

# Roots and Water

The Severn Rivers Trust  
approach to application of the  
principles of Sustainable  
Management of Natural  
Resources in Wales.



**SEVERN**  
RIVERS TRUST

# Severn Rivers Trust



*The Severn Rivers Trust is an independent environmental charity established to secure the preservation, protection, development and improvement of the rivers, streams, watercourses and water bodies in the Severn catchment, and to advance the education of the public in the management of water and the wider environment.*



# Severn Rivers Trust – Introduction



River Restoration



Land Management



Community Engagement



# Trees and rivers



Trees play a crucial role in helping us to combat the climate and biodiversity crisis; and are hugely important in restoring river catchments.

With government targets set to increase tree cover in the UK, Severn Rivers Trust are working to ensure planting is sensitive to priority habitats and the benefits are maximised.





Comisiynydd  
Cenedlaethau'r  
Dyfodol  
Cymru

Future  
Generations  
Commissioner  
for Wales

# Well-being of Future Generations (Wales) Act 2015



# Wellbeing goals



**A Prosperous Wales**



**A Resilient Wales**



**A More Equal Wales**



**A Healthier Wales**



**A Wales of Cohesive  
Communities**



**A Wales of Vibrant Culture  
& Thriving Welsh  
Language**



**A Globally Responsible  
Wales**



# What is sustainable management of natural resources?

Sustainable management of natural resources is defined in the Environment Act as:

“using natural resources in a way and at a rate that maintains and enhances the resilience of ecosystems and the benefits they provide. In doing so, meeting the needs of present generations of people without compromising the ability of future generations to meet their needs, and contributing to the achievement of the well-being goals in the Well-being of Future Generations Act.”



# What are the principles?



Principles of sustainable management of natural resources		
	<b>Adaptive management</b>	manage adaptively by planning, monitoring, reviewing and where appropriate, changing action
	<b>Scale</b>	consider the appropriate spatial scale for action
	<b>Collaboration and engagement</b>	promote and engage in collaboration and cooperation
	<b>Public Participation</b>	make appropriate arrangements for public participation in decision-making
	<b>Evidence</b>	take account of all relevant evidence, and gather evidence in respect of uncertainties
	<b>Multiple benefits</b>	take account of the benefits and intrinsic value of natural resources and ecosystems
	<b>Long term</b>	take account of the short, medium and long term consequences of actions
	<b>Preventative action</b>	take action to prevent significant damage to ecosystems
	<b>Building resilience</b>	<p>take account of the resilience of ecosystems, in particular the following aspects:</p> <ul style="list-style-type: none"> <li>(i) diversity between and within ecosystems;</li> <li>(ii) the connections between and within ecosystems;</li> <li>(iii) the scale of ecosystems;</li> <li>(iv) the condition of ecosystems (including their structure and functioning);</li> <li>(v) the adaptability of ecosystems</li> </ul>

