

## INCREASING OF AWARENESS AND PROPAGATION OF THE FUNCTIONS OF FORESTS IN LANDSCAPE AND NATURE-CLOSE WATER COURSES IN URBAN AREAS AS A PART OF ECOSYSTEM SERVICES OF RIVER BASIN

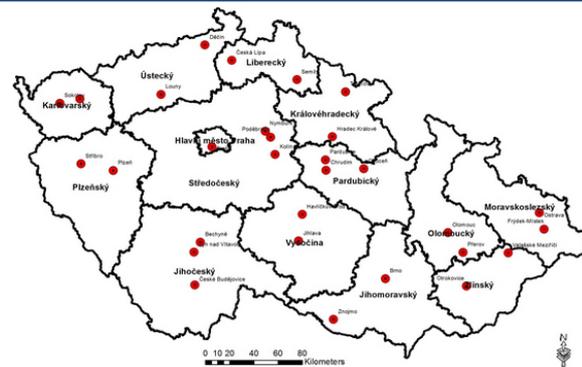
**Project number:** EHP-CZ02-OV-1-032-2015

**Granting institution:** Grants of European Economic Area (EEA)

**Programme and Programme area:** CZ02 - Biodiversity and ecosystem services/Monitoring and integrated planning and control in environment/Adaptation to climate change. PA 2 - Biodiversity and ecosystem services

**A brief project content:** : The project focuses on public education about the value of selected components of ecosystem services of the drainage basin. The result and outcomes of the project present recreation significance of near-nature and revitalised river beds of water courses in intravilan, complementing their water management and ecosystem effect.

The project deals with a terrain mapping of recreation potential of rivers in 30 towns in the Czech Republic. The research results will be by a field research well-founded national representative overviews of the river courses in intravilan and suburban recreation zones with significant synergistic water management, ecological and recreation effects.



### Rivers in the cities

#### The examples of a good quality landscaping of water courses in towns of Olomouc region

**Přerov (Bečva river)** - Back to the 19th Century Bečva river had a natural character of river course and due to transfer of river gravel its basin underwent dynamic changes. Significant regulation changes took place in the beginning of 20th Century, when the river basin was straightened and deepened and technically stabilised. These changes limited frequent floods and enabled to intensify agricultural activities in the area, however, also led and still lead to ecological depreciation of river course and its surrounding. Within the Feasibility study *Živá Bečva (Living Bečva)*, delivered by a Union for Morava river in cooperation with a project company Šindlar, the aim is to make Bečva river more natural in its landscape. A fundamental task is to protect town parts of Přerov, Hranice and Lipník nad Bečvou against floods. Bečva river landscaping should rise from the principles of intravilan revitalisations that interconnect flood protection functions and river basin stability with involvement of river into urban area and accessibility of near-river zones to city inhabitants.



**Olomouc (Morava river)** - Within the flood protection of Olomouc, a project "Flood protection of Olomouc - Morava, Olomouc - increase of river basin capacity II. Phase A" was realised in the southern part of the city. The resulting revitalisation measures were inspired by an original study by Union for Morava river as well as by revitalisation studies by the project company Šindlar. The realisation of revitalisation project represents a first example of a partial naturalisation of landscaped river course in urban area in the Czech Republic. The project of revitalisation measures aimed to ensure a functional connection between nature preservation and flood protection in the city. These things were realised within the flood protection landscaping on Morava river in phase II. A: removal of gravel from river bed, formation of gravel forms, islands, use of river wood within biotechnological stabilisation of river banks, river course bifurcation and formation of a parallel course with a low island, widening and landscaping of berms, formation of protecting embankments and river walls, planting of bank and near-bank vegetation and construction of slip roads and paths for cycling/in-line skating that made the locality accessible.

