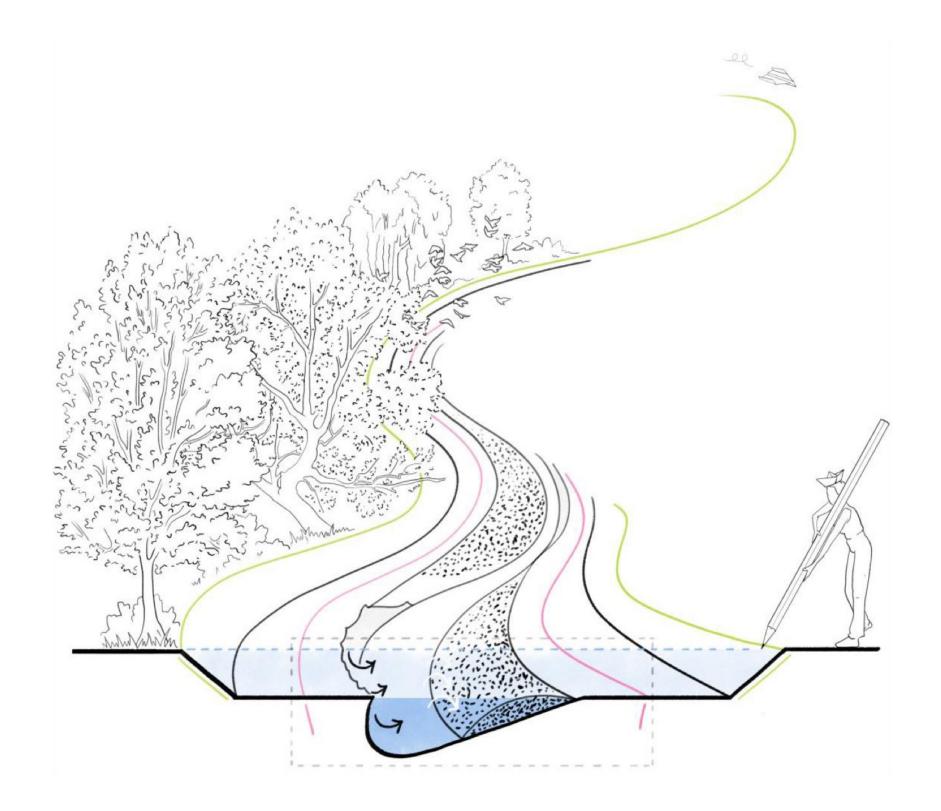
#### XI International Summer School on Rhine-Rivers

