Revitalization of the streams of the channel in the area of the Čihadla dry retention reservoir is the largest and most extensive nature close revitalization of watercourses in Prague and its surroundings. The Čihadla dry retention reservoir was built in the 80's of the 20th century and serves for capturing torrential rainfall in the basin of Rokytka. The dry retention reservoir is located area where abandoned used to be in the 18th century, which was then drained and modified into the field. Within the construction of the dry retention reservoir the channel of the Hostavický stream, the Svépravický stream and Rokytka was straightened and fortified by concrete blocks starting at the confluence with the Hostavicky stream. Along the new channels of the streams 200 young trees were planted, mainly Alder, Aspen, Maples and Oaks. There are also shrub groups consisting of different species of indige

ous trees, such as Blackthorn, Viburnum, Spindle and Willows. The pools and some of the channel parts were also planted with wetland vegetation, such as Fraxus, Louseleaves and vari-

cious grasses. Within the evaluation of the recent flood situations and the request for increasing retention capacity the Canine Centre of the Čihadla dry retention reservoir is the largest and most widespread even in the territory of Prague. According to a recent survey information about 294 speci-

eties of butterflies was successfully gathered. Eight species are closely tied up with the typical biotope localities. The pools are overgrown with abundant water vegetation. There are for example Water Lilies, Nuphar (Nuphar lutea), Alge,

dumps were extracted there and a pleasant access to water arose. The pools are inhabited by three species of amphibians ‒ Agile Frog, Pelophylax ridibundus (Marsh Frog) and Bufo bufo (Common Toad). In 2010 twelve species of Odonata were found here and twelve species of water molluscs were found in the pools and streams. All species are common and widespread close to nature and preserved. The banks of ponds were modified both gradually and steeply in places where mature trees grew.

The most common species of fish in Rokytka are Squalius cephalus (European Chub), Gobio gobio (Dace), Nym-
asus mormoranae (Frogbit), rocharis morsus-ranae (Fringed Water-lily) and

Gobio roscob anchusa (Gudgeon) and Pelophylax ridibundus (Marsh Frog), Iris pseudacorus (Yellow Flag) and Thalassia testudinum (Shining Moccasin) there.

The Svépravický Stream was cancelled in 2015. It was located close to the dam. The revitalization measures Rokytka became again a very important part of aquatic ecosystems. Thanks to the revitalization measures Rokytka the Little Rokytka was accomplished, where 2 m of

brightness the aquatic vegetation began to evolve in the stream, such as barchenich. As a part of the revitalization modification the confluence of Rokytka with the Little Rokytka was accomplished, where 2 m of dums were extracted there and pleasant access to water arose. Thanks to the revitalization measures Rokytka became again a part of the urban recreational greenery in this area. You can come directly to the water surface in many places very easily. One of the islands was immediately occupied by kids, as if they were pirates from Peter Pan.
ROKYTKA

Stream length: 37.5 km
Catchment area: 134.85 km²

**Catchment area:**
- Pravický, Hostavický, Vackovský, Prosecký stream, southeast from Ricany in Ricansky Wood between the river.
- The word ‘rokyta’, which is the root of its name, is of an old Slavic origin and stood for willows that still grow near the Vltava. The area was of industrial significance in the 19th and 20th centuries. Industrial development in this area was widespread, with cement manufacturers, etc. appearing there.
- The total length of the stream is 37.5 km. It springs from a spring near the railway in Tehov and Tehovec at the altitude of 453 m.
- The total length of the stream is 37.5 km. It springs from a spring near the railway in Tehov and Tehovec at the altitude of 453 m.

**Characteristics of the channel of Rokytka stream**
- Natural: 6.64 km
- Close to nature: 6.51 km
- Technically modified: 5.53 km
- Close to nature: 6.51 km
- Technically modified: 5.53 km
- Vaulting: 0.83 km
- Natural: 6.64 km
- Close to nature: 6.51 km
- Technically modified: 5.53 km
- Close to nature: 6.51 km
- Technically modified: 5.53 km
- Water areas: 3.09 km²
- Natural: 6.64 km
- Close to nature: 6.51 km
- Technically modified: 5.53 km
- Close to nature: 6.51 km
- Technically modified: 5.53 km
- Rebuilt: 1.83 km
- Revitalized: 0.83 km

**Revitalization above Horější Pond 2014**

- The Rokytka channel, over the Horější Pond, was straightened in the early 20th century and along its banks alley of willow and pear trees was planted. Thanks to many years of neglected maintenance they overgrew, however, with self-seeded vegetation. The Rokytka’s channel itself was downsized to a channel used for quick water drainage. The bottom lacked segmentation, the left bank was inaccessible and completely devastated by large colonies of rushes.
- As a part of the revitalization the entire channel of Rokytka, over the Horější Pond, was transmitted into the meadow on the left bank. The aim was to create a nature close, meandering and shallow channel, as it probably had looked like before regulation. In order to maintain the capacity of the flow profile ca a 20 m wide depression (flood) was created in the centre of the meadow, in which a new channel was formed. A few small ponds arose in the curves and vertical walls for kingfishers were also established there. During the construction of the channel fortification was increased by about 0.7 m. A part of the event was the protection of the surrounding estates the meadow near the drive to Kejřův Mill. In the curves and vertical walls for kingfishers were also established there.

**Revitalization below Horější Pond 2013**

- Rokytka lived up to big changes even under the Horější Pond. Originally there was a broad floodplain and in the space between the current Rokytka and the drive to Kejřův Mill Rokytka had several channels. There was even natural swimming pool in the channel of Rokytka. This area has been gradually filled up and currently there are 2-3 m of landfall. Within. The construction of the Industrial Street, the channel of Rokytka was transferred in the length of about 300 m, straightened and fortified in the shape of a concrete trapezoid. In the upper part of the modification, where the channel was not fortified and the banks were predominantly maintained, the utilization of the banks with large boulders was accomplished.
- The caving concrete fortification was knocked down and replaced by heavy boulder rockfill, so called alpine finish if possible. The segmental of the channel was made of stone layers. The bottom was left natural with sealed stones forming a mosaic and a stone threshold. Thus a channel, which was close to nature and adaptable, was built. It provides living space for water plants and animals. To make Rokytka more attractive, slow descents to the water area and a small seating area was built there.