

RESTORATION OF RIVER/FLOODPLAIN INTERCONNECTION AND RIPARIAN HABITATS ALONG THE EMBANKED DANUBE BETWEEN NEUBURG AND INGOLSTADT (GERMANY)

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The Upper Danube has constantly been embanked and straightened since the 19th century and is now disconnected from its floodplain except during high floods. Additionally, in the 1970ies hydropower stations were built. But still a high biodiversity - mainly of species of the hardwood riparian forest - could be conserved in the project area of 2.100 ha. The goal of the presented project is to bring back new “controlled” dynamics to the floodplain (water, groundwater and morphological features) which is the key process to encourage floodplain habitats and species. The project consists of three measures:

- 1) A permanent flow of water (up to 5 m³/s) bypassing the dam of the upper power station. The new river will develop on the floodplain partly flowing in old oxbows.
- 2) Controlled flooding (up to 30 m³/s) of parts of the floodplain during peak discharge of the Danube.
- 3) Temporary drainage of the floodplain in summer, where the groundwater level is constantly high due to the dams.

The building measures, conducted by the Bavarian Water Authority, will be finished in spring 2010. After that research will start which is aimed to bring more biodiversity to the riparian areas. A comprehensive monitoring program including vegetation, fauna, hydrological and morphological data has already been established and will be presented together with some of the ex ante results.

Abstract preference: oral

Abstract for presentation: Main Conference Sessions (maybe “Applied Geography” instead)

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