



## Information on the Steenbergsche Vliet project.

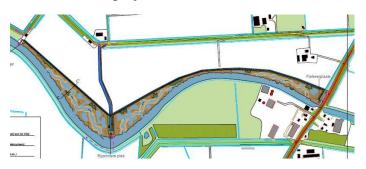
In September 2008 the report of the "Deltacommissie Veerman" reported that the Volkerak Zoommeer will in future be used for water storage during high discharges of the Meuse and the Rhine. As a consequence of this the storage of the Steenbergsche Vliet and the Dintel river discharge will be obstructed. At that moment no water can be discharged into the lake. This will likely result in high and possibly too high water levels in the upstream areas.

The **aim** of the *Steenbergsche Vliet* project is to create more water retention areas for storage of water in the Mark river. 80.000 m3 of clay is escavated. The retention will be combined with the development of river related nature and ecological corridors. The problem of water shortage in the dry season has to be tackled. In summer a combination of low discharges with high temperatures develops blue green algae blooms in the *Volkerak Zoommeer*. The water board also seeks for solutions for this problem.

Together with *Natuurmonumenten* (Nature conservation society in the Netherlands) the water board is looking for possibilities to create more water retention capacity anticipating the expected general sea level rise due to climate change. At the same time wetlands along the river will be developed. Solutions are designed in close cooperation with landowners and the municipality of Steenbergen.

# The solution for high water levels on the Meuse River

Flooding of agricultural land leads always to crop damages. The water board, responsible for water management and flood control, will have to compensate for this damages. This is the reason why the water board wants to cooperate with *Natuurmonumenten* on plans to create new nature areas that can be used as water storage during high water on the Meuse River. The investment project (action 16 in AMICE) consists of two small examples. The creation



of areas of in total 50 to 60 ha between the dikes are transformed into wetlands and water storage. The project also comprises dike improvements and changing of agricultural facilities into nonagricultural use ("so-called Green for Blue exchange").



One example in the Steenbergse vliet area.







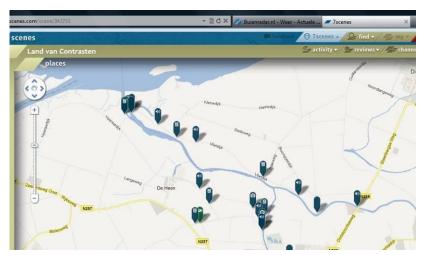
#### Multifunctional use of the land

The change of pure agricultural land into wetland enables such a multifunctional development as combinations of: water storage, recreation, housing in flood plains, restoration and reinforcing of historical monuments and the landscape.

## **Innovative communication possibilities and actions**

In order to create awareness on water management and climate change among the local population we developed the project in a so-called open plan process. The target groups are the local government and administrations, inhabitants and other stake holders. Communication is focused on this approach.





In order to inform tourist POI's Points Of Interest) along the Vliet and in Steenbergen city are created. The information can be gathered by modern mobile telephones equipped with Internet, ANDROID and APPS to view the information:

- 1. cultural history (water defence lines, fortresses, inundation areas, historical sluices, floodings from the sea in the past, future usage of the *Volkerak Zoommeer*, the typical open landscape, dike landscape and other historical developments since 1930.
- 2. water management, in the past, now and in the future;
- 3. history of the town of Steenbergen: harbour, fortress town, salt and peat exploration; recreational development in historical places

## Transnational partnership.

In this investment project the measures are taken in the most downstream area of the Meuse basin. They incorporate the results of the upstream measures in the other AMICE actions. For AMICE it is of great importance that strategy and knowledge gathered downstream for high water as well for low water levels are shared. The water boards in the Netherlands have this knowledge. Partnership of the water board in the AMICE project is therefore useful, wishful and necessary.

