

Water Renovation in Ukraine  
Project no. 22320101



# Water Renovation in Ukraine

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*The project is co-financed by the Governments of the Czechia, Hungary, Poland and Slovakia through Visegrad Grants from International Visegrad Fund. The mission of the fund is to advance ideas for sustainable regional cooperation in Central Europe.*

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● Mendel  
● University  
● in Brno

● Visegrad Fund  
●

# Ponávka – connecting Svratka and Svitava (field trip)

Ondřej Hemr

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# Introduction



- Industrial millrace textiles and engineering
- Traced in embankment walls and underground – many industrial pipelines open into Ponávka.
- Unused, neglected, inaccessible
- Urban study Revitalisation of Urban Spaces – 2010 – plan to restore all 3,7 km of watercourse, high quality and accessible public space with greenery
- 19 separate restoration measures
- some in design and engineering
- some complicated ownership of land in proximity

# Ponávka – Vlněna office park

Former biggest factory textile factory in Brno for wool processing

- o Embanked with walls, inaccessible and hidden -> appear
- o In contrast of brand new office park
- o Specifics:
  - ❑ disturbed sediment yield
  - ❑ unknown watershed area – where does the water from the city go: gutters, sewers, underground collectors
  - ❑ millrace disconnected to regular flood regimen of the parental river (Svratka)
  - ❑ urban landscape – high discharge coefficient – high volatility of streamflow
  - ❑ Restricted evolution of the stream bed

# New apartment building



- o The watercourse is shown and accessible banks, reinforced lower slope with cobblestones in concrete as well as stream bed
- o The stream shape is uniform, lacks heterogeneity
- o No vegetation in watercourse and very limited space for plants and animals to survive
- o Though heavy investment in buildings around, the opportunity to reshape the stream was not used, nor the creation of wetland biotope or adding objects into the stream to promote aquatic organisms

# Restoration of Stará ponávka with new park – first to be revitalised



- o 1,2 ha
- o Mild terrain modeling that allows access to water
- o Stream bed quarry stones and concrete walking blocks, terraces
- o Reinforced surfaces, footways, loungers and benches
- o Demolition of previous objects, public lights, railing etc.
- o Grass area of 3 lawn types
  - i. park mixture (residential)
  - ii. flowery meadow (banks)
  - iii. Wetland type perennials
- o 100 trees and shrubs,
- o 1600 understorey perennials,
- o 1600 wetland perennials
- o 2000 coastal and aquatic perennials
- o The area is taken care of the city district (lawns) and the city of Brno (watercourse)
- o Small but maximum of the possible outcome