



Riverrestoration in a densely populated area Innovative solutions for the Dommel riverbasin

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The river basin of the Dommel is located in a relatively densely populated area, roughly one third is built-up area, one third is agriculture and one third is nature reserve. The source of de Dommel lies in Flanders and 120 kilometers further it ends in the river Maas in the Netherlands.

The objective of the Water Board is to build a sustainable (water)world. The main lead in our decisions and works is the increase of ecological, economic and social values. In our search for solutions we connect to social challenges like economic growth, public health and sustainable energy and resources. Cooperation with the industry, farmers, environmental agencies and local authorities is necessary to take steps in achieving a sustainable water system. Sustainability in a densely populated area like ours is a continuous challenge. Different aspects like cities, agriculture, nature reserves and businesses lead to conflicting interests in water questions.

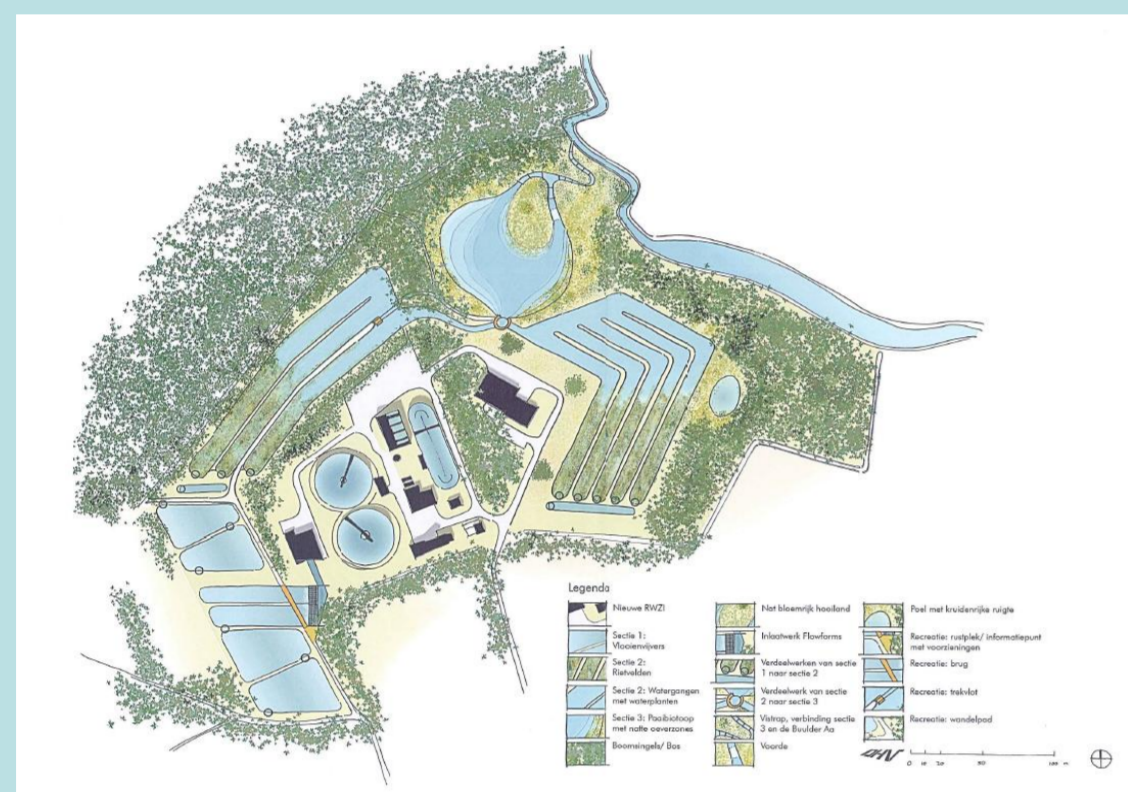
To meet the European legislation on water, we distinguish the following themes which represent our goals: Clean water, Healthy water, Sufficient water, Dry Feet, Natural water and last but not least Beautiful water. Solutions for these themes are not only found in or near the river but in the whole river basin.

