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The water regime of the lake Kolon watersystem

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Lake Kolon is one of the important freshwater marshes of Hungary, with its extensive reedbeds, meadows and forests. The natural development process of the lake was interrupted in 1930. The events which happened later give a typical cross-section of Hungarian water management practices.
The interventions started with draining a considerable part of the lake and taking it into agricultural usage. In order to get the waters of the Danube floodplains under control, the building of the Danube-Valley Channel started in 1912. The channel, which is 107 kms long, was ready in 1929, and the subordinated channel system was established in the beginning of the 1930's. Connected to these works, the lake Kolon was declared as an excess water reservoir after its draining in 1927-28. So the reservoir had to be kept on minimal waterlevel in order to be able to host the arriving waters any time. This kind of management has changed from 1987 to 1996 for a more preferable management which is ruled by the actual conditions in order to maintain the water resources.
With the analysis of the water resources of the lake we showed that there is a significant supply from subsurface runoff, and we determined the statistical characteristics of the quantitative indices of the water regime. The high waterlevel which is favourable from the viewpoint of nature conservation has proven to be sustainable even if the receiver is in its design status.