



ROHÁNSKY OSTROV\_prague wetlands

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AT4  
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## wider connections

A The park is situated on Rohánský ostrov along to the

Vltava river

- 1 Štvanice Island
- 2 Church of St. Cyril and Metoděj
- 3 Church of St. Antonín Paduánský
- 4 Holešovice market
- 5 National Monument on Vítkov
- 6 Žižka's Tower
- 7 Baroque complex of the Invalidovna



0 100



## photos of wider connections





## the current situation

neglected areas

disconnection

absent contact with the river shore

impermeable pavements

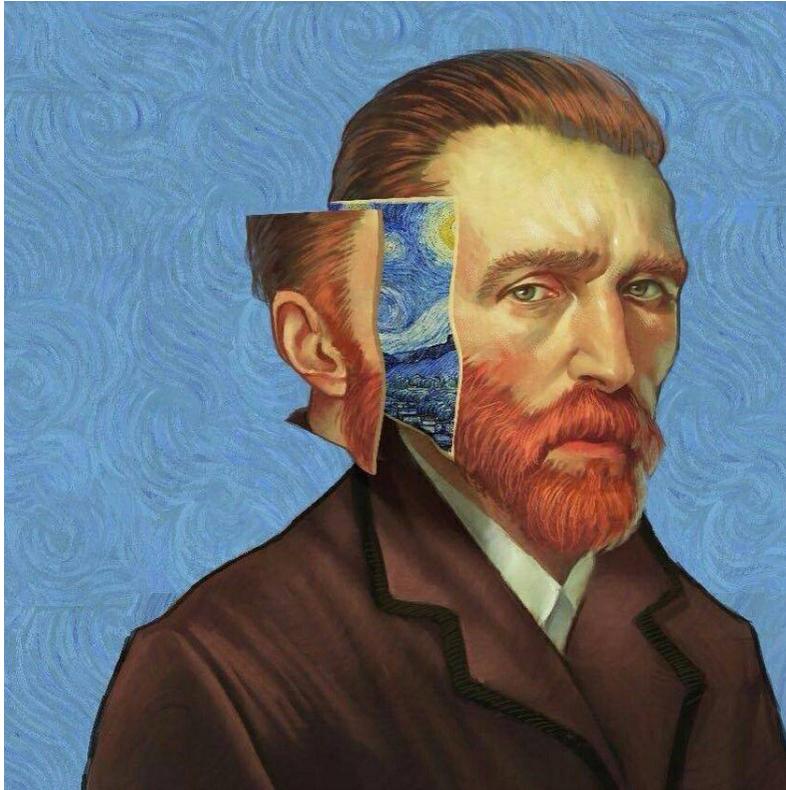
no reasons for the stay

feel of danger





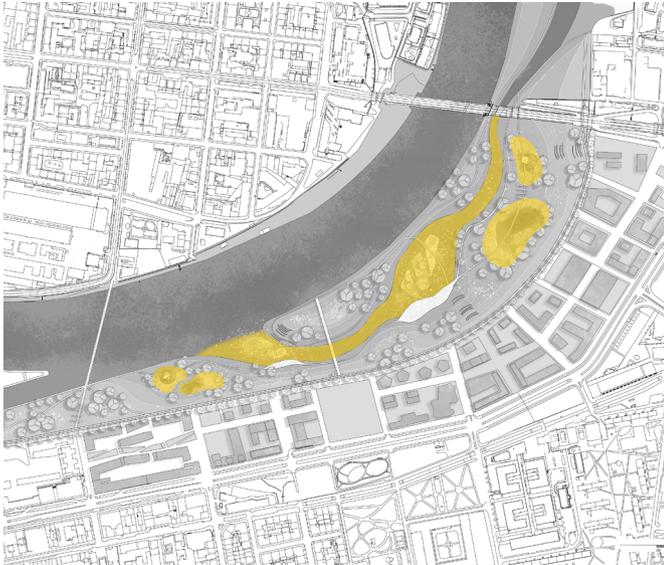
no nature left



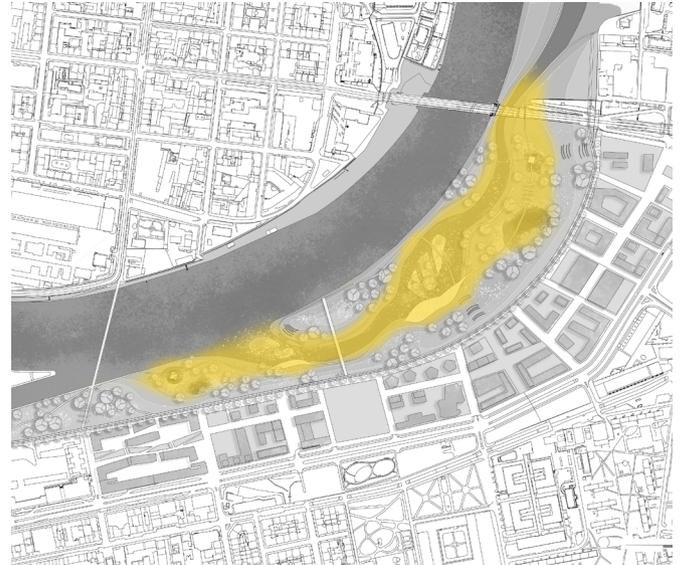
## main goals

- \_create interconnected system of constructed wetlands
- \_enhance biodiversity and create variable ecosystems
- \_create systems of wetlands and islands
- \_stream water x still water of the new arm of the river
- \_use gravel and stones filter of the river bed to make the river water cleaner
- \_phytoextraction, retention, evaporation, infiltration
- \_use macrophytes plants in constructed wetlands
- \_enable contact with the river
- \_interconnect areas for smooth move
- \_create area which will act as a sponge
- \_enhance social life

## analysis



The new arm of the river respects the natural processes of river bed formation.



Various water levels and different speed of streams helps to prop up the diversity and create variable ecosystems.



The project follows the current urbanization and interlink the main paths and areas.



Wetlands are situated in places where the river flowed in the past.