Innovation is needed to find new creative solutions for our water problems. Lots of innovations were found in recent years. These are some of our main examples.



Clean water

Improvement of water quality with state of the art sewage plants with a "waterharmonica". This is an ecological filter that removes the last remaining bacteria, pathogens and inoculates the treated effluent with appropriate surface water full of flora and fauna species.



The sewage plants will generate energy and reclaim valuable resources like phosphates in the near future. To deal with water soil pollution measures were taken like dredging and construction of sediment catchers. All kinds of innovative pilots were done in cooperation with industry and agriculture in order to improve waterquality.



www.energiefabriek.com



www.grondstoffenfabriek.com



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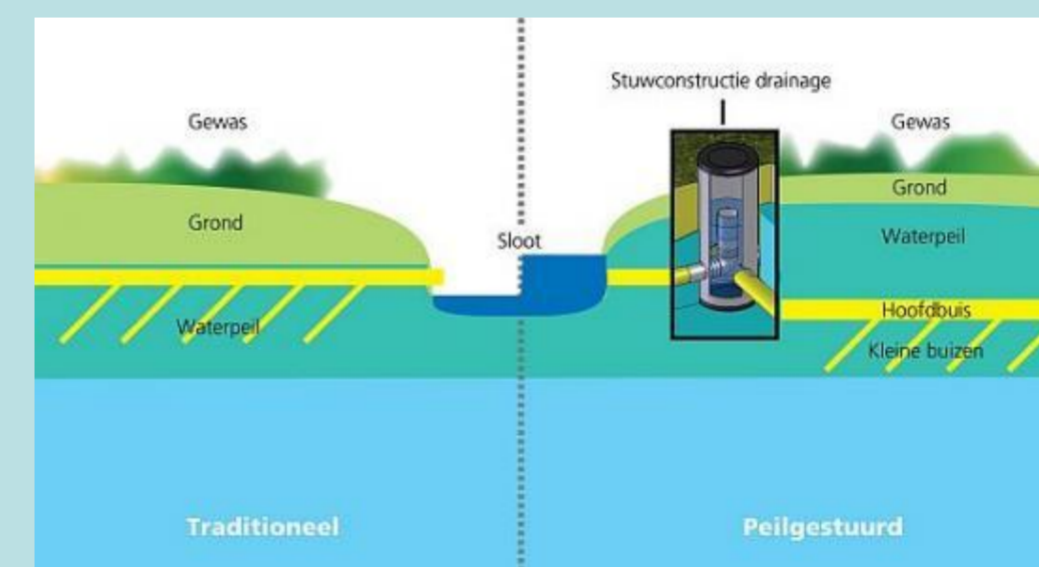
Healthy water

Swimming waters and isolated waters in our cities cope with blue algae growth in summer. Different measures like dredging, reducing Carp, Phoslock, education, etc, were taken to meet the European directive on bathing water quality and improve the quality of waters in the city.



Sufficient water

Traditional water management has caused drought of agricultural grounds and nature during summer time. Conserving water replenishes groundwater stocks and restores the presence of seepage water in stream valleys. Conserving water is stimulated by new forms of drainage and weirs.



Natural water

For natural water we focus on river restoration in our main rivers and streams, based on historic information. Innovations in fish passageways are shown in a handbook, this gives an overview of experiences with fish migration and fish passageways, accumulated over the past twenty years.



We have Biodiversity programs for solitary Bees, protection of the Brook Lamprey and the reintroduction of the Burbot and the Beaver.



Dry Feet

With climate changes being forecast, the awareness has grown that our rivers and streams must be given more space, so that we can guarantee the safety of our residents in the future and create natural and sustainable water systems. We use integrated flood defense systems to help keep our feet dry.



Beautiful water

Finally focusing on experiencing the values of water. We started communication and education projects like "adopt a Pond" for primary schools. Also making it possible that people can enjoy water by walking, canoeing, cycling and fishing. This generates also economic values. The way we make our plans is in complete participation of our citizens and stakeholders. By doing so we try to make a connection between the main perspective of "what is a beautiful landscape" and our watergoals.

