



Case study #17: Forth catchment

Case study cluster: peatlands and wetlands;
small streams and basins

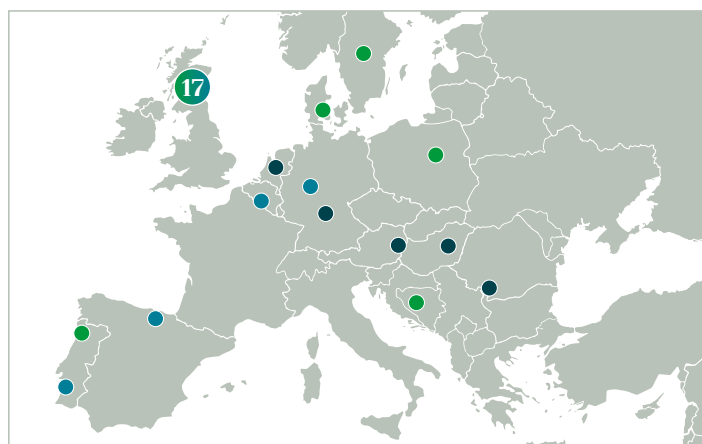
Country: Scotland, UK

Scientific partner: University of Stirling,
UK Centre for Ecology & Hydrology

Implementation partner:
NatureScot, Forth Rivers Trust

Twinning case study: Welsh peatlands

Website: www.nature.scot,
www.ceh.ac.uk/our-science/projects/merlin



Demonstration

- **Type of restoration:** restoration of channel and riparian habitats, reconnection of floodplain of the River Forth tributary (~23 km), rewetting of at least 150 ha of peatlands within a 10+ year national project (£250 million) – including forest to bog restoration
- **Size:** 800 km² catchment
- **Location(s):** Allan Water & peatlands across region
- **Value of the case:** river and floodplain restoration, flood management, climate resilience, biodiversity enhancement, carbon sequestration, social and economic recovery in economically deprived region
- **Stakeholders involved:** local government (landscape planning), public agencies and authorities, forestry, NGOs (nature conservation), research
- **Sectors involved:** tourism
- **Innovations being applied:** Demonstration sites in the catchment will partner with the University of Stirling's Forth ERA programme. This will facilitate the collection of high resolution data in freshwaters undergoing restoration, and data provision to the wider community.

Implemented within MERLIN

- **Restoration measures:** Re-wetting of lowland bog peatland; restoration of floodplain habitat; introduction of leaky dams and large woody debris
- **Size:** 412.92 ha restored land, 50 km restored river length
- **Scope:** regional
- **Vicinity:** rural

- **Stakeholders involved:** water management (river trust), landowners, public agencies and authorities, nature protection (NGOs), citizens
- **Estimated costs:** 750,000€ (including planning, monitoring and construction costs) + 5000€ annual maintenance costs

Lessons learnt

- Restoration requires patience from planning to ecological recovery
- Engage local communities early and throughout implementation

Strengths

- Integrated river and peatland restoration
- Strong stakeholder co-creation
- Comprehensive monitoring
- Diverse funding

Weaknesses

- Limited social expertise
- Complex ownership
- Fragmented funding

Opportunities

- Demonstrate multiple benefits
- Community and insurance partnerships
- Innovative NbS trials
- New funding mechanisms

Threats

- Climate change
- Preference for technical solutions
- Limited transferability
- Complex funding procedures