

# Restoring Europe's Rivers

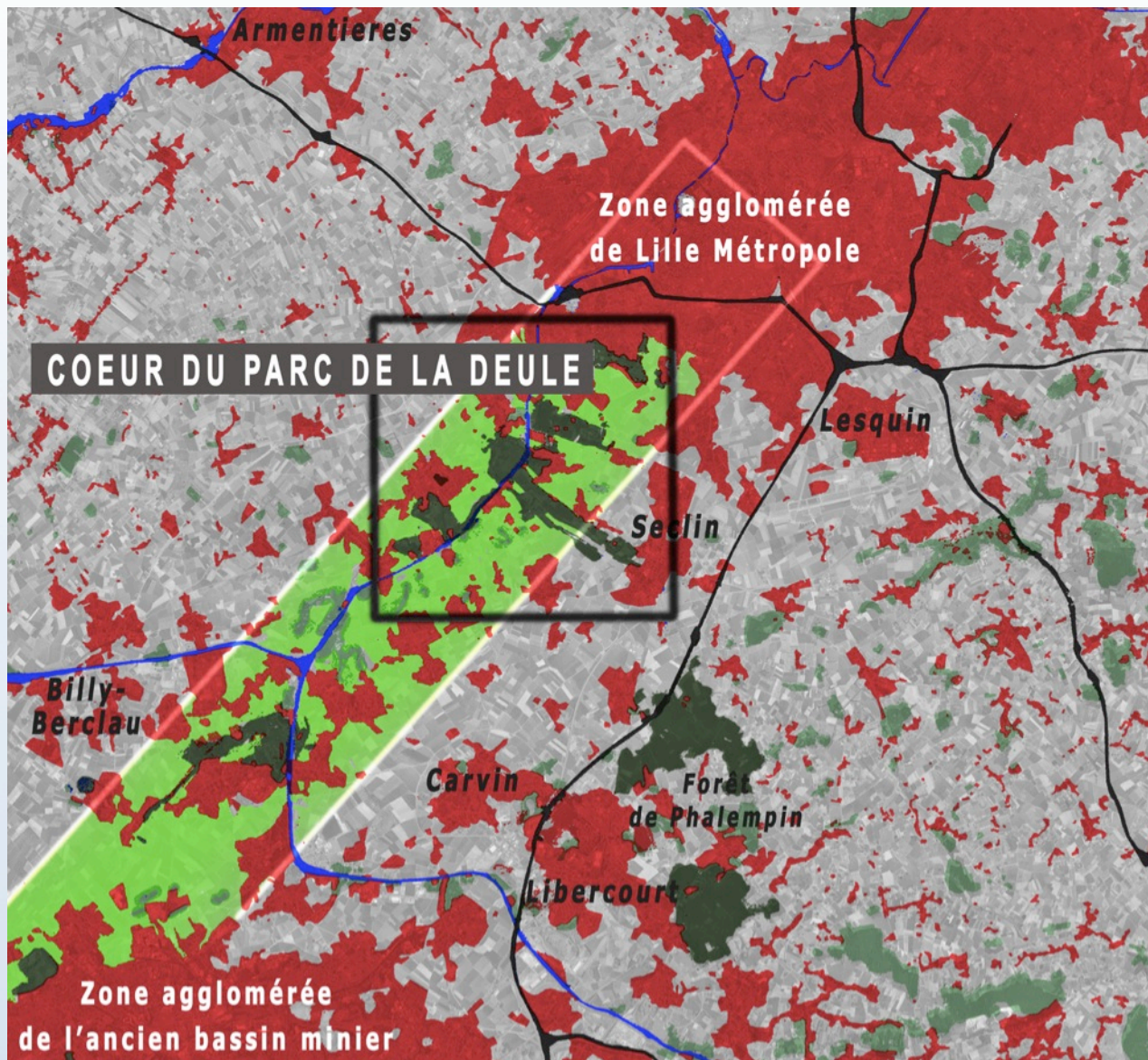
*RESTORE Lunchtime Talk – 27 february 2013*