August and September 2024 | Technical University of Darmstadt



#### **Creating River\_Space**

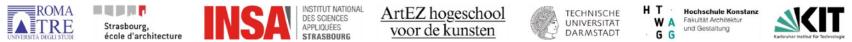














#### SLOW FLOW, WILD GROW

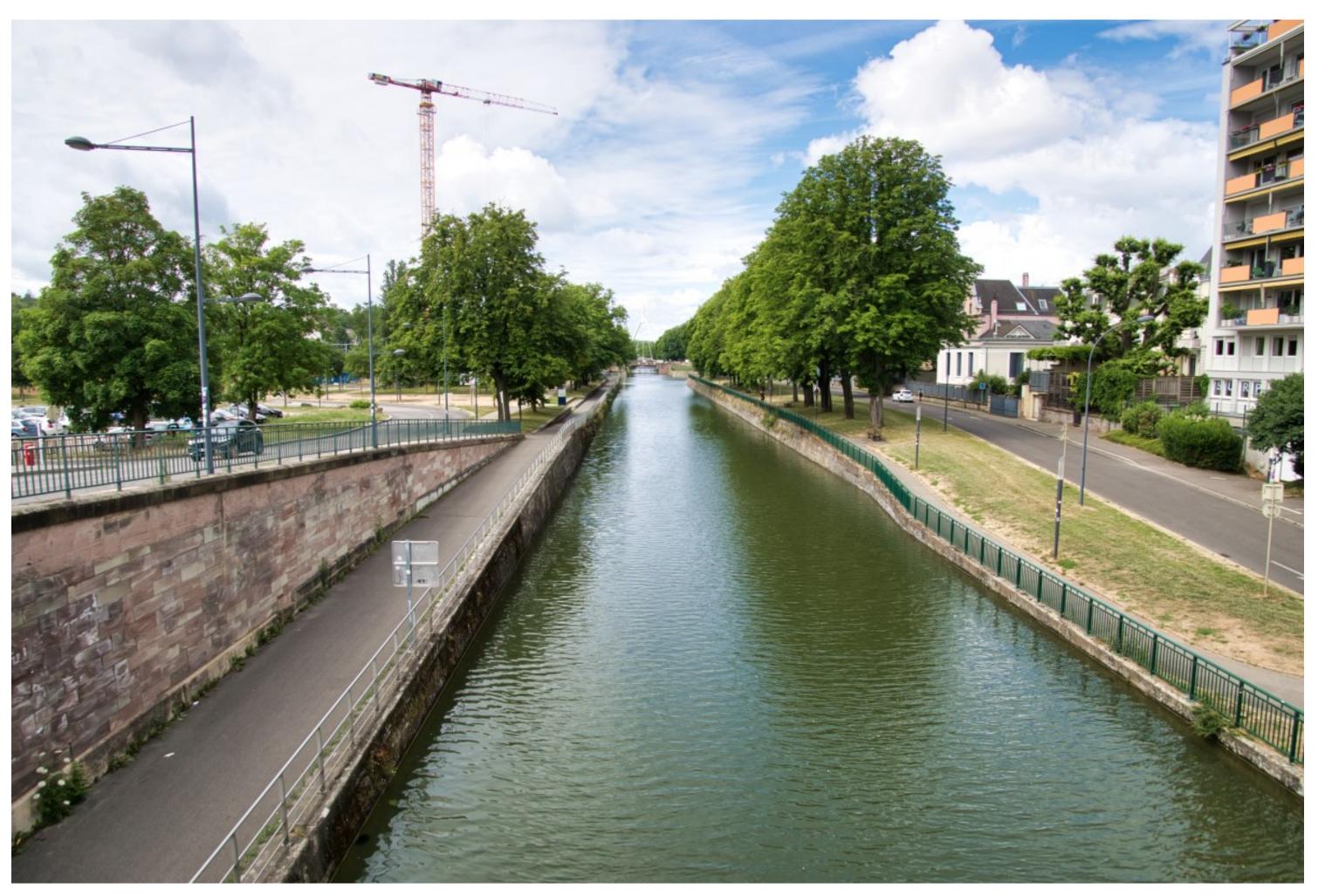
-Reviving river biodiversity-

Group 2

Tizian Landt Paula Karcher Isabela Cardona Yerin Park Giulia Ascenzo Emile Bojadzic Lucas van Hulzen

