



Case study #11: Emscher catchment

Case study cluster: small streams and basins

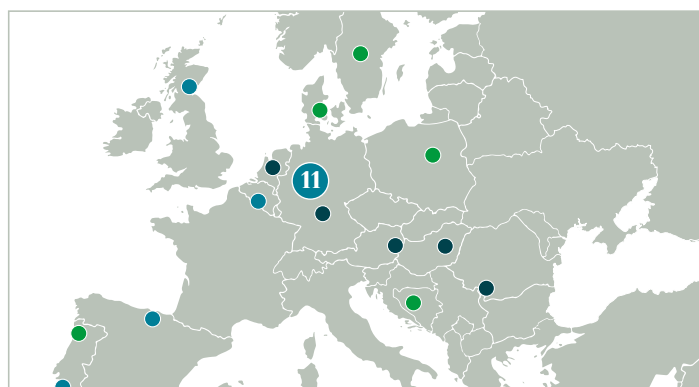
Country: Germany

Scientific partner: University Duisburg-Essen (UDE)

Implementation partner:
EmscherGenossenschaft (EGLV)

Twinning case study: Leipzig: revitalisation of
streams, floodplains and riparian forests

Website: www.eglv.de



Demonstration

- **Type of restoration:** Emscher restoration: restoration of channelised and wastewater-carrying Emscher river and tributaries (350 km) in a 30+ year project (> 5,6 billion €)
- **Size:** catchment scale (800 km²)
- **Location(s):** restored river stretches and ecological hot spots in the entire Emscher catchment
- **Value of the case:** river and floodplain restoration, flood protection, urban climate resilience, biodiversity enhancement, recreation, regional development and well-being
- **Stakeholders involved:** municipalities (spatial and landscape planning, climate adaptation, infrastructural development), agencies and authorities, NGOs (nature protection), citizens, research, artists & cultural heritage, mining companies
- **Sectors involved:** (insurances)
- **Innovations being applied:** –

Implemented within MERLIN

- **Restoration measures:** Flowering meadows on public land; participatory river maintenance through citizen science
- **Size:** 0.021 ha
- **Scope:** regional

→ **Vicinity:** urban

→ **Stakeholders involved:** water management authorities, agencies and municipal authorities, nature protection (NGOs), education, tourism, citizens, landowners

→ **Estimated costs:** 740,000€ (including planning, construction/sowing and App programming costs) + 18,000€ annual maintenance costs

Lessons learnt

- Concepts need time and committed individuals to really drive things forward.

Strengths

- Long-term restoration programme
- Multi-objective evaluation
- Stable cooperative funding

Weaknesses

- Limited co-creation
- Highly modified river system
- Limited evaluation of effectiveness

Opportunities

- Municipal climate partnerships
- Digital river twin
- Nature-based local products

Threats

- Flood protection–biodiversity conflicts
- Rising restoration costs
- Limited public acceptance