## The Tortoise

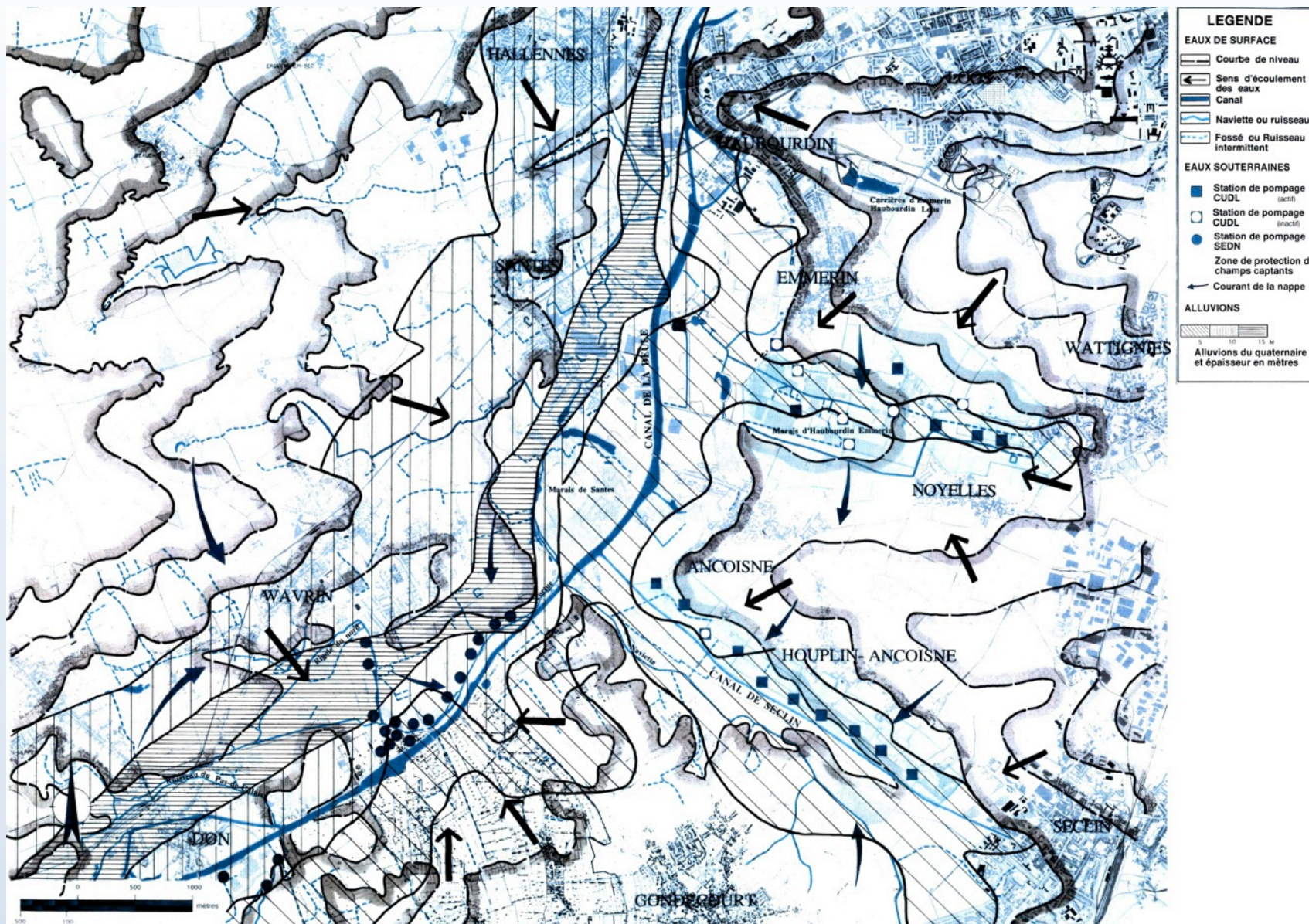
How to convert a dewatering ditch into river