# The Severn Rivers Trust approach to the application of the principles of SMNR in Wales





# Adaptive Management



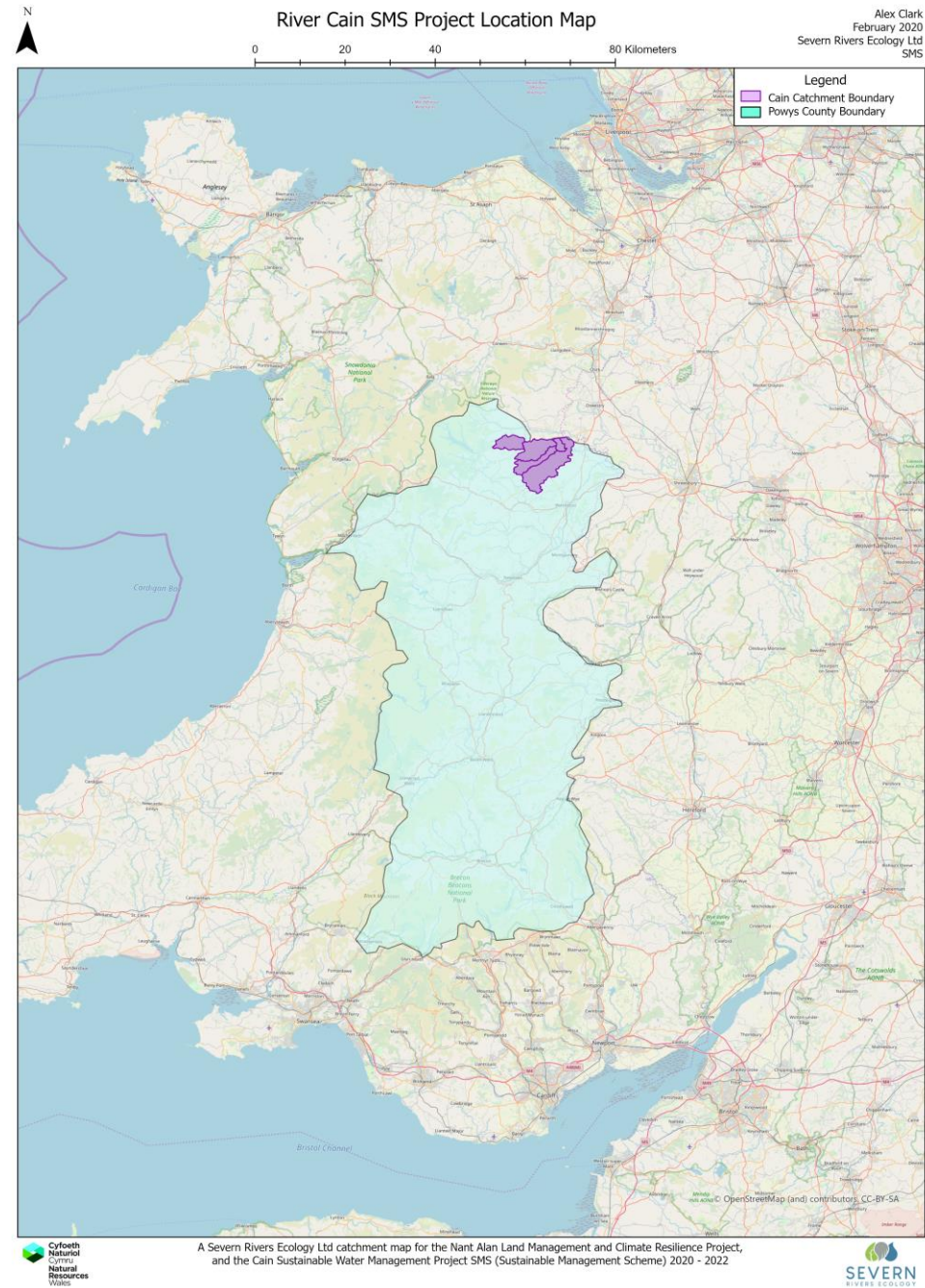
- Engaging landowners through discussion groups and project steering groups
- Planning, monitoring, reviewing and where appropriate, changing action
- Peer to peer learning
- Local knowledge
- Win-win for farm business
- Trees heeled in to work around farm business





# Appropriate scale

- River catchment scale
- Point of contact leader
- Group of farmers
- Long term relationships
- Data and evidence
- Partnership with NRW
- Recognised by funders including businesses
- Local volunteers
- Community links



