

Depoldering Uiterdijk

What

This action involves the realization of a depoldering (also known as 'managed retreat') of an area called 'Uiterdijk'. This area has a surface of approximately 11 hectares.

Where

Uiterdijk is located along the river Scheldt, on the right bank, between the villages of Dendermonde and Baasrode, in the province of East-Flanders. This area is situated adjacent to the Flood Control Area with Controlled Reduced Tide (FCA-RTA) 'Vlassenbroek'.

How

The old river dyke of Uiterdijk will be lowered to a level of approximately 5 mTAW so it is on the same height as the polder, and this over a distance of approximately 950 meters.

An alternative has been considered during the studies such as a breach of 70 meters instead of the removal of the whole dyke. The option of a breach had a significant influence on the current and consequently on navigation. Breaches on this location in the Scheldt do cause transverse currents which are not desirable. Also from ecological viewpoint the chosen scenario was preferable, as mudflats and young marches will develop spontaneously.

Prior to this earth moving, the vegetation on the old river dyke will be removed, and as these areas often contain different types of waste caused by the use of the area as agricultural land or dumping of household waste on river banks for many decennia, this material will be removed prior to the lowering of the old dyke.

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

There are several names to define the action of 'literally giving the river more space by means of yielding land that was previously occupied for other purposes'. Common names are 'depoldering', 'managed retreat' or 'embankment realignment'. The result of this measure is an intertidal habitat with a high nature value and an increased resilience to climate change. A stretch of the old river valley again comes under the influence of the natural dynamics of the river. Hence more space is given to the river and storage function is created.

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. Therefore this 'depoldering' is considered as a best practice.

'Uiterdijk' is an existing flood area which has been realised shortly after the floodings of 1976, maintaining its original use as agricultural land. The 'summer' dyke only flooded when peak surges occurred on the river. During the studies lying at the basis of the updated Sigma

Plan was concluded that a depoldering of Uiterdijk would cause an important amelioration of the ecological condition of the river while creating more space for the river. This action will make the area prone to the daily movement of the tidal river. Only at low neap tide the area will not be flooded.

As the area lies between the flood control area 'Vlassenbroek' and the Schelde, the construction of a ring dyke is unnecessary; an extra benefit in the analysis process towards the selection of the most suitable areas for depoldering.