Yves Hubert, paysagiste EFLA/IFLA, Urbaniste CUB

# Location



# Hydraulic context

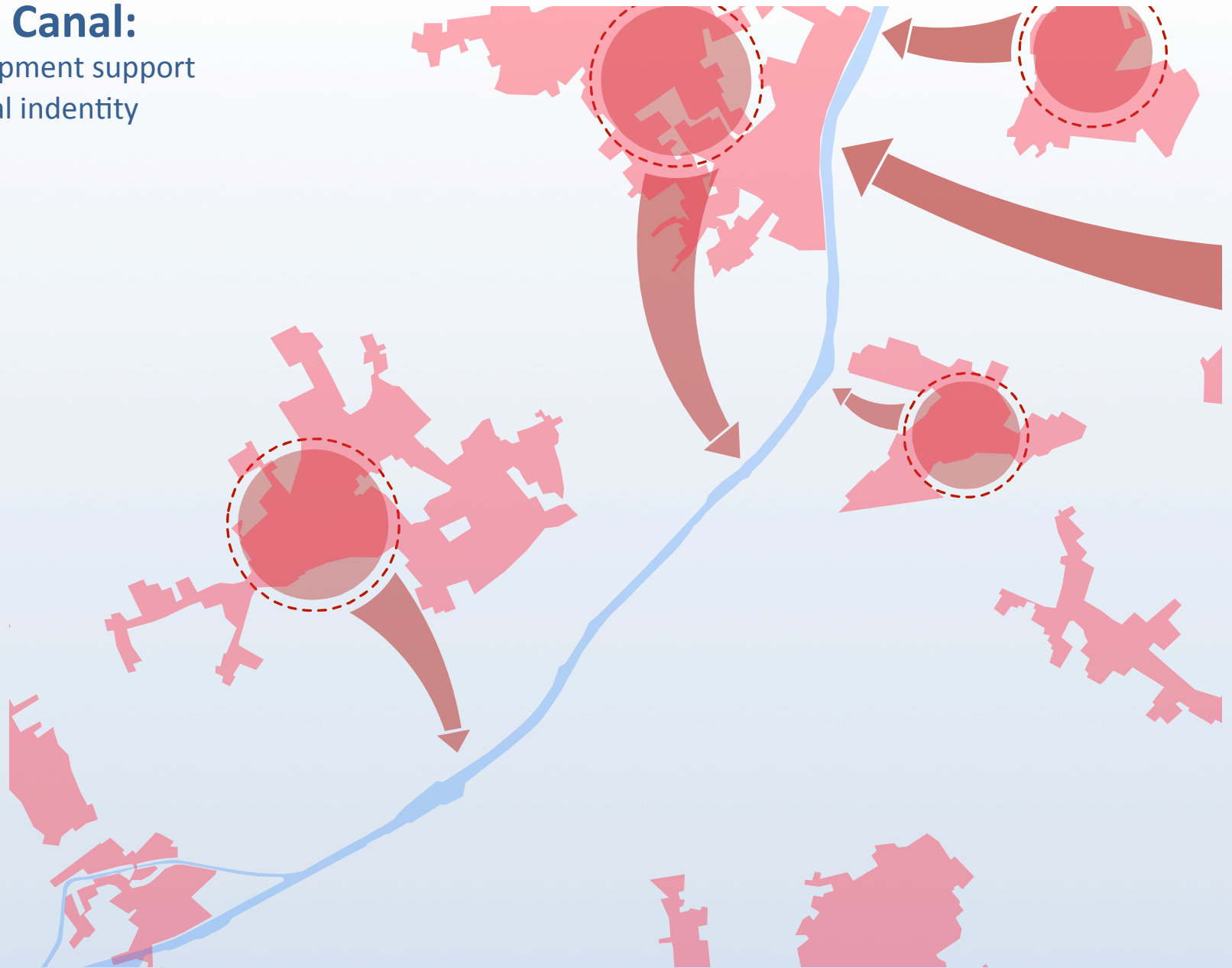


# Parc de la Deûle project



## Deûle Canal:

A development support for a local identity



## The Tortoise:

A population anchorage  
to the Deule's valley territory



## The stakes of the program

### Water quality

- To protect the groundwater
- To promote the auto-treatment of the water

### Hydraulic

- To solve problems of hydraulic saturation due to the sewage disposal networks
- Restoring of one water flow

### Environment

- To improve the quality and the ecological value of the Tortoise
- To enhance the diversity of the wet circles

### Living environment

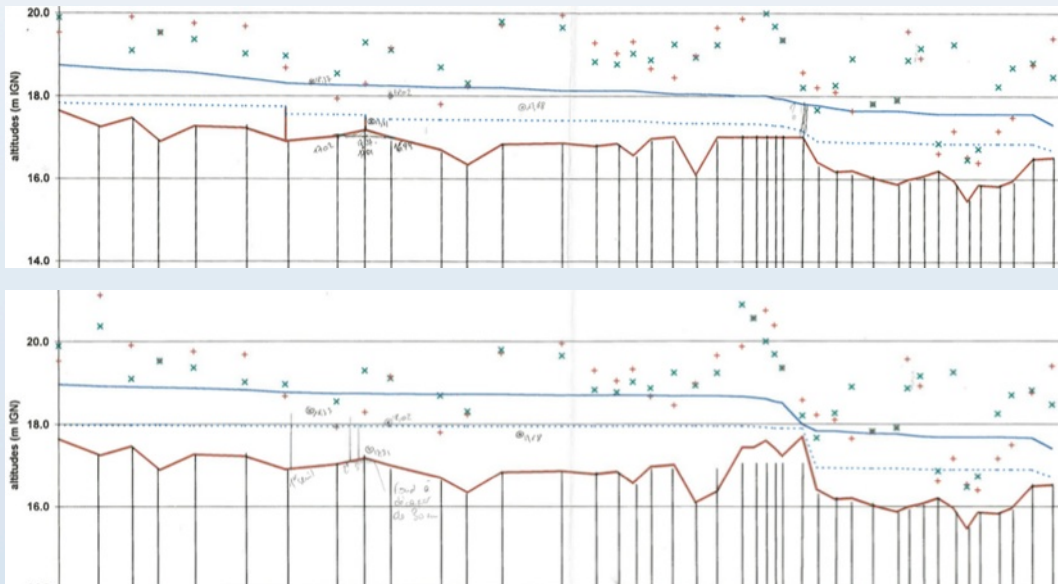
- To increase the value of the landscape
- To develop entertaining activities in the aquatic environment

