

Abstract

New functions to old values; redesigning the Tongelreepvalley

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The Tongelreep, a small brook which flows from Belgium to the Dommel in Eindhoven, has several adjacent fish ponds, which were previously used for breeding fish for recreational angling.

In 2003 the waterboard purchased five fish ponds which now provide an overflow capacity to deal with water levels that may occur every ten years. The function of the fish breeding ponds has therefore now changed to water storage in order to prevent the flooding of the city of Eindhoven.

At the same time the original course of the brook was re-established. The depth of the brook has been reduced and the course has been altered in such a way that allows the water to flow freely into its floodplains. In this way the additional benefits of an increased water table level, a more dynamic flow and different morphology were achieved. Discharge peaks have been reduced and as a consequence, the peak discharge times have been extended.