Pilot *Led by*	Problem being addressed	Ecosystems / habitats	Ecosystem Services targeted	Providers	Potential Buyers *Motivation*	Intermediaries	Interventions	Payment mechanisms	Outcome/legacy	Key challenges
Round 1 (2011-12)										
Fowey River *UEA and Westcountry Rivers Trust*	Water quality	River catchment	▪ Water quality	Farmers	South West Water *To reduce treatment costs*	Westcountry Rivers Trust	Land management changes & farmers' capital investments	Reverse auction	Successful bidders have now completed actions	Difficulty engaging multiple bidders
Hull Flood risk *Land Trust*	Flooding	Urban	▪ Flood risk; ▪ Biodiversity; ▪ Provisioning; ▪ Landscape	Hull City Council, individual households	Yorkshire Water Services, Hull CC on households' behalf *To avoid upgrading sewer capacity; reduce flood risk*	Land Trust, technical specialists, Hull CC, local NGOs	Large scale SUDS & greenspace, and street-level SUDS	Council paying using multiple funding sources initially, then layered many-to-many	Council initially positive but plans to implement schemes stalled by loss of staff and budget	Layering complexity; inability-to-pay; different siloed LA budgets
Poole Harbour catchment *RSPB*	Nutrient discharge prohibiting new development	Harbour, catchment	▪ Water quality	Farmers	Developers or planning authorities *To allow development*	Not resolved; could be different organisations fulfilling different roles	Land management changes	Not resolved.	Council's preferred route to Nitrogen mitigation is purchasing and reverting land. N mitigation schemes could be applied elsewhere	Length of contracts, different regulation for farmers & developers; reluctance to pay polluters
South Pennines *Crichton Carbon Centre*	1. Development of peat and carbon metrics 2. Approaches for aggregating buyers and accounting for multiple ES	Uplands, peatland	▪ Flood risk; ▪ Water quality; ▪ Biodiversity; ▪ Carbon; ▪ Recreation	Land owners/managers	Range of public and private sector *To deliver a range of ESs*	Range of options	Various options from layered to bundled proposed	Various options proposed	Development of peat and carbon metrics that form basis for initial pilot Peatland Code	Options for layered and bundled provide a useful guide to some of the options but could be seen as rather theoretical - how to achieve in practice?
Round 2 (2012-13)										
Peatland code *Birmingham City University*	Peatland restoration/reducing carbon emissions	Peatland (blanket bog)	▪ Water quality; ▪ Biodiversity; ▪ Carbon; ▪ Recreation	Landowners/land managers	Business CSR funding *To fulfill CSR commitments*	Range of partnerships could be involved in pilot projects	Restoring peatland/range of possible land mgmt actions	Peatland code provides enabling mechanism	IUCN launch of pilot code in 2013 followed by further Defra R&D to refine metrics and protocols. Formal code launched November 2015	Robust peat and carbon metrics; extent to which businesses will fund pilot projects
Tortworth Brook *Bristol Avon Rivers Trust*	Phosphorus discharge	River tributary; country estate	▪ Water quality; ▪ Flood risk; ▪ Biodiversity; ▪ Provisioning	Tortworth Estate	Wessex Water *To reduce treatment costs*	BART	Integrated Constructed Wetlands	Potential business case for PES scheme from Wessex Water as part of PR14	Provide concept to apply to other wastewater contexts for water companies	EA issues on consenting ICW and flood risk
Leeds-Liverpool Canal *Canal & River Trust; JBA Consulting*	Multiple ecosystem risk	Canals, banks, towpaths, SSSI	▪ Flood risk; ▪ Water quality; ▪ Biodiversity; ▪ Water supply	CRT, local authority	Developers, government *To facilitate multiple ES provision across network*	Local authority	Land & woodland management, increased dredging	S106, CIL, ELS, WGS, Conservation and Enhancement Scheme	CRT assessing ecosystem benefits through further research	Identifying baseline for services; payment mechanisms
Pumlumon Project *Mongomeryshire Wildlife Trust*	Evaluation of place-based PES	SSSI, river catchment, woodland, scrub, wetlands, peat bog, grassland	▪ Flood risk; ▪ Biodiversity; ▪ Carbon; ▪ Recreation	Landowners	Visitors, EA, water companies *To protect biodiversity, store carbon,water quality/quantity*	Montgomeryshire Wildlife Trust	Land management, improved access, visitor centre for bird watching	Various	Demonstration of success of place based approach	Stronger market funding mechanisms needed
River Lea in Luton *Cranfield University*	Degraded river	Urban, river	▪ Flood risk; ▪ Biodiversity; ▪ Carbon; ▪ Recreation	To be identified; Luton Borough Council	To be identified *Could include: attract visitors, investment, raise property values, enhance biodiversity, flood and climate mitigation*	Luton Borough Council, EA	Various	LA and/or charitable grants, utilities funding, agri-environment, CSR funding	Project partners are now working together under a Catchment Partnership to implement project proposals, although PES features are unclear.	Ensuring broad spectrum of stakeholder participation; engaging local businesses and identifying the right people in organisations to input; framing viable options within the context of LA planning and budgetary constraints;