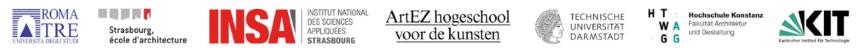
# THE FAST FLOW PROBLEMATIC













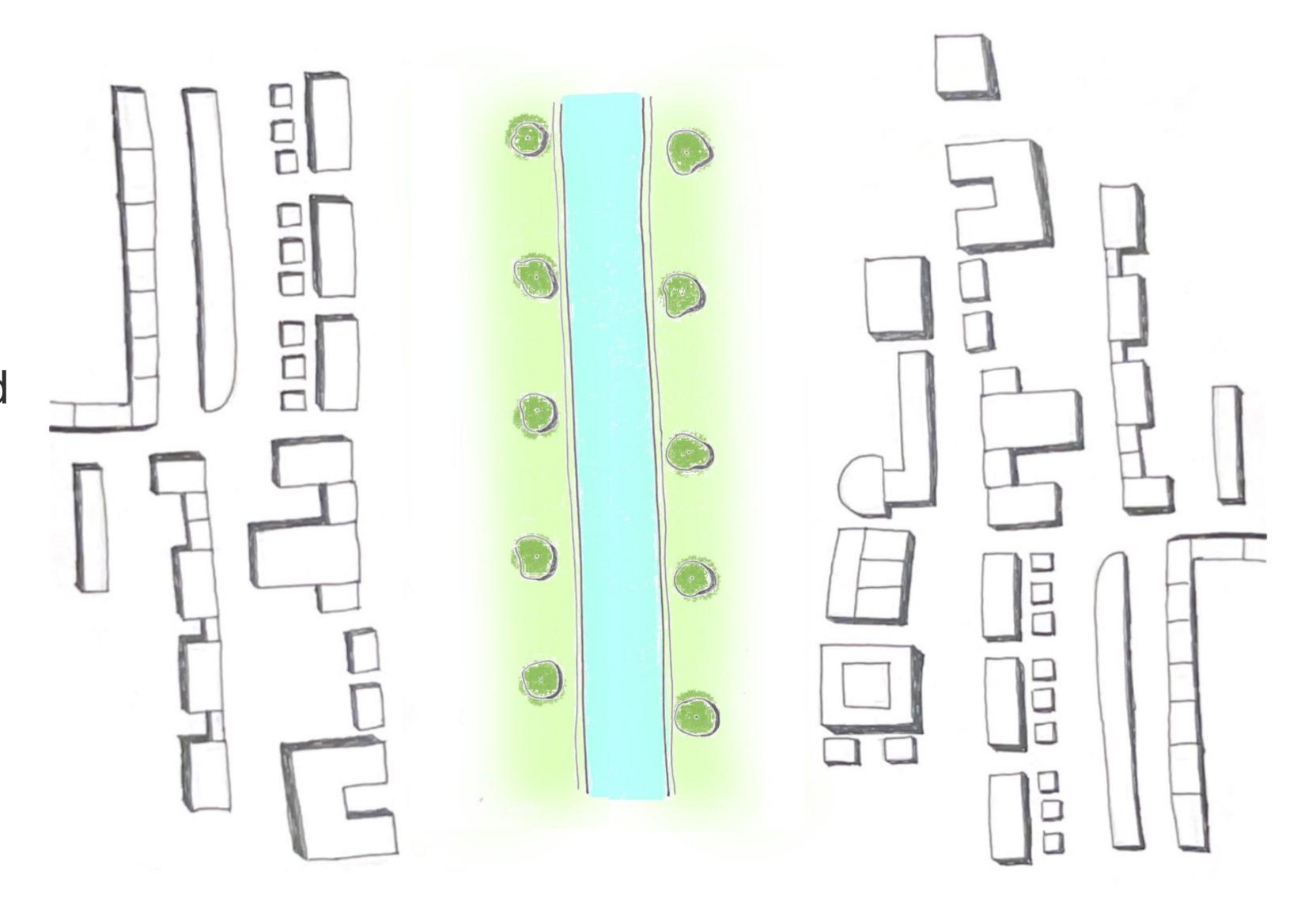






# THE FAST FLOW PROBLEMATIC

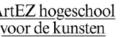
- Narrow and deep canals
- Less habitat for species and vegetation
- Lack of natural filtration processes
- Reduced groundwater recharge
- Flooding risks (if infrastructure fails)











