

New meanders in Luxembourg (Lux-BE)

The scope of this study was to draft a comprehensive pre-feasibility note for the restoration of 300m of the Tretterbach river, located in Northern Luxembourg.

In the stage of pre-feasibility, no official survey yet exists (Dec. 2015) for this site, but it is expected to produce:

- Pre-feasibility study ;
- Drawings of the remeandering project with sketches and basic technical justification;
- Estimate of the costs of works.

Benefits of stream renaturation

A stream or river that has a freedom space to move naturally, provided by restored meanders, will gain in **hydromorphological quality**, especially if the **erosion** on the bank/bottom appears. Various benefits will be achieved:

- ✓ Improved **quantity** of **habitats for biodiversity** by increasing the volume of water (increased river linear);
- ✓ Restored **quality** of habitats for biodiversity by recreating the essential components, for example for fish habitat (rifles, glides and pools), with natural fish cover (underbank ...). This also restores the spawning habitats (gravel), the habitat for fish juveniles (bank diversified with Small woody Debris (SWD), etc.);
- ✓ Restored **hydraulic functionalities** of the ecosystem (e.g. regulation of flooding, provide cold water in the summer via wetlands maintaining system).