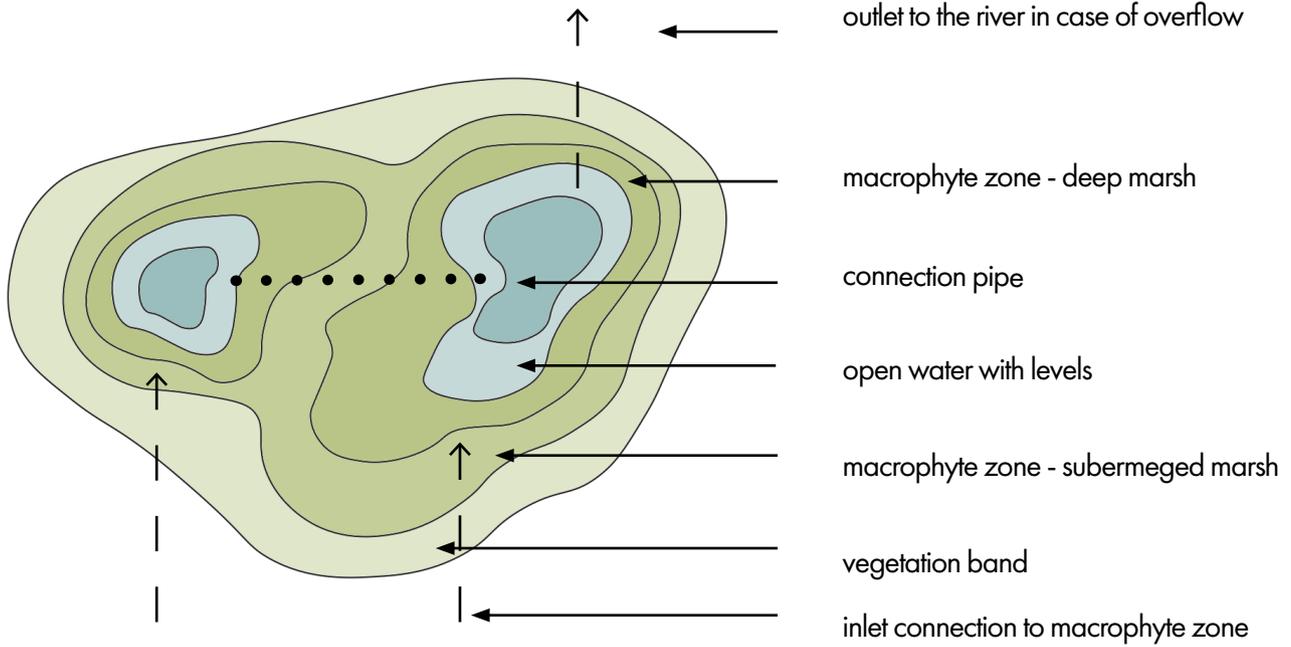
area which acts as a sponge

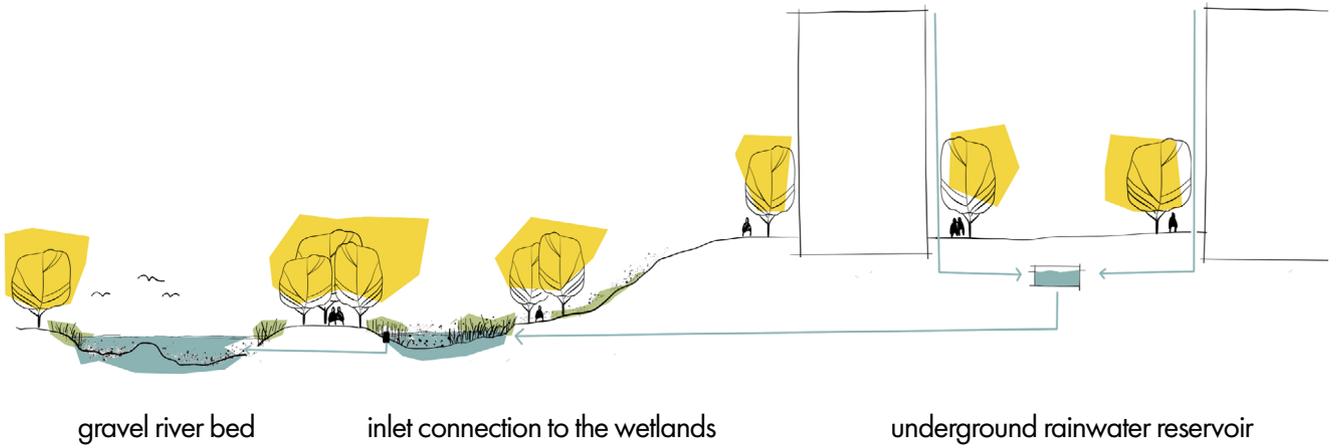
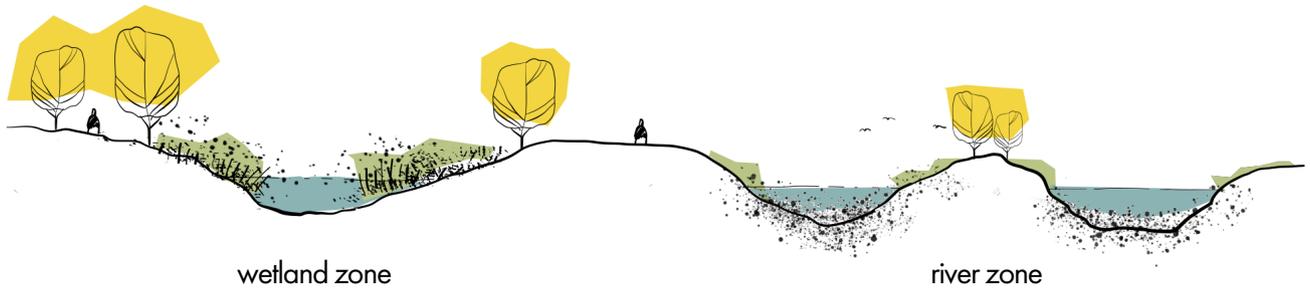


Most of the rainwater that falls on Rohan City and its close surroundings is separated from the sewer system and is collected and stored in the system of underground basins. When it rains the water from the roofs, streets and roads is diverted to the underground reservoirs, from where the rainwater runs through the underground pipelines to constructed wetlands.

Wetlands with sufficient population of macrophytes, plants serve as a biological filter and maintain the good water quality. In case of the overflow the water from the wetlands flow to the new arm of the river with gravel and stone bed filtration.

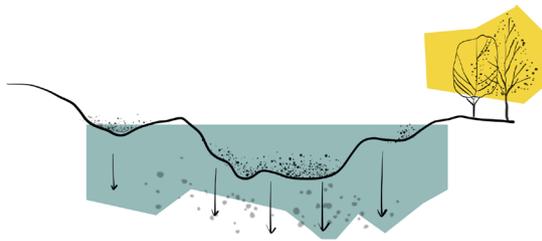
# the constructed wetland principles



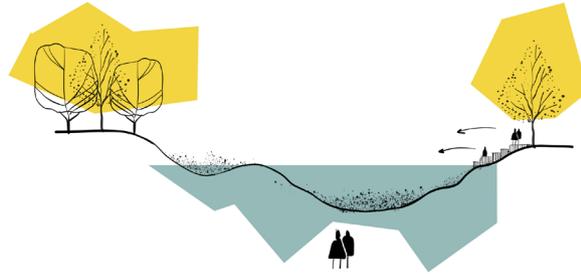


## **the river**

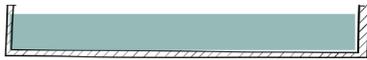
The body of the river filter bed consists of gravel and stones coated with biofilm and serve as a tool to make the new arm of the river cleaner.



communication with the ground



contact with the river



Vltava as an artificial canal



birds nesting on islands

## **materials and vegetation**

The elevated area features with meadows and urbanforests, while the lower area with wetlands is with a predominance of dense, lush, water tolerant vegetation. Urban nature h is expressed through a number of green initiatives. The diversity was emphasised in the selection of plants as well to accommodate a greater biodiversity. Permeable materials such as recycled gravel, mlats and stone pavings were used for sidewalks and seating areas.