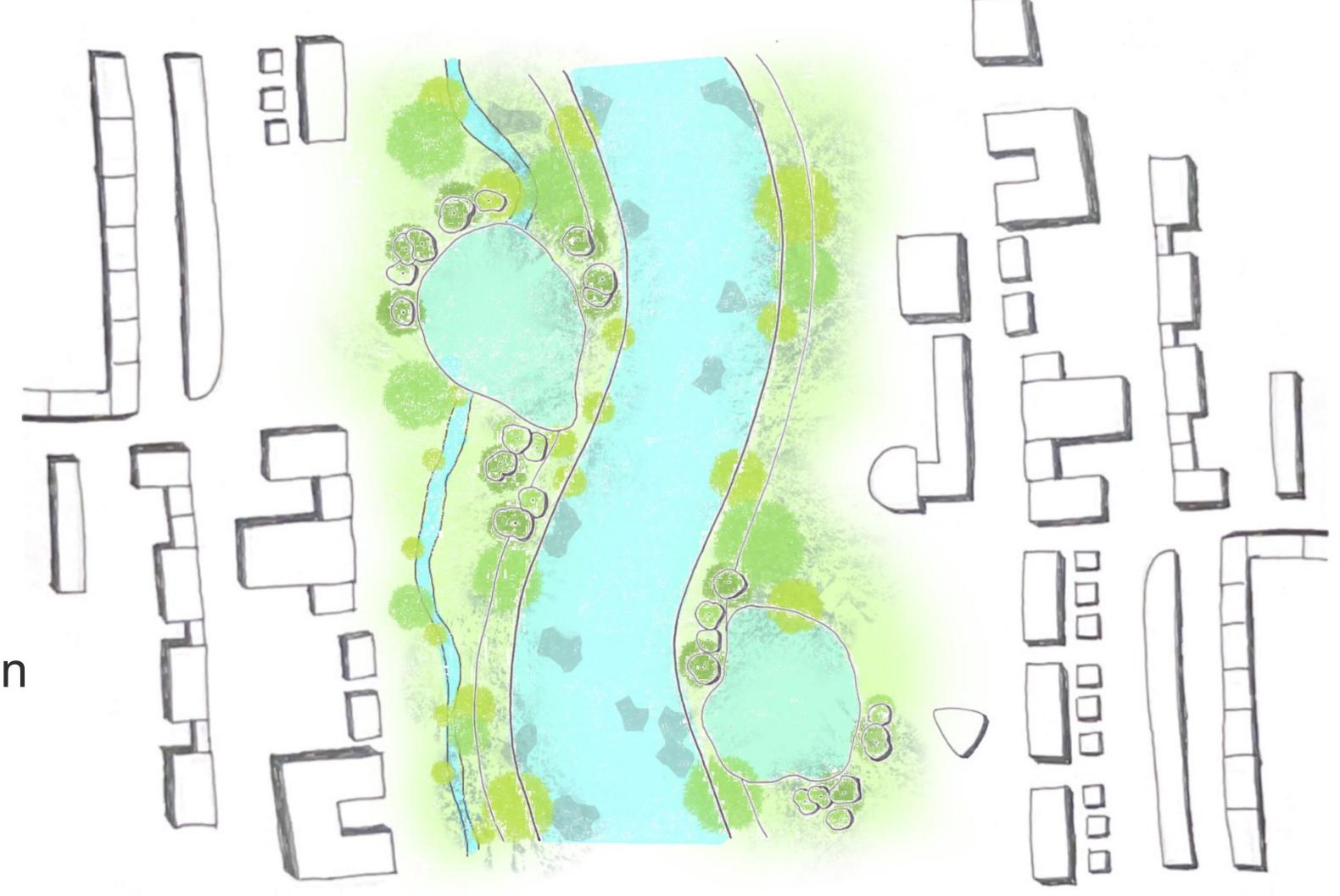






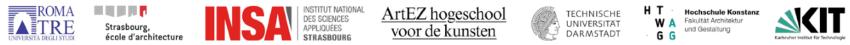
## STRATEGIES TO **SLOW THE FLOW**

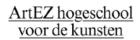
- Expansion of river area (wider and shallower)
- Disperse water flow (rocks, vegetation, changes in topography)
- Canals and ponds to contain floods









