Habitat Restoration and Natural Flood Management

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Rainfall Amount
Annual Average
1971-2000

Average Value (mm)

- > 3000
- 2000 to 3000
- 1500 to 2000
- 1250 to 1500
- 1000 to 1250
- 800 to 1000
- 750 to 800
- 600 to 750
- < 600

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Scottish Environment Protection Agency
Flood Risk Management Policies

- plan-led
- risk-based
- integrated across all sources
- considers all actions
- collaboration between responsible authorities
- public engagement
s20 – ‘SEPA must assess whether alteration or restoration of natural features and characteristics could contribute to the management of flood risk…’

‘include such features and characteristics which can assist in the retention of flood water, or in slowing the flow of water, those which contribute to the transporting and depositing of sediment, and the shape of rivers and coastal areas.’
Runoff Reduction
Floodplain Storage
Sediment Management
Water Framework Directive

- Framework for management of water environment across Europe to:
  - protect, enhance and restore water bodies
  - reduce pollution
  - promote sustainable water use
  - contribute to mitigation of floods and droughts
ecological status & objectives

Includes:

- Water Quality
- Physical Condition
- Fish Passage
- Flows and Levels
- Invasive Species

*Good status also requires good water quality*
River Basin Management Planning

![Bar chart showing the number of water bodies in different categories: Water Quality, Physical condition, Barriers to fish movement, Flows and Levels, Invasive Non-Native Species. The chart indicates the number of water bodies for each category, with the highest number being for Water Quality.](image-url)
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Potentially Vulnerable Areas

Rivers not in good condition
Eddleston Water
Eddleston Water

- The main aim is to investigate if changes to land use management and the restoration of natural habitats can help improve the river valley for wildlife and help to reduce the risk of flooding in Eddleston and Peebles.

- Working with local communities and farmers to ensure the proposals deliver multiple benefits and meet their requirements....
Eddleston Water
- 64 hectares of riparian woodland created
- 12,000 metres of fencing erected
- Over 1km of river re-meandered
- 22 ‘flow restrictors’ installed
- 4200 square metres of ponds created, and
- over 67,000 trees planted
Comprehensive Monitoring Programme across whole catchment

Installed detailed baseline networks

**Measuring:**
- Precipitation and weather
- Flows and river Levels
- Groundwater
- Physical stream habitats and hydro-geomorphology
- Ecology – plants, fish, invertebrates
www.sepa.org.uk