

Depoldering Groot Schoor (Hamme)

What

This action involves the realization of a depoldering (also known as 'managed retreat') of an area called 'Groot Schoor'. This area has a surface of approximately 26 hectares.

Two areas part of SPARC have the name 'Groot Schoor'. The name 'Schoor' is a very common Dutch name that means 'schor' or 'marsh'. We will therefore always specify in which city/village the area is located.

Where

Groot Schoor (Hamme) is located along the river Scheldt, on the left bank, on the territory of Hamme, near the village of Kastel, in the province of East-Flanders. This area is situated next to the FCA-RTA 'Wal Zwijn'.

How

For this area a new inland dyke is not required, because the ring dyke of the adjacent area 'Wal Zwijn' protects the surrounding villages against the water of the river Scheldt in case of controlled flooding. This ring dyke is under construction since the summer of 2016.

The old river dyke of the area 'Groot Schoor' will be lowered from a level of approximately 7 mTAW to approximately 4,5 mTAW, and this over a distance of approximately 1500 meters, so it is equally high as the polder.

Prior to this earth moving, the vegetation on the old river dyke will be removed. Also certain amounts of waste need to be removed to clear the area and give it a clean slate.

Within the area locally there will also be a removal of soil in the shape of onset of creeks.

Quarry stones will be placed to secure the parts of the river embankment that are not allowed to be influenced by the water dynamics.

Why

Just as 'Uiterdijk', this 'Groot Schoor' at Hamme, with its specific polder level, has a good potential to develop a young marsh vegetation spontaneously, if looking to the tidal window on the river.

It is expected that by the removal of the river dyke the marshes that will develop will be highly dynamic and will integrate fully in the existing marshes that are located on two sides of Groot Schoor.

The contact between the river and its estuary will be enlarged and space is created for natural dynamical physical, chemical and ecological processes. The result of this measure is an intertidal habitat with a high nature value and an increased resilience to climate change.

This area will hence contribute to the nature targets for the Scheldt estuary, as devised within the framework of the Bird- and Habitat directives. The contact of the river with its

expanded streambed creates an important shear on the water which causes a mitigation of the rivers force during events of high tide or storm tide. Consequently the pressure of the water is released so there is a lesser likelihood of flooding further inland.

Creeks improve the drainage of the water towards the river and enhance the ecological development towards the optimal habitat. The soil yielded from the creeks can be used for other purposes in the construction process ('work with work' principle).

Just like 'Uiterdijk', the 'Groot Schoor' in Hamme is an existing flood area which has been realised shortly after the floodings of 1976, originally maintaining its use as agricultural land. The 'summer' dyke only flooded when peak surges occurred on the river. Also for this area during the studies lying at the basis of the updated Sigma Plan was concluded that a depoldering would cause an important amelioration of the ecological condition of the river while creating more space for the river.

As the area lies between the flood control area 'Wal Zwijn' and the Scheldt, the construction of a ring dyke is unnecessary. This was an extra benefit in the analysis process towards the selection of the most suitable areas for depoldering.