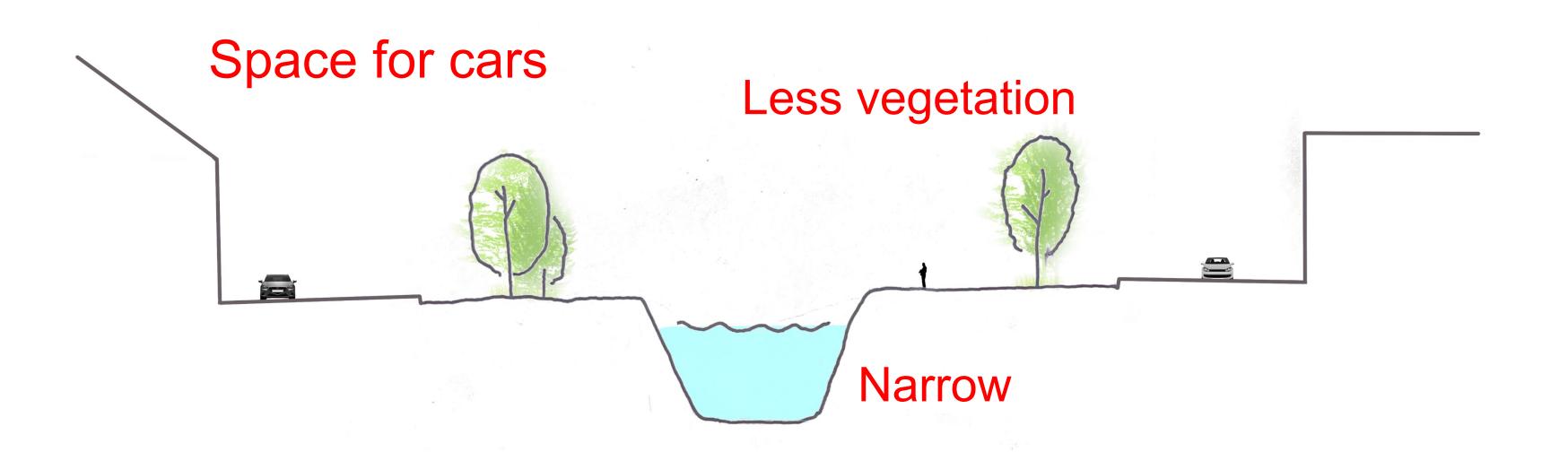




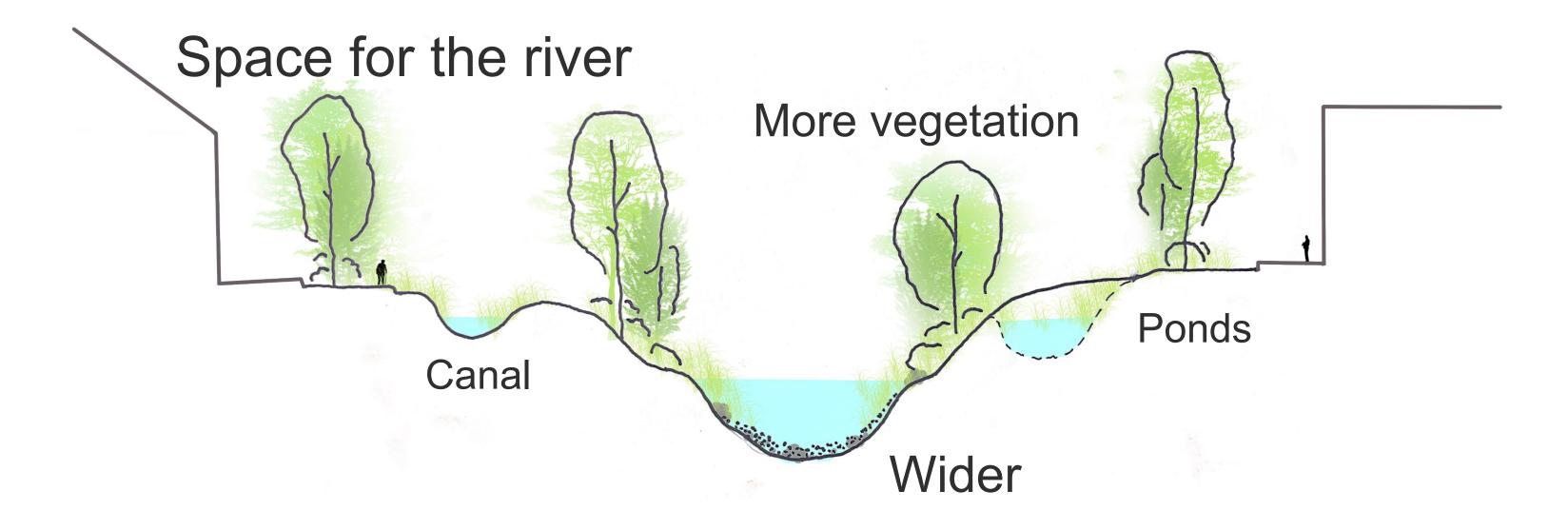




#### **FAST FLOW**



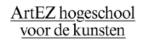
#### **SLOW FLOW**

















#### WILD GROW - VEGETATION



BALD CYPRESS

Retains a lot of water and soil water



**SWAMP OAK**Similar to bald cypress in it's purpose.



Takes a lot of water and turns it into sap. The sap is also drinkable and is said to have health benefits.

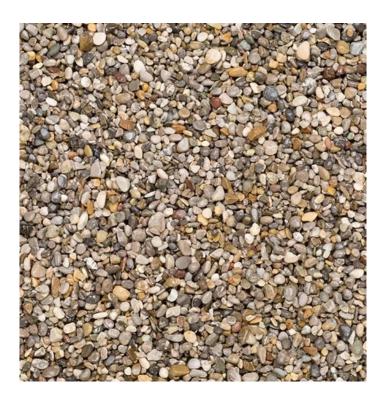


**VIBURNUM** 

#### SOIL



**GRASS** 



**GRAVEL** 



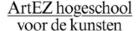
**SAND** 

Soils that absorb water very well.













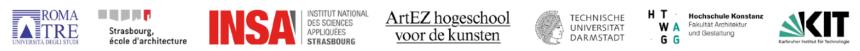


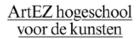
## THE MODEL...



























