

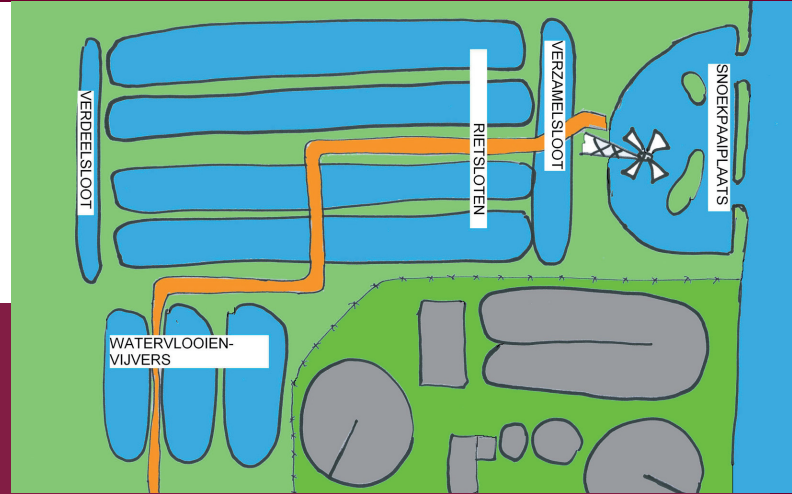
Ecological filter

Additional part of the waste-water treatment at Grou

The EU Water Framework Directive aims to reach a good ecological condition or good ecological potency of all surface waters. The effluents from the waste water treatment form a very large part of the total load of substances to the surface waters of the main Frisian lakes system. Therefore the effluent from municipal wastewater treatment plants needs to be improved. (focussed on e.g. nutrients, BOD and bacteriological contamination)

This reuse has been made possible and is realised by low-tech ecological engineering techniques by means of constructed wetlands for a few number of wastewater treatment plants in The Netherlands. The post-treated and polished effluent can be used for e.g. combating desiccation or stimulate nature development. Actually a Dutch STOWA project (the Waterharmonica) is going on to stimulate this low-tech reuse of effluents by low-tech ecological engineering principles for tertiary treatment.

At the wastewater treatment plant at Grou we now have constructed a wetland (for post treatment of a part of the effluent), in combination with a spawning place for Pike. This spawning place is linked to the open water of the Frisian main water system, so upgrading the ecological value and resilience of that water system.



Aim

- Pilot = learning the potential of the wetland system
 - N and P removal
 - Disinfection
 - Removal of other compounds (heavy metals etc.)
 - Maintenance and control costs
 - Potential improvement of surface water quality
- Combining the wetland system with spawning ground for pike
- First step in bridging the gap between the emission approach and water quality thinking
- Stimulation of "Water Cycle" education (promote public awareness)

Costs Ecologic Purification Grou

Projectgoals	Costs (€)
Construction of polderdike	50,000
Making ponds, ditches and wetlands	45,000
Connectionwork to main water system (spawning area)	39,000
Planting (reedbed, waterplants etc)	16,000
monitoring	15,000
Total	165,000

Partners

The regional lead partner for the pilot will be the Province of Fryslân.

The sub-partners:

- Province Fryslân
- Water Board Fryslân (Wetterskip Fryslân)
- Municipality Boarnsterhim

