



**Cyfoeth
Naturiol**
Cymru
**Natural
Resources**
Wales



NRW projects / interventions on the Afon Teifi

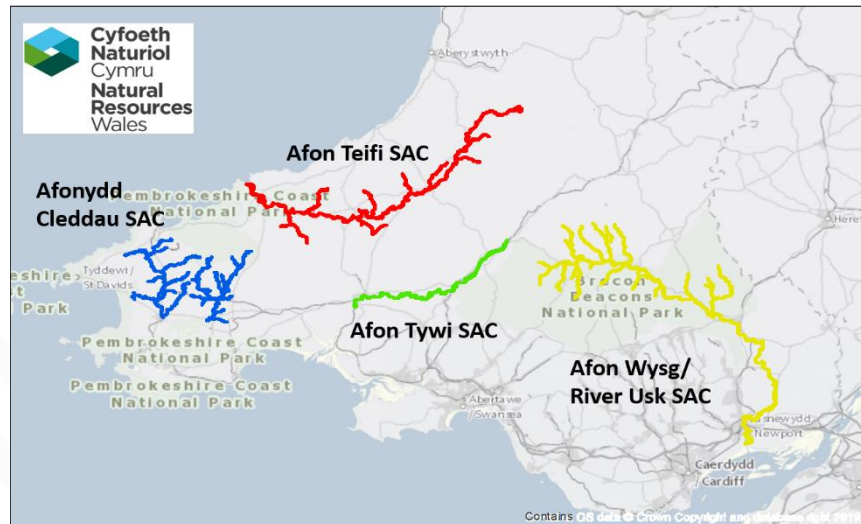
Jon Goldsworthy – Teifi Demonstrator Project Manager

Projects/ Interventions:

- **Four Rivers for LIFE (Teifi)**
- **WFD Opportunity Catchment**
- **Metal Mines Remediation**
- **Fisheries Habitat Restoration**
- **Cardigan Tidal Flood Alleviation Scheme**
- **Regulation**
- **Incident response**

Four Rivers for LIFE - Overview

- 5 year project until 2026 with a £9.11 million budget
- Designated SAC features – plants, animals, fish and habitats
- Fish passage, in-river habitat works, re-meandering
- Working with farmers to reduce sedimentation and nutrient inputs
- Reducing invasive alien species
- Sharing learning and demonstrate best practice in river restoration



Target species / SAC features

- **Sea, river and brook lamprey**
- **Atlantic salmon**
- **Bullhead**
- **Otters**
- **Floating water-plantain**
- **Water crowfoot / Ranunculous**



Riparian Corridors and Land Management

Focus on reducing nutrients and sediments, increasing riparian habitat:

- Target of 100km of riparian fencing
- Planting 50,000 native broadleaf trees
- Land Management improvements across 35,000 Ha
- 350 farms to be engaged
- Improving livestock crossings to reduce livestock in the river (simple culverts & complex clear span structures).



River Restoration: Re-meandering and Connecting Floodplains

- Re-meandering sections of river which have been historically straightened
- Encouraging natural flooding in selected sites
- Restoring wetlands and floodplain meadows

Cors Caron Proposal

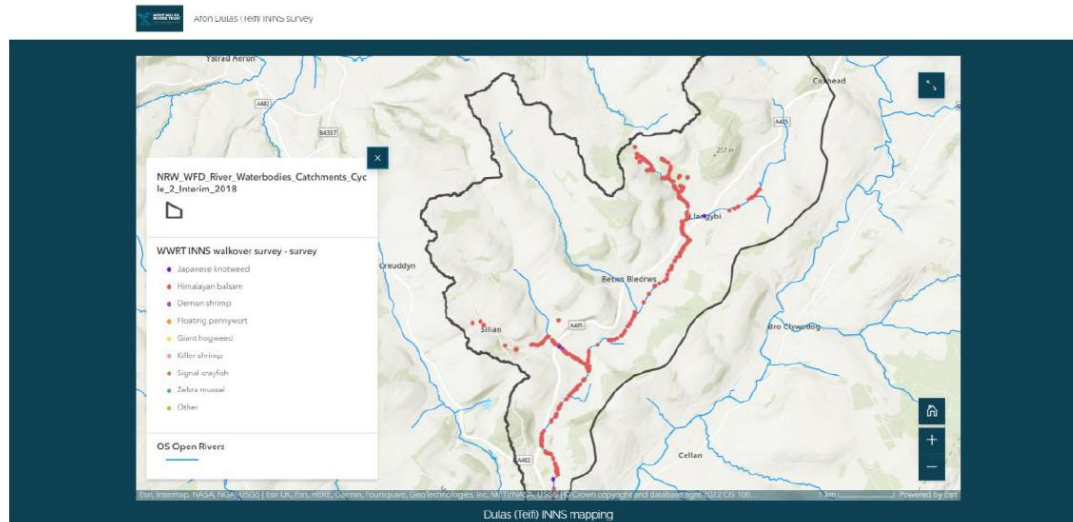
- 2km stretch of river Teifi running through Cors Caron National Nature Reserve
- Straightened & dredged over 100 years ago
- Project concept over 20 years to put river back in its old meandering river channel
- Thought to be drawing down the raised bog, therefore raising bed level will support the work to re-wet the bog



INNS (Invasive Non-Native Species)

9 contracts let in 2022 and 10 contracts let in 2023 to map and manage Himalayan Balsam, Japanese Knotweed, American Skunk Cabbage and Giant Hogweed at strategic locations within the 4 catchments.