# Collaboration and engagement

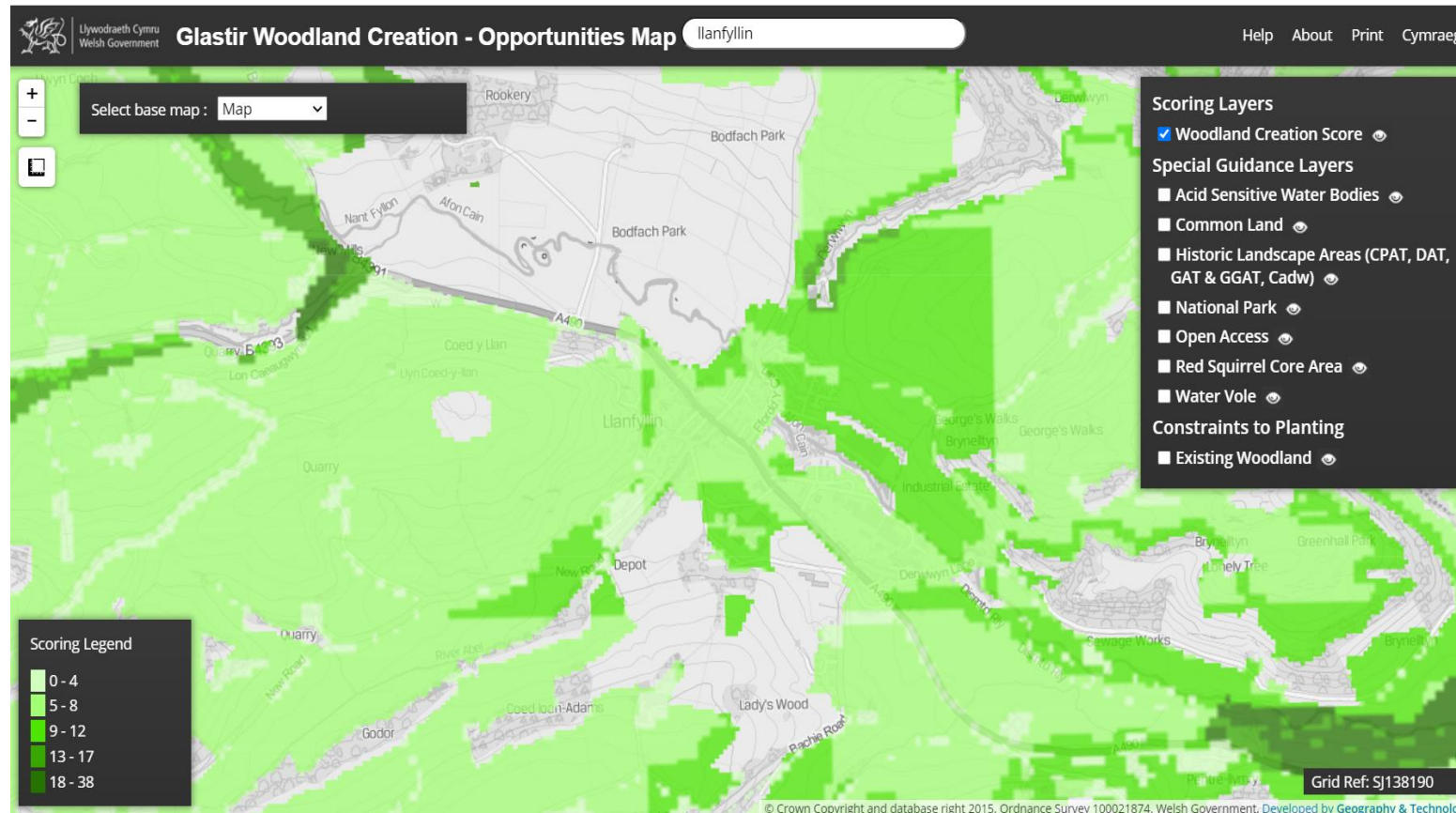


Severn Rivers Trust have plans to plant **10,000 trees** in Wales this winter in partnership with Coed Cadw, the Woodland Trust in Wales.





# Collaboration and engagement



- Desk based study
- Followed by farm visit
- Identify constraints e.g. historic interest/ good quality grassland
- Planting densities agreed with partners WT and NRW



# Collaboration and Engagement



- Local businesses and corporate volunteering
- Schools and Community Groups





# Public Participation



Tree planting days and awareness raising of the role of trees in river restoration

- Cain Valley River Group
- BTEC Agriculture students, Llanfyllin High School
- BRACE Llanfyllin
- Montgomeryshire Bat Group
- Severn Trent Community Champions
- Severn Rivers Trust staff Christmas party





# Evidence

Data collected on project outcomes

- Volunteer hours
- Numbers of trees
- Tree species
- Length of hedgerow
- Length of riverbank restored
- Landowner feedback
- External project monitoring for larger projects



# Multiple benefits – NFM



- Natural Flood Management
- Reduced pollution run-off and improved water quality





# Benefits for the farm



- In field shelter
- Soil conservation
- Increased amenity and land value
- Improved biosecurity between land holdings





# Biodiversity Benefits



- Increased biodiversity and connectivity of habitats *niches for species*
- Fisheries management – erosion and temperature control





# Health and wellbeing benefits



# Preventative action



Threats posed to declining Atlantic Salmon populations by climate change and river habitat loss.

Sensitive riparian tree management is key to mitigating these impacts.

Creating dappled shade can protect fisheries from rising temperatures.



Photo thanks to Jack Perks



# Building Resilience

- Increased carbon sequestration
- Building rivers which are resilient to climate change
- It is important to recognise the intrinsic value of natural resources.
- Potential for long term and cost effective impact of projects.
- Preventative action taken now, can reduce the impact of climate change on communities in Wales.



# Projects



Funding for *Roots and Water 2018-2020* was thanks to Natural Resources Wales and Severn Trent Community Champions.

Work in the Cain catchment continues under the Welsh Government Sustainable Management Scheme 2020 - 2023

- Nant Alan Sustainable Land Management and Climate Resilience Project
- Wye, Ithon and Severn Ecosystem project in partnership with the Wye and Usk Foundation
- Cain Sustainable Land and Water Management Project

Work in the River Teme funded through the Afonydd Cymru and Natural Resources Wales Strategic Allocation Fund

# Contact



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