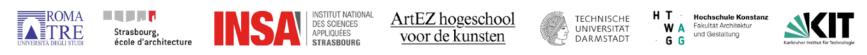










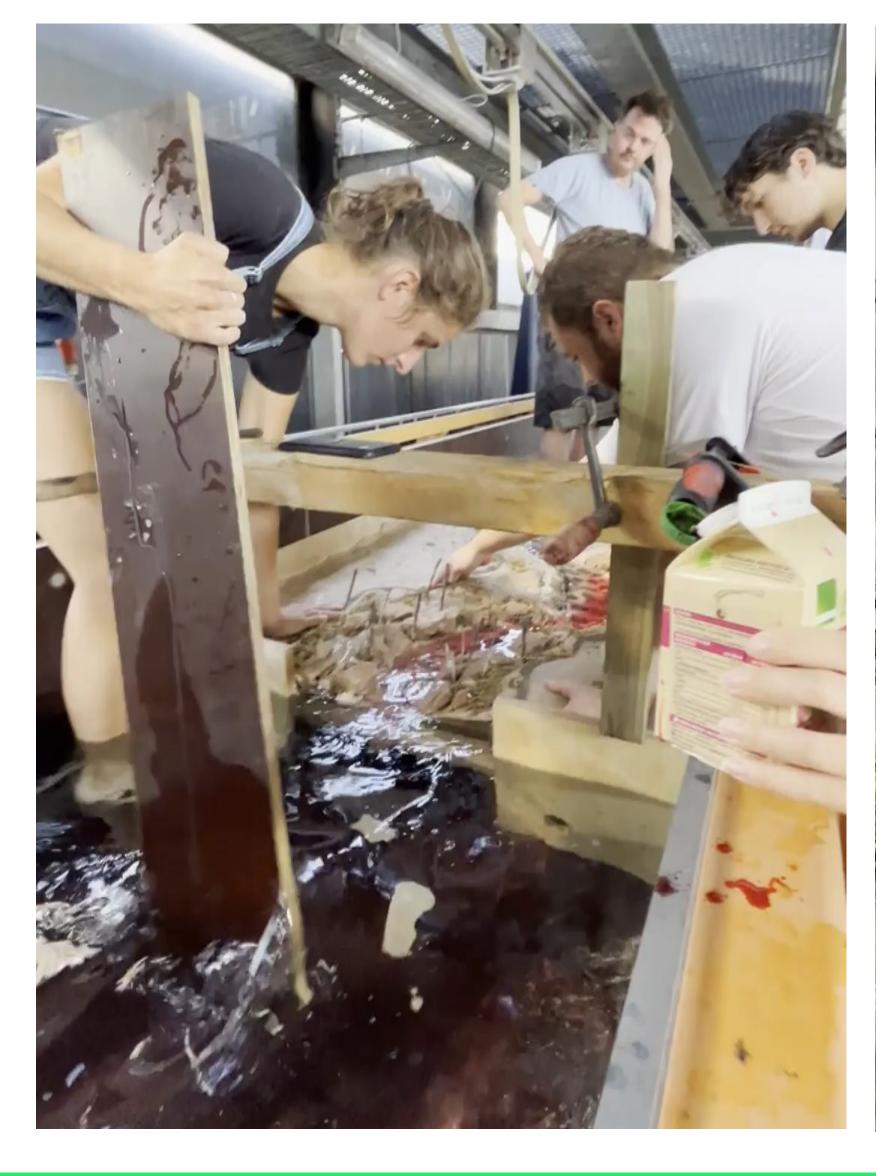


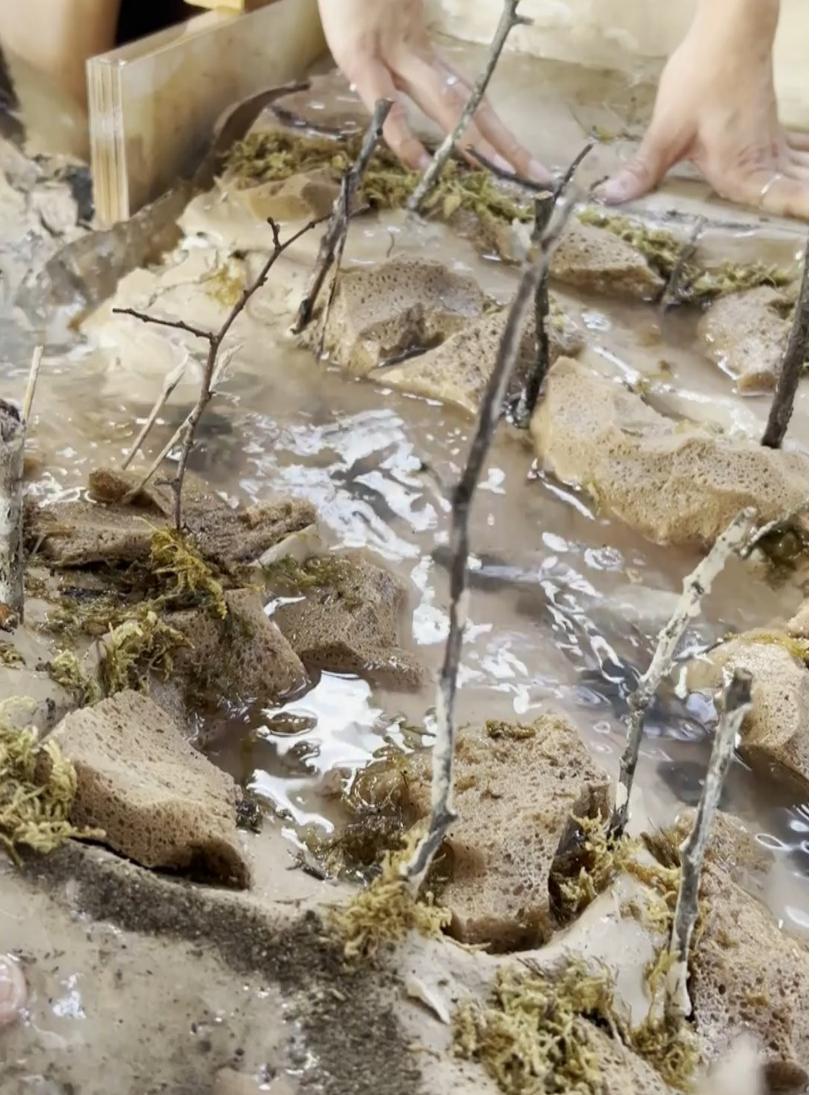