# Partnership

- Jean-Claude Bruneel - Ethnobotanist



- Beture-Cerrec – Hydraulic engineering





## The Tortoise is not a river!

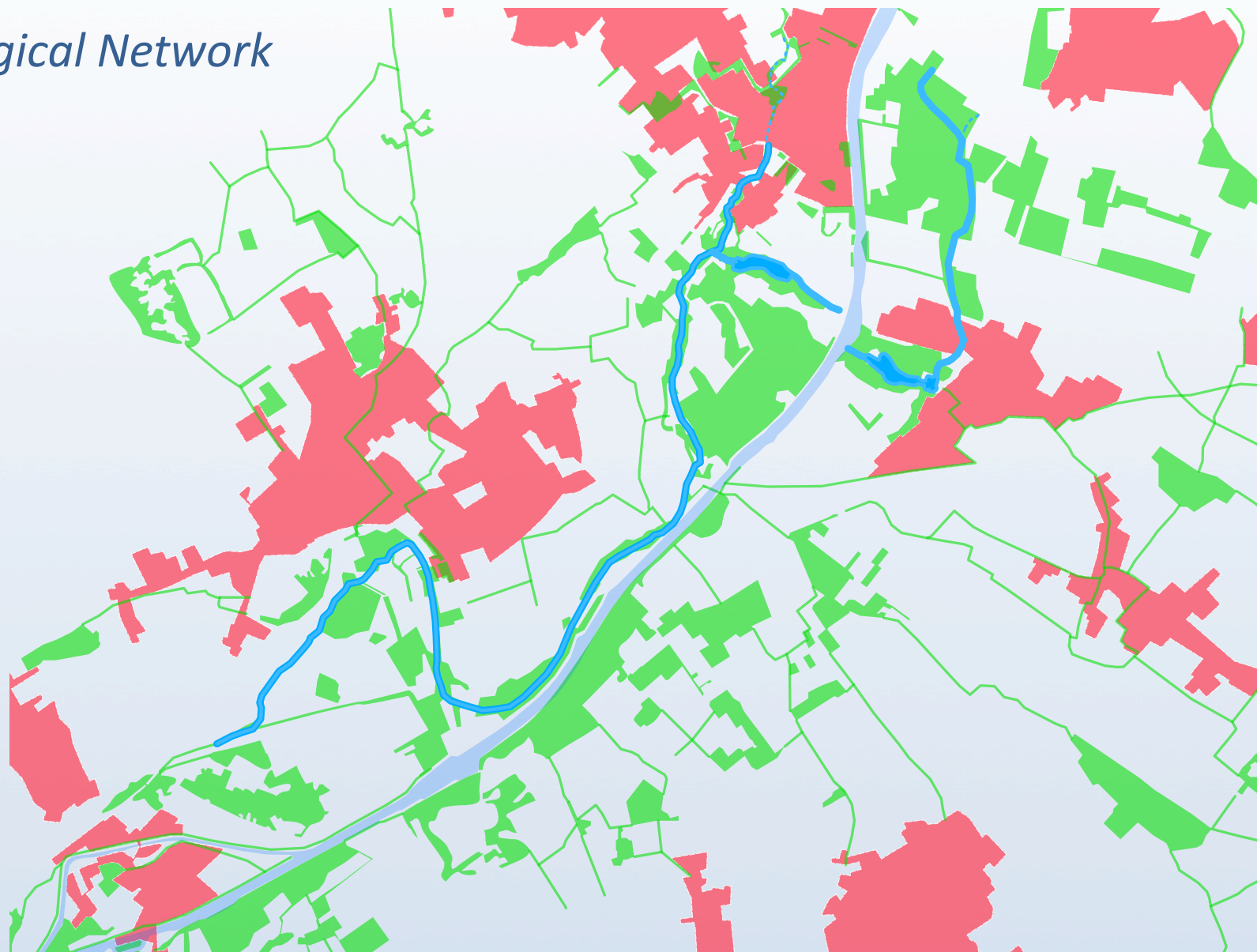


# Initial situation



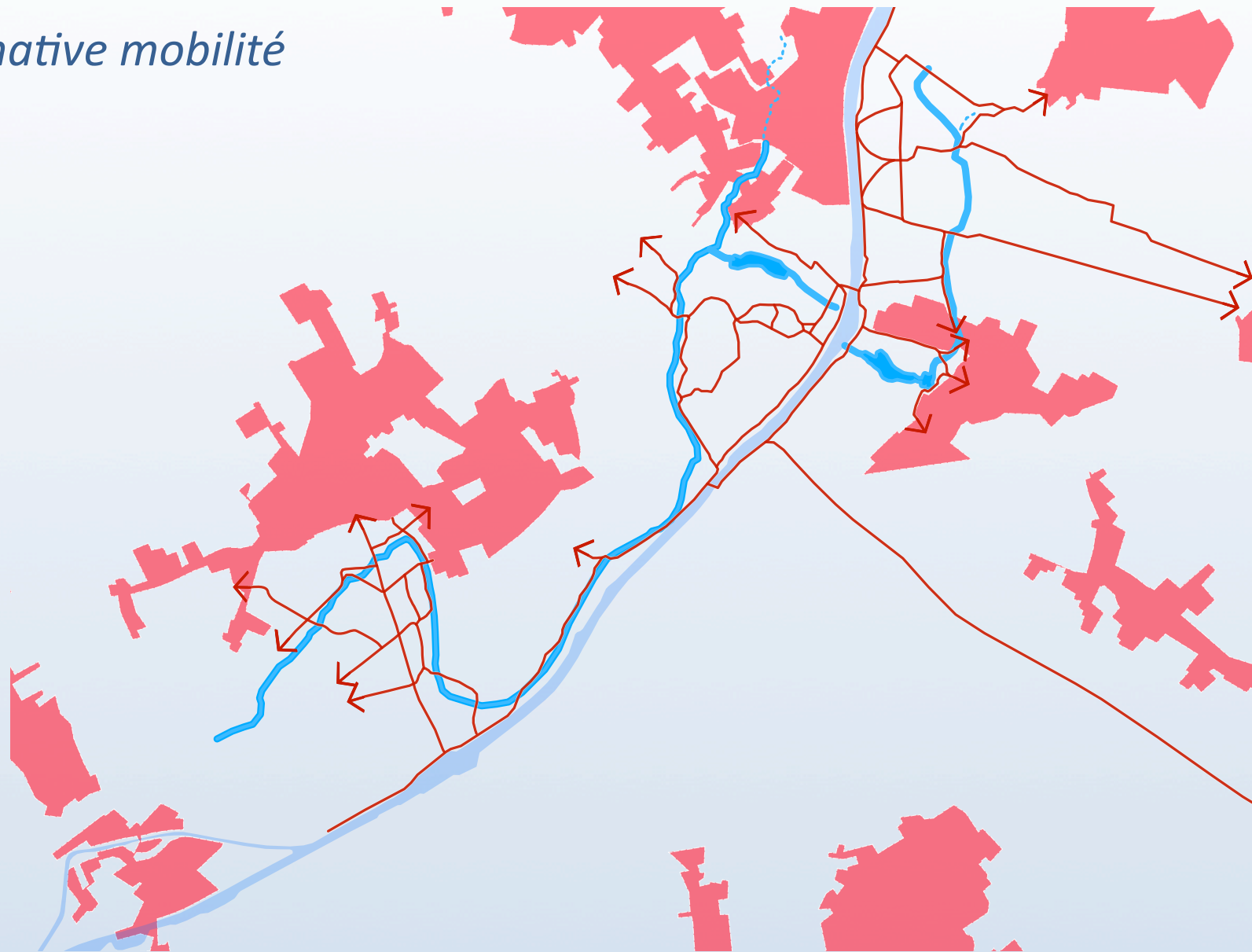
# A territorial development project organized along The Tortoise

