

# NERR092 Appendix 2 Bassenthwaite Upland Ecosystem Service Pilot

Natural England's Natural Capital Evidence Handbook helps you come to a strategic understanding about the natural environment in your place using natural capital evidence. This Evidence Information Note helps you access resources related to the Bassenthwaite Upland Ecosystem Service Pilot.

## Background

Natural England's Upland Ecosystem Service Pilots (2009-2011) were designed as demonstration projects to apply the Ecosystem Approach on the ground. The aim was piloting the delivery of the ecosystem approach in a place to:

- Demonstrate how multiple public benefits can be delivered through integrated partnership working.
- Provide tools that help demonstrate and value the public benefits that the catchment's environment provides, including detailed mapping and economic valuation.
- Develop a delivery plan with partners and farmers for a full range of environmental, economic, social and cultural benefits.
- Explore innovative funding mechanisms to pay for ecosystem services.

## What did we do?

- Followed a set of **project steps** designed nationally for all three pilots.
- Worked **collaboratively**, with the existing Bassenthwaite Lake Restoration Programme (BLRP) **partnership**, and additional new partners.
- Established a **new task group** of the existing BLRP partnership to steer the pilot.
- Produced a **shared mapped evidence base**, to provide a baseline assessment of ecosystem services (Natural England 2011a).
- Sought consensus through a series of **workshops and meetings**, with partners, farmers, tourism sector and the public (200+ workshop attendees), identifying **key actions to enhance multiple ecosystem services** plus **opportunity maps** for these.
- Developed a **shared delivery plan** of key actions and opportunity maps, to enhance multiple ecosystem services (Natural England 2011b)
- Developed **evidence reports** on specific tasks:
  - Visitor Payback pilot, focussing on paying for ecosystem services, with Nurture Lakeland and 35 tourism businesses (Nurture Lakeland 2011).
  - Research report on farmers' views of ecosystem services, with University of Cumbria (Mansfield 2010).
  - Modelling woodland creation to reduce flooding in the Derwent Catchment, Cumbria, with Environment Agency, Forest Research and Cumbria Woodlands (Atkins 2012).
  - Report on the economic benefits of ecosystem services in the Bassenthwaite Catchment (Rebanks 2010).

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- Identified priority **agri-environment agreements** as a mechanism to deliver the actions in the delivery plan.
- Undertook **economic valuation** of ecosystem services based on modelled future land management scenarios (Lusardi and others 2020).
- **Evaluated the project process and impact**, along with the other upland ecosystem service pilots (Appendix 5).

## Bassenthwaite Upland Ecosystem Service Pilot delivery matrix

Land Management Action	Ecosystem Services and Benefits									Partner Objectives										
	Water provision	Food and fibre	Carbon storage and sequestration	Erosion Control	Water quality	Flood Regulation	Cultural landscape, historic environment	Recreation, inspiration, education and Health	Biodiversity	SSSI PSA target	Cumbria BAP targets	Climate Change adaptation	Landscape Character Assessment targets	Catchment Sensitive Farming	Improved access to natural environment	SCaMP2	Catchment Flood Management Plan	Water Framework Directive	Heritage at Risk	Lake District National Park Partnership Principles of Land Management
1. Increase Woodland Cover	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x		x	
2. Achieve Sustainable Grazing	x		x	x	x	x	x		x	x	x	x	x	x		x	x	x		x
3. Sustainable River Management			x	x	x	x			x	x	x		x			x	x			x
4. Restore Scheduled Monuments at Risk				x	x		x	x				x	x						x	x
5. Improve Access			x	x	x		x	x	x						x					x
6. Manage Nutrients on Improved Grassland			x	x	x		x	x		x	x			x				x		x
7. Improve Biodiversity of Valley Habitats				x			x	x	x	x	x	x			x					x

## Outputs: What is available to use?

- [Evaluation of the Upland Ecosystem Service Pilots: Bassenthwaite - NERR077](#) - post-project evaluation based on stakeholder interviews and GIS analysis of agri-environment scheme uptake.
- [Evaluation of the Upland Ecosystem Service Pilots - NECR254](#) - synthesis evaluation of all three pilots.

## Lessons Learned

The evaluations concluded that this project is a useful practical example of how to apply the Ecosystem Approach ‘on the ground’, with the following lessons learnt:

- Successful **practical demonstration** of a participatory approach to identifying and prioritising ecosystem services – subsequently leading to land management change.

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- The importance of **existing place-based partnerships** for delivering the ecosystem approach.
- Existing partnership **boundaries** enable partner buy-in; catchment boundaries work for water-based ecosystem services.
- The input of **Project Officer resource** was the biggest catalyst in establishing and driving the project forward.
- It is worth investing significant time to enable a **participatory approach**, with a wide range of partners beyond the environmental sector.
- Partnerships don't always need economic valuation to inform decisions; **recognising the value of ecosystem services** can be enough.
- It can be difficult to **maintain momentum** after the intensive resource phase ends.
- Modelling of ecosystem services is only possible for a **limited selection of ecosystem services**, in part due to the lack of data to parameterise models.
- **Build in evaluation of pilots from the outset.**

## References

Atkins. 2012. The value of woodland on flood reduction in the Derwent Catchment. Report to Cumbria Woodlands, Environment Agency, Natural England and Forestry Commission.

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[accessed 5<sup>th</sup> May 2020].