

# **RESEARCH SUMMARY**

Chris J Spray, October 2012

CATCH II – review of operational experiences and approaches to the implementation of an ecosystem approach and ecosystem services

### Introduction

In the last decade, catchment management has seen a wealth of new "top-down" legislation and policy initiatives, alongside an increasing number of "bottom up" initiatives. Taken together, these respond to emerging demands for better integration of catchment management to deliver multiple benefits for society and the environment. Also, the Ecosystem Approach and interest in ecosystem services has highlighted the need to consider other potential costs and benefits, values and approaches. The *CATCH-II* project represents a key opportunity to further learn from the experiences of existing integrated catchment management (ICM) projects and pilot Ecosystem Approach initiatives, and contribute to the challenge of integrating the Ecosystem Approach within catchment management, and making it relevant to both stakeholders and practitioners.

### **Key Points**

This review reveals that (as in Scotland) there has recently been a major change in the UK environmental policy landscape, resulting in a move towards a wider and deeper adoption of the Ecosystem Approach across many policy areas of government

A key finding from our investigations is that very few projects actually formally began as an Ecosystem Approach, even fewer as an Ecosystem Services Approach. That said, many have followed the main attributes and principles of the Ecosystem approach, including extensive community involvement and stakeholder engagement, decision-making at the lowest scale, multiple benefits, scenario planning and adaptive management. In this way, we were able to look at certain projects in retrospect and note that they could claim with some justification that they adopted at least the majority of the 12 principles of the Ecosystem Approach.

One of the reasons for this lack of clarity is undoubtedly the similar lack of clarity as to what the Ecosystem Approach actually is and what adherence to it actually involves. Moving away from the original 12 principles, a number of guidance and policy documents have reinterpreted and re-framed these into a smaller number of different principles, tasks and steps to follow.

Interest in the identification and measurement of ecosystem services is a much more recent aspect of pilot projects, but one that is seen as of increasing importance and relevance at a number of scales. It goes beyond principles towards a more definite identification of services, their valuation and delivery, framing the rules of engagement and management decisions. This has been the subject of increasing academic and research interest, both from a bio-physical and social science approach.

## **Research Undertaken**

Our review of case studies included those drawn upon as examples in the UK National Ecosystem Assessment Technical Report chapter on Freshwaters – open waters, wetlands and floodplains, as well as examples from workshops attended, examples from organisations we interviewed as part of the rest of the *CATCH II* project, and case studies to which we were

drawn attention in response to questions in our interviews with key practitioners.

We held structured interviews in person on the Ecosystem services approach with multiple representatives from the following organisations: Joint Nature Conservation Committee (JNCC); Natural England (NE); Environment Agency - HQ, Evidence Directorate, and Environment & Business directorate (EA); Department for Environment, Food and Rural Affairs (Defra); the Rivers Trust (RT); Westcountry Rivers Trust (WCRT).

In addition, we used our attendance and contributions to a series of workshops and seminars on Ecosystem services and approaches to gather further information in discussion with key players, including the SNH Ecosystem Approach in Action Workshop - Edinburgh December 19<sup>th</sup>; SEPA/CREW Water-related Ecosystem Services Indicator Workshop - Perth, March 22<sup>nd</sup>; Westcountry Rivers Trust Ecosystem Services seminar - Scottish government April 16<sup>th</sup>

# **Policy Implications**

No one single governance model was identified for successful delivery of pilot projects, rather a range of partnership approaches with a variety of agency, NGO, academic and local authority leads was apparent.

In most instances, the main challenge facing those trying to develop projects with a significant element of ecosystem services in them has been, and continues to be, a lack of ready tools and techniques to identify, map, measure and value ecosystem services in practice on the ground. Further development and testing of tools, along with ready access and capacity building among key stakeholders is required.

Integration with river basin management planning at a catchment scale was not seen as a major issue for most projects. Only the EA had undertaken a detailed assessment, mapping the processes involved in adopting an Ecosystem approach against their own internal processes for river basin management planning and delivery. This is already underway in SEPA, and collaboration between organisations should be further enhanced.

Integration of the Ecosystem approach and the use of ecosystem service mapping and evaluation needs to be spread to other policy areas beyond just the immediate environmental grouping.

The few active delivery projects that have formally adopted an ecosystem services approach from the outset, notably the three Natural England upland catchment pilots and those involving the Westcountry Rivers Trust were the ones from which most lessons could be learned.

There is a clear need for a series of pilot delivery projects, operating at a number of nested scales to prove delivery in practice, beyond just the stages of co-creation of catchment plans and future scenario planning.

#### **Research Team and Contacts**

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