## *Ecological Network*



# A territorial development project organized along The Tortoise

*Alternative mobilité*

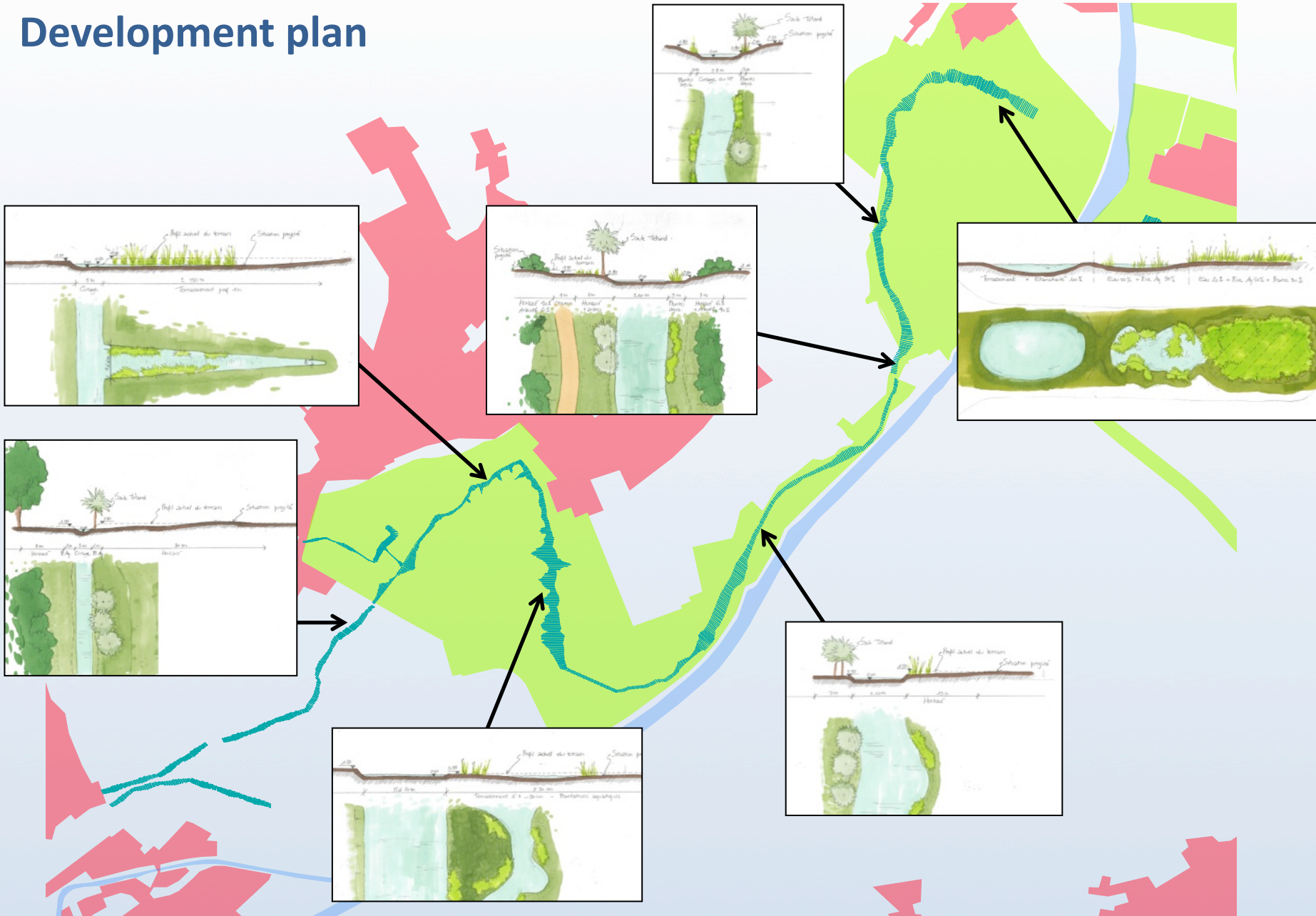


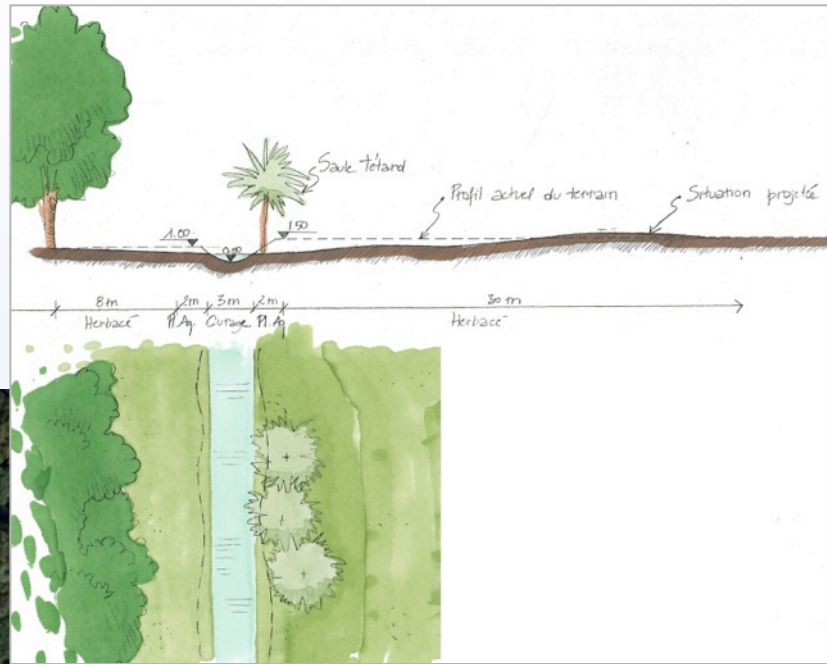
# A territorial development project organized along The Tortoise