Visitor Giving Schemes *Birmingham City University*	Upkeep of areas	Peat bog, uplands, moorland, woodland, hay meadow	▪ Water quality; ▪ Carbon; ▪ Recreation; ▪ Landscape; ▪ Pollination	Penine Edge Forest, Moors for the Future, RSPB	Visitors *To provide particular ESs of interest*	Pennine Prospects, Nurture Lakeland	Land management	Donations through smartphone app	Mobile apps developed for South Pennines and Lake District Help sheets produced for visitor giving schemes on Visit England website	Technical and governance issues with app
Cotswolds Catchment *FWAG South West*	Intensive land use	River catchment, AONB, farmland	▪ Water quality; ▪ Biodiversity; ▪ Carbon; ▪ Landscape	Farmers	Water company, energy buyers	FWAG SW	Land management changes	Various	Thames Water developing PES around pesticides in upper thames and Ecotricity taking forward an innovative green gas plant	Takes time to build trust with land managers; need to demonstrate additionality
Round 3 (2014-15)										
Energy for Nature *RSPB*	Disposal for biomass created by land management costly	Conservation Wetlands	•Biomass •Biodiversity	Conservation land managers, possibly farmers	Consumers of bioenergy products produced from biomass (briquettes, energy from anaerobic digestion, heat from boilers)	RSPB	Increased land management funded by revenue from sale of biomass and bioenergy	Payments to RSPB for raw biomass or bioenergy products	RSPB are now in a position to pilot biomass to bioenergy in the Somerset Levels and Moors; dependent on funding.	Understanding the amount of biomass which can be harvested from different types of vegetation and how this varies over time.
Holnicote Estate *National Trust, Penny Anderson Associates*	Area of high flood risk, funding for effective natural flood management methods finishing in march 2015	River Catchment, country estate	•Flood risk mitigation •Biodiversity •Recreational and Cultural •Health and Wellbeing •Water quality	The National Trust, farming and tenants on the estate	To be identified Could include: visitors and the flood insurance industry	The National Trust, Selworthy and Minehead Without Parish Council, Allerford and Bossington Community Flood Group	Not identified	Not identified	The pilot has raised the profile of PES thinking within the National Trust and helped to inform its Land Choices strategy	Difficult to engage potential buyers in view of a strong feeling that others should take responsibility for managing flood risk.
Irwell Catchment *Lancashire Wildlife Trust*	Urban pressures on ecosystem services	Urban and Peri-urban land	To be determined by interviews with Manchester city centre and Salford businesses	Land managers in Greater Manchester	Manchester City centre and Salford Businesses	Lancashire Wildlife Trust	Not identified	To be determined by information gathered in the business interviews	Pilot not successful but has helped to provide key learnings and an initial assessment on potential investments in the river Irwell and the benefits that could be delivered.	Lack of appetite to contribute to a fund because of social detachment from the river.
Smithills Estate *The Woodland Trust*	1. Suboptimal Land management of the estate 2. Detachment of local population from estate	•Peatland •Woodland	•Provision •Cultural and Recreational •Biodiversity	The Woodland Trust	Enterprises using provisions from Smithills estate and consumers of Smithills funded enterprises	The Woodland Trust	Woodshare, tandoori food truck enterprises and other enterprises invested in by Smithills' local development partnership	Profits from Smithills' woodshare and food truck and possibly profits from local development partnership enterprises	Ongoing project to develop a cluster of PES enterprises using a community interest company as catalyst. The pilot has strengthened the support for PES within the Woodland Trust who is keen to pilot the approach in other areas.	How to establish and support an independent social enterprise without compromising charitable responsibilities; Need to ensure financial viability in early days
Winford Brook Catchment *Eunomia*	1. Rapid Response Catchment has experienced flood related loss of life in the last 18 months 2. Soil erosion causing silt build up in reservoir 3. Sewage overflow common in the catchment	River Catchment	•Flood risk mitigation •Water quality •Soil formation •Waste management	Landowners in the catchment	Bristol water as anchor beneficiary with the aim to develop a mechanism where other interested parties can contribute to a fund	Natural Capital Trust	Land Management	Multi-beneficiary contributory PES fund, Bristol water the main contributor. Using reverse auctions to determine payments to farmers.	Advanced thinking in the legal structures of multi-beneficiary funds and PES intermediaries.	Various evidence, data and scientific challenges and uncertainties.