Integrating Natural Flood Management into Payment for Outcome schemes in the Yorkshire Dales

Context: Natural Flood Management (NFM) has increased in popularity in recent years as integrated catchment management approaches are championed and discrete funding has been made available. The National Trust (NT) is working in partnership with the Yorkshire Dales National Park Authority (YDNPA) to run one of Defra's Tests and Trials looking at including pollinators in payment for outcome (PfO) approaches and the development of Environmental Land Management Scheme (ELMS). This iCASP project

Method: The project focused NT land parcels tenanted by five farms across the Yorkshire Dales uplands.

Opportunity mapping: iCASP identified areas that could benefit from NFM using the open source mapping tool SCIMAP which identified areas of high risk for overland flow and/or soil erosion. These were ground truthed via farm visits.

Farmer workshop: Opportunity maps were reviewed by project partners and farmers for accuracy and usability ensuring farmers' local knowledge was integrated whilst increasing awareness of NFM.

Monitoring workshop: iCASP facilitated a workshop with academics and project partners to develop NFM monitoring guidance to inform a payment for outcomes scheme. Guidance is in development.

Summary:

PfO / ELMs cannot be a one-size-fits-all scheme. Every farm is different in terms of land use, business structures, and site-specific constraints such as the presence of historic land drainage.

Monitoring:

- Farmers are keen to implement monitoring; however, this time must be costed.
- Clarity on data quality needed to release payment - would a photograph showing water retained behind a leak woody dam at a time of peak flow be sufficient to release payment?
- Time needs to be costed for training farmers to ensure that required data collection is possible.

Farmer insights:

- Farmers were receptive to NFM, especially interventions that complement farm business.
- NFM interventions that were perceived to result in 'loss' of productive land (tree planting / offline storage) were less appealing to farmers than interventions that complemented existing farm business (soil aeration).
- Farmers need control over NFM to reduce risk to business i.e. farmer-controlled sluice gates installed in for offline storage ponds to avoid flooding during lambing.
- Farmers support a whole-catchment approach, but raised concerns about neighbours who may not be implement NFM robustly, and the extent to which this might affect outcomes and thus payments.

Considerations:

- There is a need for catchment wide awareness of NFM (technical advice to farmers on installation, operation and functioning of interventions) to avoid risk such as synchronising flood peaks.
- Consideration around payment for the different types of interventions is also needed; often 'water' based interventions such as leaky dams or offline storage ponds can realise outcomes immediately, whereas 'land' based interventions such as soil management or tree planting may take years to realise their full potential.

Further information can be found in the main report, available here.