*Land use*



# Development plan

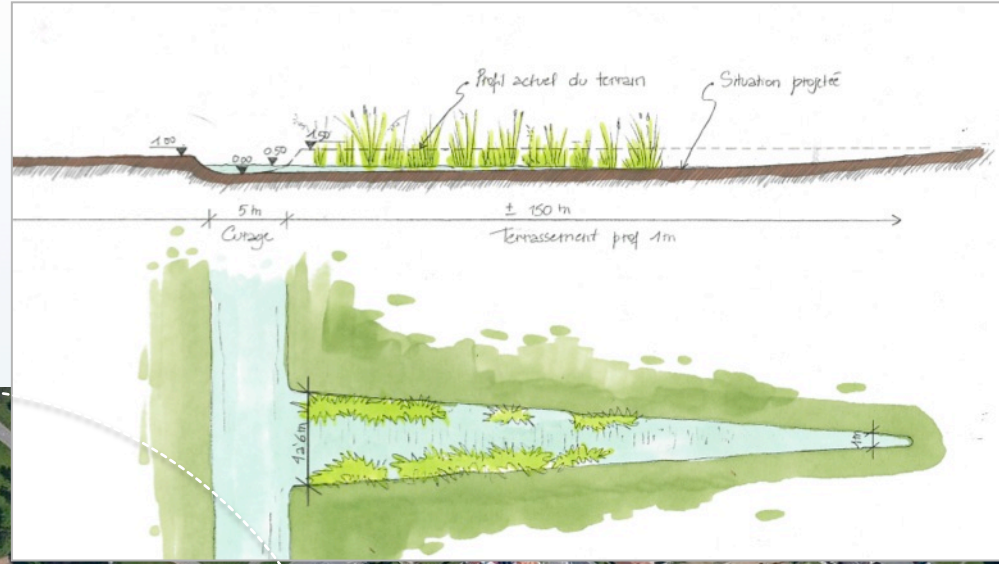










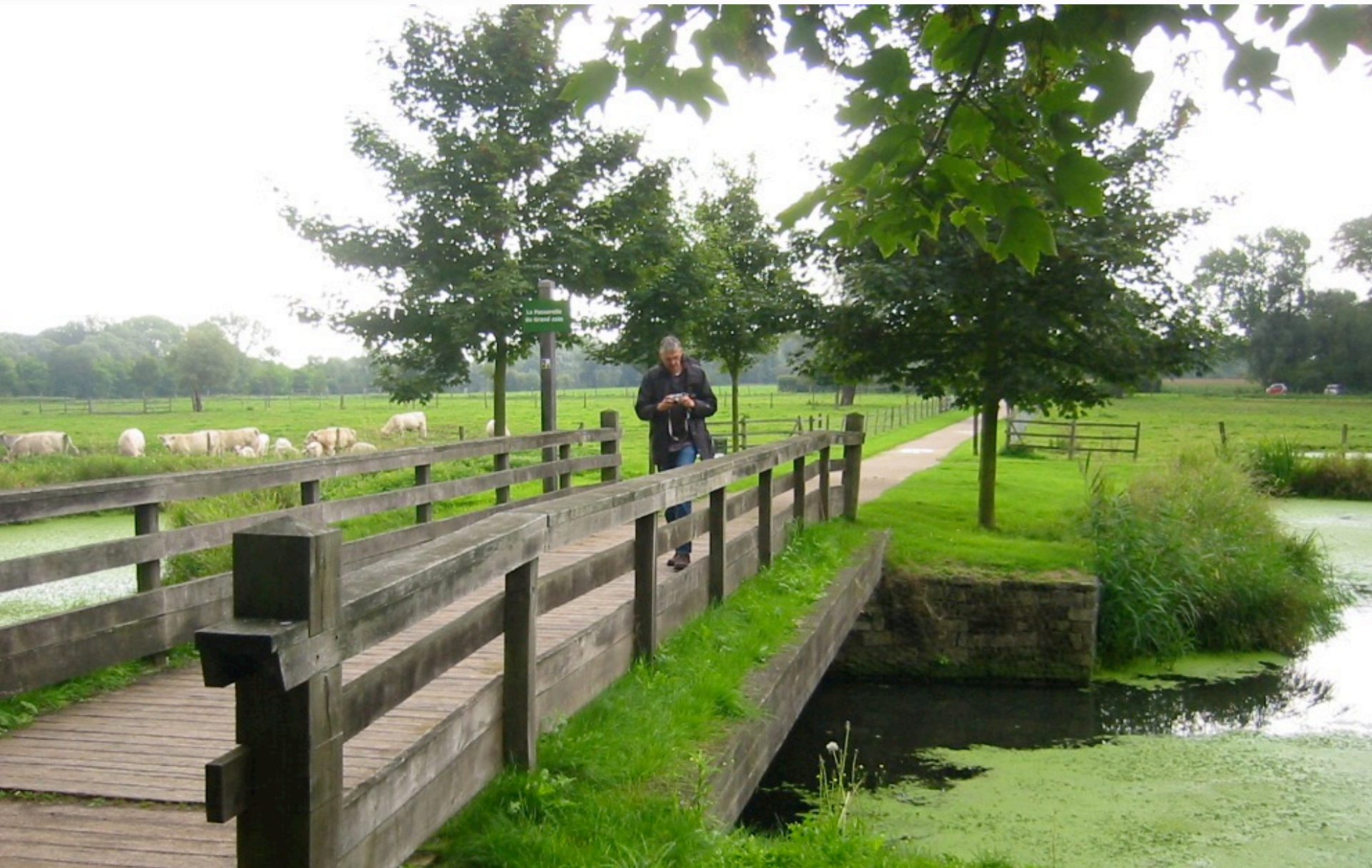


