and its practical application in the Scottish context (Deliverable D1: Report on relevant adaptive management approaches for Scotland);
- ) feedback received during the November 2016 Ecosystems and Land Use Stakeholders Engagement Group (ELSEG) meeting, and
- ) the experience of those researchers coordinating the selected case studies within WP1.4.3.

Our aim was to draw on the common adaptive management steps and principles, to provide the basis for an evaluation framework for the relevance, appropriateness and usefulness of adaptive management as a tool to help deliver multiple benefits from Scotland's environment. We will test it against the suite of case studies. These include the effectiveness of ecological focus areas and Agri-Environment Climate Scheme management options in delivering multiple benefits on the arable Balruddery research farm, and three grassland research farms (Glensaugh, Hartwood and Kirkton/Auchtertyre); and woodland expansion in a peri-urban system, and in an accessible rural woodland.

The evaluation framework comprises a set of questions that researchers will utilise in order to structure a comparative and consistent approach across the research deliverable, and the wider 'Natural assets' theme. In this way, the adaptive management evaluation framework should help us compare and contrast across our case studies, thus contributing to the objectives of our wider research on 'integrated and sustainable management of natural assets.' This will result in a research brief comparing effectiveness of achieving multiple benefits in case studies using an adaptive management framework (in December 2018).

Theme	Questions to guide analysis of whether the case studies were able to implement adaptive management, what was learned and achieved
Participation	<p>Who is involved and why?</p> <p>What is the distribution of multiple benefits, and who are the beneficiaries?</p> <p>What are their roles, their power, and their influence?</p> <p>Who has been involved in setting the objectives?</p> <p>Who was missing and why?</p> <p>What are the institutional arrangements for management?</p> <p>How do different types of actors (e.g. governmental, civil society etc) interact with each other? Does this change over time, and what are the implications of these changes?</p> <p>How are the issues framed by the different participants?</p>
Purpose	<p>What are they trying to do/achieve? What challenges/issues are they trying to resolve?</p> <p>Have the objectives changed over time and why?</p> <p>How were potential actions, inactions and interventions identified?</p> <p>How are the actions, inactions and interventions prioritised?</p> <p>What is the role of policy delivery mechanisms (e.g. regulations, incentives, advice etc)?</p> <p>What actions, inactions and interventions are being implemented and why?</p> <p>What multiple benefits were considered?</p> <p>What progress was made towards the objectives?</p>
Knowledge and learning	<p>What is the participants' understanding of their system?</p> <p>What types of knowledges are being used? How are these circulated (and not) and translated (and not)? Whose knowledge is it? Is it from multiple knowledge sources? What role was played by embodied, practice-based, tacit and experiential (and where relevant, nonhuman) knowledges in these processes?</p> <p>What have been the opportunities for shared learning? What are the main relations and devices through which social learning, knowledge exchange and knowledge translation took place?</p> <p>How is monitoring data used in the process? Who is involved in monitoring? What monitoring data is used and how is it integrated (developing a shared knowledge base)? Is nationally available spatial data combined together with local knowledge?</p> <p>Has data been collected at different spatial and temporal scales? Was evaluation a formal part of the project?</p>
Process	<p>What were the formal and informal governance arrangements in place?</p> <p>What aided the process?</p> <p>Have the perspectives on the issues been addressed, changed?</p> <p>Have there been any new emergences of groups, networks, policies, rules, initiatives (social capital) or conflicts resulting in the project? Or has the status quo resumed?</p>

<p>Have management actions changed through monitoring/shared learning? In what way? Is there a willingness to learn from lessons learnt? Is there effective conflict resolution? Has trust between actors developed? Has there been room for reflective learning? What were the constraints and barriers to the process? (e.g. lack of time, money, underlying conflict)? Have new findings been incorporated into the management actions? Did anything unexpected happen? How has management changed over time, and to which degree this was a process of adaptation (to what?)? Have either formal institutions (anything of rule-character that's written down) and/or informal ones (established practices of doing things) changed over time in response to lessons learned during the process? (flexibility and adaptability of institutions)? How does place matter to such processes (i.e. seeing all practices of adaptation and management as situated)? What is it about particular places and spaces that have allowed and resisted particular things to happen/relations to form? How are particular bodies mobilised to exert power and influence (and not)?</p>
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