



Case study #16: Scheldt catchment

Case study cluster: small streams and basins

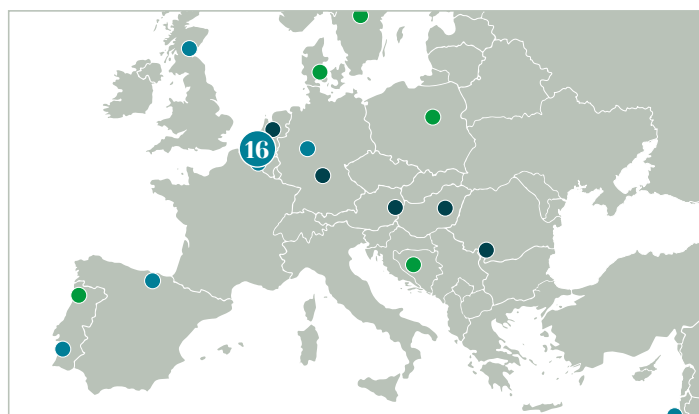
Country: Belgium

Scientific partner: Ghent University

Implementation partner:
Province of East-Flanders

Twinning case study: Schwarzer Schöps case study
in Germany of the Optain project (optain.eu)

Website: [www.ugent.be/bw/asae/en/research/aeco/
research/Merlin/Zwalm](http://www.ugent.be/bw/asae/en/research/aeco/research/Merlin/Zwalm)



Demonstration

- **Type of restoration:** restoration of the Zwalm river basin: installation Waste water treatment plant (WWTP) and sewer systems, removal of fish migration barriers, species reintroduction programs, habitat restoration – restoration of spawning beds, water buffer basins, buffer strips
- **Size:** river basin 144 km²; length of the main river 21.8 km
- **Location(s):** Zwalm, Brakel and Zottegem
- **Value of the case:** riparian and habitat restoration, flow connectivity, fish passes, biodiversity enhancement, reduction of erosion, improvement of ecological and water quality, reaching the goals set by the EU WFD
- **Stakeholders involved:** municipalities, farmers, water and land managers
- **Sectors involved:** agriculture, tourism, water
- **Innovations being applied:** online monitoring

Implemented within MERLIN

- **Restoration measures:** Channel restoration, fish passage improvement and riparian flower strips.
- **Size:** 5.921 ha restored land, 8 km restored river length, 22 fish steps installed
- **Scope:** regional
- **Vicinity:** rural
- **Stakeholders involved:** farmers, water managers

- **Estimated costs:** 375,000€ (including planning, monitoring, landowners' compensation and construction costs) + 6000€ annual maintenance and monitoring costs

Lessons learnt

- Align funding and administrative processes early across organisations

Strengths

- Strong evidence base
- Established stakeholder network
- Supportive policy and funding

Weaknesses

- Multiple environmental pressures
- Limited stakeholder engagement
- Preference for technical solutions

Opportunities

- Climate-driven demand for NbS
- Recreation and tourism benefits
- New restoration policy and funding

Threats

- Limited stakeholder commitment
- High restoration costs
- Short-term policy priorities