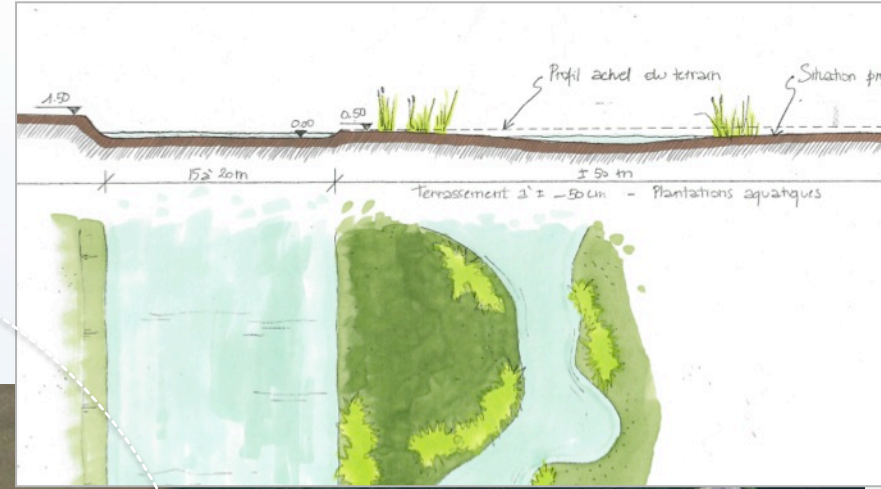
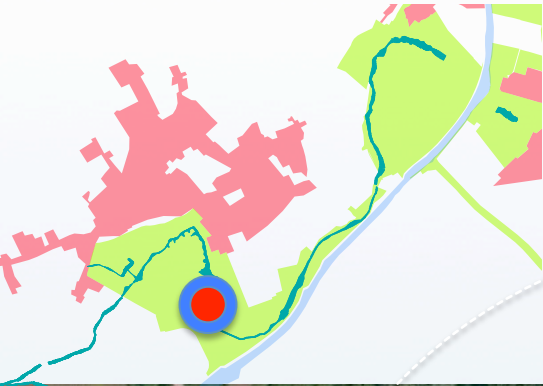














