Additional information

Physical features of the site

Geology

The soil types in the floodplain of Rába are raw alluvial soil, sometimes mixed with marsh soil. The river deposits consist of silt, sand and gravel. Several springs spout forth from the steep hills. Of course, the main watercourse is Rába river, which is here totally unregulated, less rapid than upper-reach river type, so its building-destroying role is not so dynamic. The biggest tributary on the left riverside is Pinka, which joins here into Rába. Rába meanders among a series of naturally formed oxbows.

Soil types

The most dispersed soil types in the floodplain of Rába are meadow soils, marsh soils, forest soils connected to moorland and floodplain, and row swamp soils. The sole soils have the aspects of clay and loam, because leading part of the river deposits are from acid Holocene bedrocks (gravel, sand), and the chemical characteristic of sole soils are also acidic. It is typical to sole soils to be wet through periodically (water-logged), where loose water can be found the formation of peat and "kotu" soil formation is remarkable. On the steep hills, where leaching and acidification are intensified, usually brown forest soils (clay, pseudoglej, podzol) are current. In cultivated lowlands different sub-types of brown forest soils can be found.

Climate

The average yearly rainfall is about 800mm near the western border (in Körmend above 1000mm has also been measured), but on the south-western part of the floodplain it is about 600-750mm.

Three types of floods are typical: the first occurs mainly in March-April, following the snow melt. Heavy floods may occur in June-July caused by intensive precipitation. As an effect of the Mediterranean, a second peak comes in September-October (for example in 1998), which is caused by the rains in Graz-basin.

Hydrogeology

The Rába springs in the Fischbach-Alps, at 1200m above the sea level. The real floodplain of Rába in Hungary can be found in Vas County, between Alsószölnök and Nick settlements, with the length of 120km. After that the Rába becomes a lowland river (Rábaköz) and flows into Mosoni-Duna at Győr. The catchment area of Rába is disproportionate. All of the watercourses are collected from the left side: Lapincs, Pinka, Sorok, Gyöngyös. Several streams can be found on the right side, but their discharge is low: Szölnöki-patak, Szakonyfavi-patak, Huszászi-patak, Lugos-patak. A significant part of the right riverside water supply of Rába is collected by Csörnöc-Herpenyő (which springs near Halogy settlement), from the streams Himfai-, Nádasdi-, Hegyaljai-, Szarvaskendi-, Bogrács-, Ordó-, Mókus-, Szentkúti-, Szentegyházi-, Koponyás- és Egervölgyi patak. Csörnöc-Herpenyő flows more or less parallel with Rába. Its floodplain and moorland areas belong to the floodplain of Rába.

During the yearly floods the Rába inundates the low grounds near Körmend totally. So the water of Pinka and Csörnöc-Herpenyő streams unites with the flooded Rába. Behind the floods the oxbows and navvy pits are filled with water, which determines the yearly dynamics of vegetation.

The riverbed shifting and oxbow development are important and significant between Szentgotthárd and Rum: they assure the maintenance of interesting riverside vegetation. At some places the floodplain can be divided into high and low floodplain zones.

Ecosystem Services

Scientific research

For several years, macro-invertebrate and fish monitoring work has been carried out in the frame of the National Biodiversity Monitoring System. The Water Framework Directive (60/2000/EC) monitoring also started in 2005. Survey of alien plants was prepared on the whole marked reach. Other studies include surveys and research on birds conducted by NGOs and Őrség National Park Directorate. A habitat map has been made of the reach belonging to the Őrség National Park. From 2013 Őrség National Park Directorate have started to prepare the Management Plan for Rába és Csörnöc völgy Natura 2000 site.

Tourism :

The volume of tourism related to water and rural areas is increasing and may have a potential for threatening the riverside ecosystem.

Current land (including water) use:

- Forestry, unfortunately with extended plantations of hybrid poplar;
- Inappropriate grazing and harvesting of hay;
- Tourism, canoeing along the river, beaches and related business, development of guest-house areas;
- Hunting, mainly for wild boar, pheasant, waterfowl;
- Fishing.

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