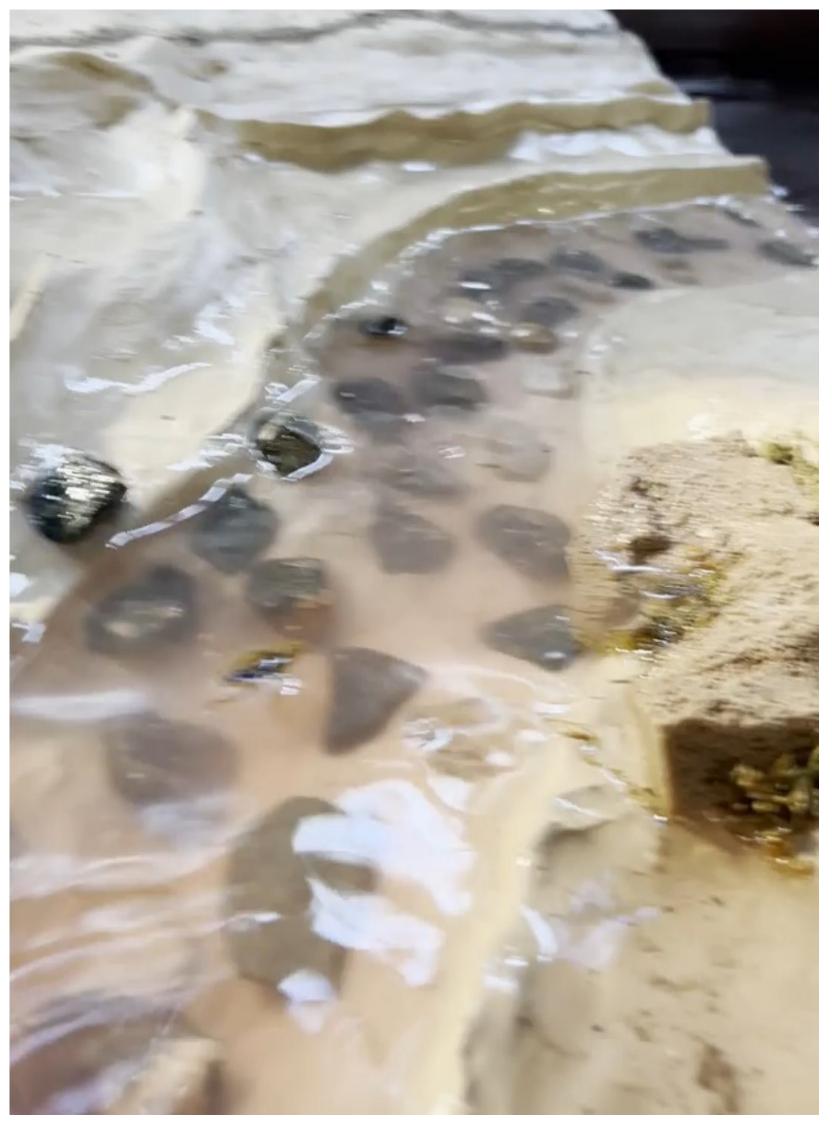






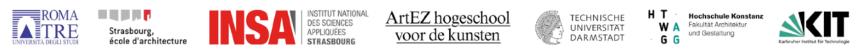


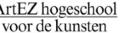
















### CONCLUSION