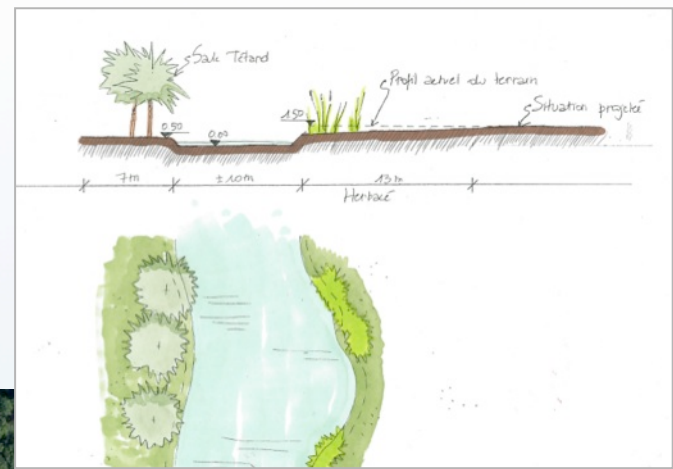










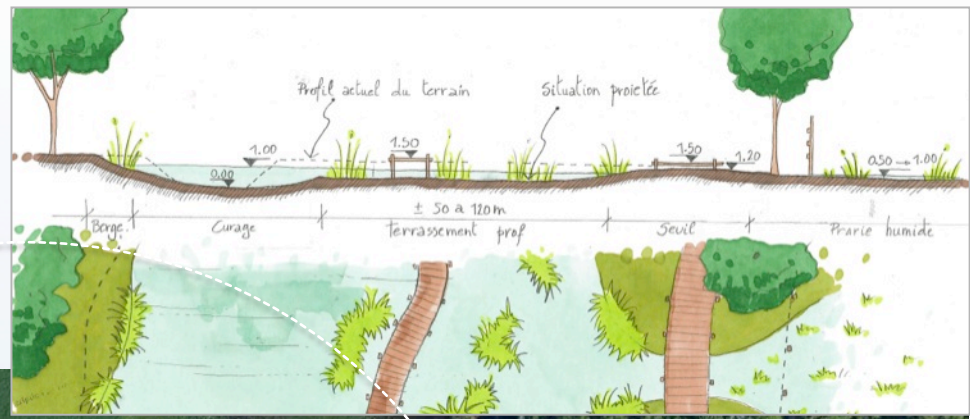










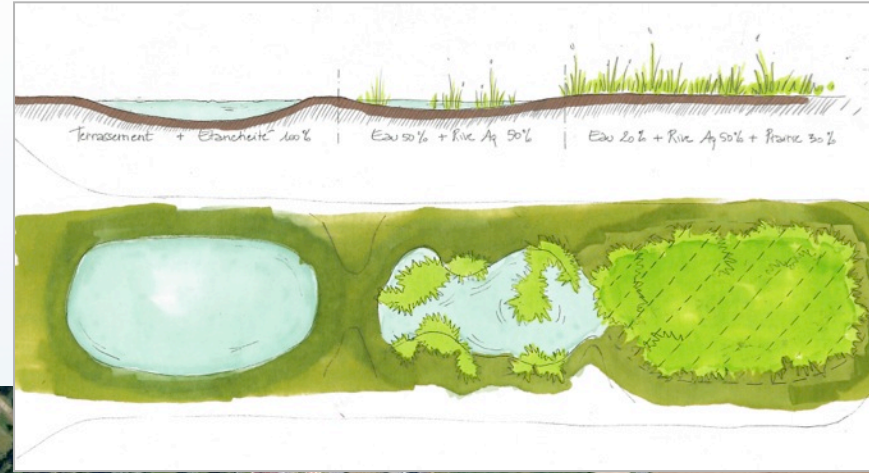




















## Cost

± 150 euro/lm

## Restoration Benefits

### Social benefits

- Education - *Heritage Discovery, environmental awareness*
- Community life
- Leisure activities - *Walking, fishing, sports*

### Economic benefits

- Betterment - *Positive picture of the territory*
- Rural tourism - *Rural heritage discovering*
- Agricultural economics – *Local agriculture promotion*

### Environment benefits

- Water Quality - *integrated farm management, natural water treatment*
- Flood risk management - *Water retention*
- Biodiversity - *diversification of the ecological habitats*

# The Tortoise : Restore rivers for environment and people



The End...