On the Teifi:



Metal Mines Remediation Project

- Aiming to reduce the discharge of metals from abandoned metal mines and achieve WFD GES
- NRW working with the Coal Authority and Welsh Government
- Two sites on the Teifi - Abbey Consols (Teifi headwaters) & Esgair Mwyn (Meurig tributary)



Fisheries Habitat Restoration

- **Installation of livestock fencing to limit stock access to watercourses and promote the growth of native vegetation to secure habitat and shading benefits**
- **Funded by our Sustainable Fisheries Project and Inland Fisheries Habitat Restoration (IFHR) Strategic Allocated Fund (SAF) grant award to Afonydd Cymru and the West Wales Rivers Trust**
- **Fisheries Habitat Restoration Plan – produced by Afonydd Cymru**
- **We aim to use the IFHR grant to deliver the measures identified in the Habitat Restoration Plan**



Flood Risk Management Capital Investment: Cardigan Tidal Defences

- The Cardigan Tidal Flood Alleviation Scheme will reduce the risk of flooding to a 0.5% Annual Exceedance Probability to 70 properties (52 residential and 18 commercial) within the Strand area of Cardigan
- The proposed scheme will cost in the region of £8m and will consist of flood defence walls and flood gates
- The project is currently in the detailed design phase and we are hoping to begin construction in 2024-25

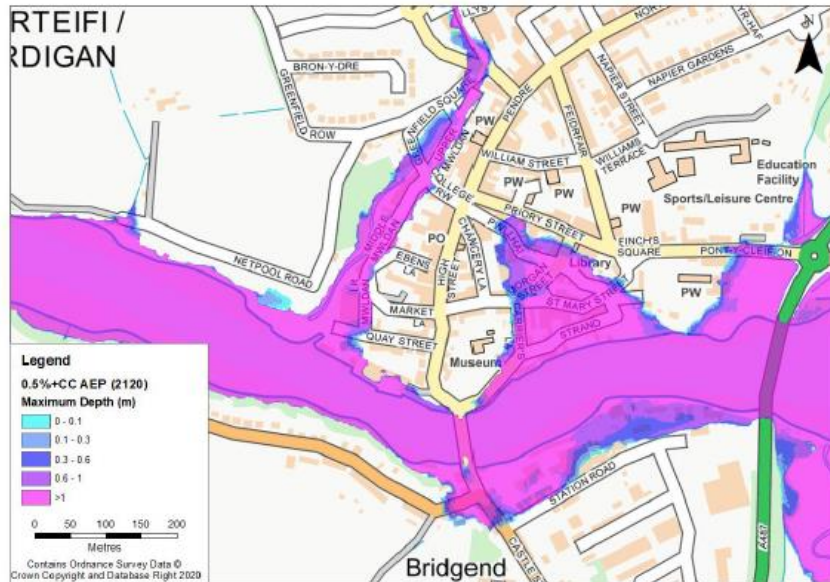


Figure 2-2 Flood depth in Cardigan during the 0.5% AEP event with climate change (2120)



Cardigan Tidal Defences Environmental Enhancements

Potential Environmental Enhancement	Strategic Drivers / Associated Policy
Artificial otter holt and resting places along the River Teifi	Core Management Plan for the Afon Teifi SAC, Teifi Salmon Action Plan, Mid Wales Area Statement.
A net gain of intertidal habitat along the River Teifi can be achieved by expanding existing intertidal habitats in and around the Scheme extents	Core Management Plan for the Afon Teifi SAC, Teifi Salmon Action Plan, Mid Wales Area Statement, SMNR principles, Well-being objectives, Ceredigion LDP.
Promotion of Active Travel routes through improvements to existing footpaths and cycle ways through surface improvements, signage, planting and information boards.	Core Management Plan for the Afon Teifi SAC, Teifi Salmon Action Plan, Mid Wales Area Statement, SMNR principles, Well-being objectives, Ceredigion LDP.
Provision of wildlife information board on Cardigan Bridge road crossing of River Teifi	SMNR principles, Well-being Guidelines, Ceredigion LDP.
Heritage considerations taken into account in the design of flood walls to provide amenity value.	Ceredigion Well-being Guidelines, Sustainable Management of Natural Resources
Opportunity for public art (could be done in conjunction with local schools)	Ceredigion Well-being Guidelines
Public space and amenity improvements to The Strand area in front of Cardigan Castle	Ceredigion Well-being Guidelines
Construction contractor linking up with local tree planting schemes in an effort to offset some of the embodied carbon associated with the construction, as well as improving local biodiversity	SMNR principles, Well-being Guidelines, Ceredigion LDP.

Regulation / Incident Response / other work

- **Permit compliance**
- **Farm visits**
- **Responding to pollution incidents**
- **Enforcement**
- **Protected sites**
- **Supporting partnerships eg NMBs, LFGs, etc**
- **Policy advice eg SFS**

Diolch / Thank you – any questions?

