

River System Project Ruwer

Large-scale conservation project, ecological continuity, floodplains, water quality, riparian land program



(1) 1997: The Ruwer downstream of Kell am See – deepened and straightened

*The Ruwer is an upland river system with more than 100 springs, forest creeks and open country streams. Long stretches of the Ruwer can be considered close to natural. However, some sections of the river system have been heavily modified by straightening or construction of weirs, and large non-native coniferous forests influence the acidity of the water. The main objective of the project was the conservation and development of the Ruwer and its tributaries with the floodplains as a **near-natural water and floodplain landscape**. By means of conservation and development of the floodplain and water landscape, water quality shall be improved, ecological continuity shall be restored and **natural dynamics of the creeks** shall be supported. These goals comply with the demands of the WFD. The project is financed with funds from the **riparian land program**.*

Area

The Ruwer and its tributaries form a widely branched network of watercourses: As the main stream the Ruwer rises from several springs in the Osburg Forest at about 660 m above sea level. It disembogues the Mosel after a flow path of about 46 km and a change in altitude of about 500 m. The project area in Western Rheinland-Pfalz includes the entire Ruwer and its tributaries with a total length of 180 km and an area of about 260 km². The core area with watercourses and floodplains accounts for about 30 km².



River basin district and state: Mosel; Rheinland-Pfalz

Coordination zone: processing area Mosel/Saar

Name of water body: Ruwer

LAWA water type: predominantly rocky-gravel to sandy highland creeks

Classification within the river basin and state analysis: „not at risk“

Critical load factors and impacts: –

Protection status: 455 ha of the core area as nature reserves, mainly „Natura 2000“

Reason / Cause

The Ruwer river system – with many areas worth protecting – was included in the federal riparian land program in 1993. Even though most of the Ruwer and its tributaries have been in a close-to-natural and unpolluted condition already before the beginning of the project, several threads and cases of pollution have been detected in the widely branched network of watercourses. Here the measures for a water and floodplain protection area apply.

Objective

The main objective of the project was the conservation and development of the Ruwer and its tributaries with the floodplains as a near-natural water and floodplain landscape. The project was designed for 10 years and had the following sub-objectives:

- conservation and development of near-natural creeks by
 - restoration of ecological continuity
 - support of the natural dynamics
 - improvement of water quality
- conservation and development of open valleys
 - preservation of extensive farming
 - further extensification of farming
 - re-cultivation of fallow land
 - removal of coniferous wood
- conservation and development of deciduous forests on floodplains and in spring areas
- designation of nature reserves



(2) The Ruwer in its new bed: development in 2005

The extent and objectives of this project were beyond the scope of the usual protection and restoration measures of landscape and water management: Exemplary solutions in cases of conflicts of interest concerning floodplains were to be implemented integrating landscape management as well as water management objectives. The restoration of the Ruwer area should increase the value of the region as a tourist attraction and for local recreation by thematic circular walks and creation of a bike lane on a former train path.

Measures

The measures are taken within the framework of land acquisition, management contracts and exchange of land. In total 186 km of watercourses in the Ruwer catchment were included in a maintenance and development plan. In order to protect the ecologically important areas long-term, nature reserves were designated in the core areas, e.g. the „Keller Mulde...“ or the „Enterbachtal“. Along the entire watercourse pipe passages, thresholds, weirs and creekfalls were reconstructed in a way that fish and other aquatic fauna can migrate freely. Straightened sections were renaturalized.



(3) The Eselsbach, tributary of the Ruwer, before and after restoration

The Ruwer near Kell am See was deepened due to vertical erosion. Therefore the bed was restored along 600 m. This watercourse development measure is a model project in Rheinland-Pfalz.

In total land acquisition provided for the natural development and succession of 50 km of riparian buffers. In floodplains and spring areas conversion from non-native spruce forests to local alluvial and wet woodlands was started. Extensive grassland cultivation on the floodplains is kept up and supported in order to provide good conditions for biodiversity and to reduce pollutant input into waters. Parallel to the project the wastewater management has further reduced pollution from point sources by means of additional measures.

Actors / Procedure

The administrative district Trier-Saarburg, the municipalities Kell am See and Ruwer as well as the city Trier were responsible for the project. An important part of the project is the catchment-related regional approach after inclusion in the federal riparian land program. The maintenance and development plan from 1997 was developed involving various actors. The responsible district administration established a project accompanying working group, including authorities, municipalities, organizations, landscape planners, user groups (farmers, forest owners, fishers, nature conservation associations, local residents) as well as the interest group Ruwer. Project duration: 1993 - 2004.

Costs / Financing

In order to support environmentally-friendly land management funds from the aid program of the federal state Rheinland-Pfalz were used. The total costs of 6.8 million euros were paid by the Federal Government because of inclusion in the riparian land program (75 %), the state Ministry for Environment and Forests in Mainz (AKTION BLAU) (15 %) as well as the administrative district Trier-Saarburg, the municipalities Kell am See and Ruwer and the city Trier (together 10 %).



(4) Pipe passage at the Weierbach is made „permeable“

Results / Assessment

Along the main river Ruwer the goal of complete ecological continuity from source to mouth was widely reached. The creation of riparian buffers gave the rivers space for a development according to their natural dynamics in the valleys. This increases the habitat diversity of the creeks significantly and further pollution is reduced. Thus, the implemented measures contribute to long-term preservation of the good status of the Ruwer according to the WFD.

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Literature / Links

Kreisverwaltung Trier-Saarburg (2001): Gewässerprojekt Ruwer und Nebenbäche. Erhalt und Entwicklung einer Gewässerlandschaft. Brochure. www.trier-saarburg.de/ruwerprojekt.
Ministerium für Umwelt und Forsten (Ed.) (2000): Gütebericht 2000. Gewässergütebericht für die Fließgewässer in Rheinland-Pfalz. Edited by Landesamt für Wasserwirtschaft Rheinland-Pfalz, Mainz.
Ministerium für Umwelt und Forsten (Ed.) (2005): 10 Jahre Aktion Blau. Gewässerentwicklung in Rheinland-Pfalz. Edited by Landesamt für Umwelt, Wasserwirtschaft und Gewerbeaufsicht RLP. www.aktion-blau.de.
Bundesamt für Naturschutz: Naturschutzgroßprojekt Ruwer: www.bfn.de/0203_ruwer.html.

Picture sources: baerens & fuss (map); Anette Haas (1),(3 right),(4); Gabriele Niclas (2); Planungsbüro Hömme GbR (3 left)
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