

Wye Ithon and Severn Ecosystems (WISE)

Lead organisation: Wye and Usk Foundation

Grant Award: £530,215

Location: Llandrindod Wells to Knighton

Email: simon@wyeuskfoundation.org

This collaborative project worked with an established catchment partnership, including landowners and local communities to improve the natural resources in four smaller and three larger catchments covering a large landscape travelling down a stretch of the Wye catchment. Action was taken to improve soil quality in agricultural land create woodland to maximise the potential for reducing flood risk, habitat improvement for better biodiversity and water quality and improved infrastructure on farmyards to reduce pollution.

The project involved the rural communities and agricultural businesses in the area to help them understand and take action to ensure long term improvement of ecosystems. Also to understand the services these ecosystem provide that are vital for helping address the impacts of climate change and flooding, and in turn provide opportunities for improved health and wellbeing. The project has also explored the potential for private investment to deliver benefits for water quality and carbon storage. Activities undertaken by the project are supported by a comprehensive monitoring programme during the active project phase and after completion.



The project is in partnership with Severn Rivers Trust and has tackled nutrient management, soil health, water quantity and biodiversity. As well as delivering environmental value, effective land management can also improve water quality in rivers, reduce flood risk, improve soil quality, enhance biodiversity, and improve carbon sequestration.

Catchment Advisors from both rivers' trusts will be working with farmers to find practical ways in which they can change agricultural practices to benefit both their business and the aquatic environment, such as;

- Hedgerow and tree planting
- Leaky dam installation
- Improving soil quality
- Attenuation ponds/green swales
- Clean and dirty water separation
- Soil testing including organic matter levels
- Soil structure assessment and infiltration tests
- Risk mapping.

The project has developed a scheme that pays farmers to mitigate against flooding, thereby reducing the need for costly "hard" defences further downstream. "Natural flood management" involves working with hydrological and morphological processes, features and characteristics to manage the sources and pathways of flood water. These techniques are often simple, small scale and cost-effective for both the environment and farm business.

Water Quality. The project is also working with Tesco's suppliers within the project area on nutrient management, providing advice and grant funding to reduce the risk of diffuse and point source pollution and to improve soil health. This will have benefits to other users of the Wye catchment and the project will develop catchment scale markets for phosphate and hopefully flood and drought management. This is how our environment will be managed in the future and developing these markets will allow for the external costs of pollution (such as fishing days lost to algal blooms) to be monetised and reduced, improving the state of the whole of the Ithon and main stem of the Wye.

Building Collaborations and Partnerships:

8 NFM farm visits including farm scale opportunity mapping, soil testing, compaction assessments and infiltration tests completed

Two evening sessions delivered to 37 attendees promoting woodland planting was delivered alongside Farming Connect

Project has visited at least 275 farms covering 41,000 hectares of agricultural land in mid Wales

Community Engagement: Project has engaged with 1255 stakeholders

Woodland Management and Planting:

35ha of Woodland supported, 1.8ha new woodland planting. Total 15,701 trees planted

Woodland Management and Planting:

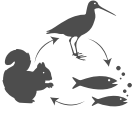
1428m hedgerows planted and 3.6ha new riparian woodland planted



Ecosystem Resilience: provided a tailor-made farm report and opportunity maps developed for the use of the farmer, which highlight existing benefits the farm is contributing to the environment and wider society as well as additional opportunities.



Reduce Flood Risk: local flood risk maps will be produced identifying natural flood management opportunities.



Increased Biodiversity: supported by hedgerow renovation, wetland creation and woodland creation.



Soil, Air and Water Quality: supported by hedgerow renovation, tree planting, woodland creation, and soil testing and assessment.



Rural Skills and Heritage: supported by volunteer programmes and traditional methods.



Health and Wellbeing: providing information that are vital for helping address the impacts of climate change and flooding, and in turn providing opportunities.



Ecosystem Resilience: the project involved the rural communities and agricultural businesses in the area to help them understand and take action to ensure long term improvement of ecosystems and understand the services these ecosystems.

Get Involved: Volunteering for many of the above activities is a very satisfying way of enjoying the outdoors and getting to know the rivers. If you are interested in voluntary work, please complete the following form to register with the Foundation. www.wyeuskfoundation.org/forms/volunteerregistration

Contact admin@wyeuskfoundation.org +44 (0) 1874 711714

 www.wyeuskfoundation.org/the-wye-ithon-severn-ecosystems-wise-project