Green-blue corridor

Status	Construction 2011 – 2012
Location	Germany, North Rhine-Westphalia, City of Kamen, Heerener Mühlbach
Spatial info	Town Residential area and business park
Measure type(s)	Green open spaces; Water retention, water drainage, Urban water spaces – flowing water
Contact	www.eglv.de/lippeverband

Description and Aim

Ecological improvement of the water body Heerener Mühlbach on 2.14 km (remove concrete bed and change into natural banks). Disconnection measures of about 80 private properties (roofs and paved area) on about 1,1 ha.

The aims are to reduce the volume of rain water of the combined sewer system and to improve the city micro climate within the “Green corridor strategy” in the city of Kamen: The ecological transformation of the water bodies in the Lippe catchment shall be combined with disconnection of storm water to create blue-green-corridors.

Adaptation to climate change

Urban heat island effect can occur in summer, flash floods tend to become more, more storm water is added to water body, so in summer the risk of drying out is reduced.

Problems addressed:

Heat wave, heavy precipitation / flooding, drought

Receptor(s):

Population, infrastructure, natural resources

Experiences

Functionality:

The water system will be much more robust after finishing the ecological transformation. The flood protection will be enhanced, and also the living quality will be risen.

Further synergies/benefits:

The ecological transformation of the water body will raise the living quality for the people: instead of having a canalized, concrete-bedded open waste water sewer behind their gardens, a nature-like water body will benefit the living environment. For some parts where the private gardens allow also space for public use, the area will be used also for recreation: public cycle ways will be built directly next to the water body.

Less water in the sewer system means less water which runs through a WWTP. This saves energy within the waste water treatment process as well as pumping costs.

Costs:

In total about 4,3 Mio. € for the ecological transformation. The average disconnection costs are about 10 – 20 € / m².

Funding:

ERDF: 729.600 € , national funding: 691.500 €

Stakeholder involvement:

The water board Lippeverband, the city of Kamen, the district Unna, the regional authority Bezirksregierung Arnsberg, the local inhabitants.

Acceptance:

Public: The acceptance for the measure is very high – the future situation is very attractive for the people living next to the water body. During the construction work some disturbances are expected; the water board will care for a smooth construction process as much as possible.
Politics: The measure is highly appreciated in the local and regional politics.

Obstacles/restrictions:

Regarding the disconnection the water board has to consult individual inhabitants which needs a lot of time.