

NOARD FRYSLÂN BÛTENDYKS

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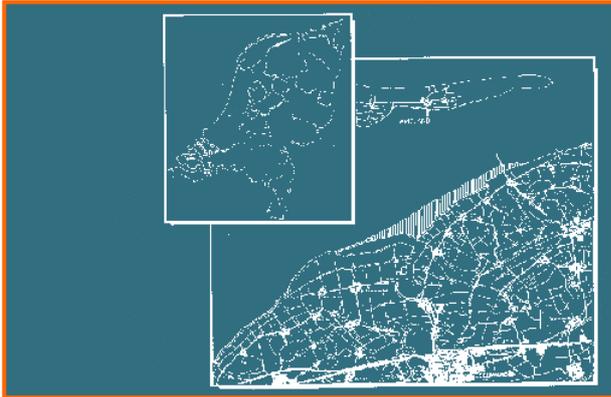
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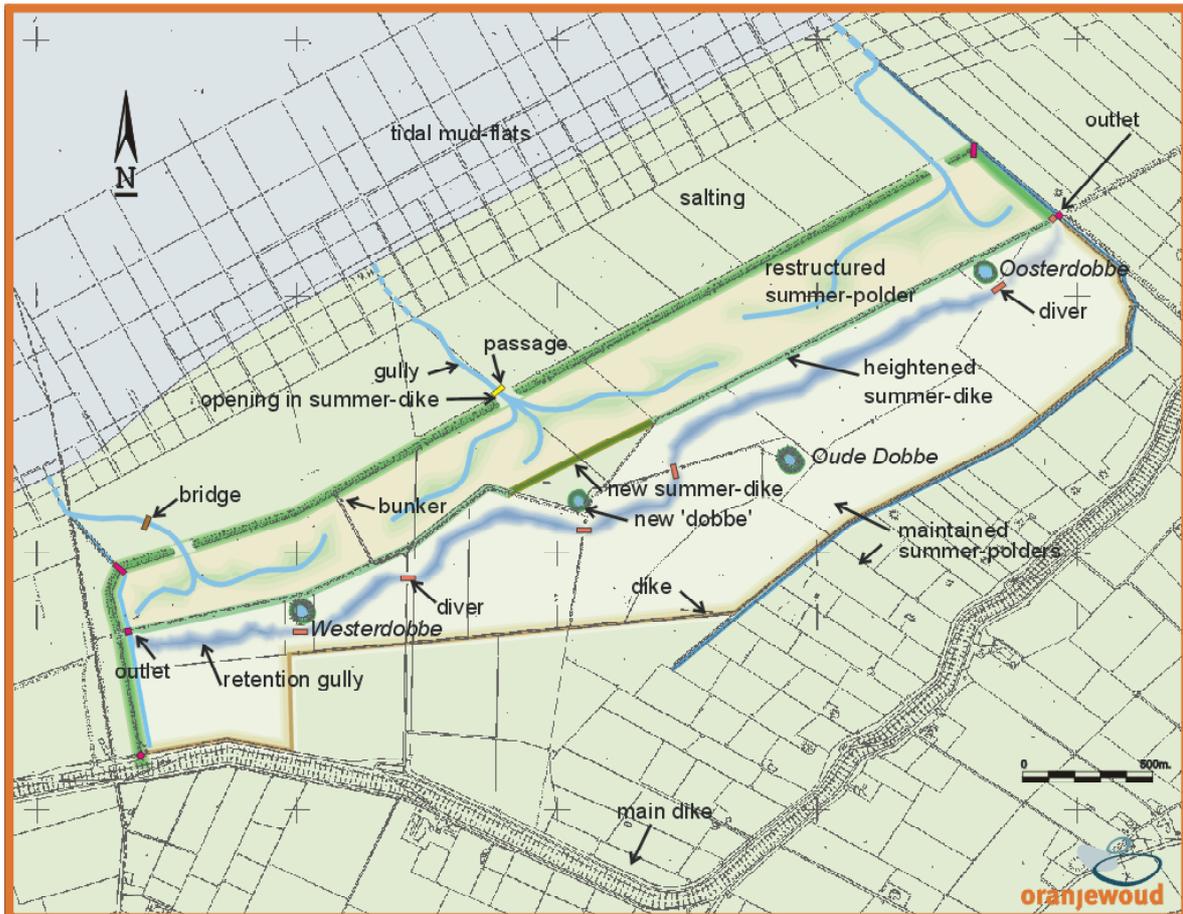
In 1990 the area outside the main dike, on the border of the province Fryslân and the Waddenzee, was assigned as a 'heart-area' of the Ecological Main Structure. The purpose of the Ecological Main Structure is to give nature a place of full value, to make sure it won't be lost for future generations in the intensively used areas of The Netherlands. To give this 'heart-area' form, the complete area outside the main dike (summer-polder) will in time be formed into a large scaled salting.

Noard Fryslân Bûtendyks is a wide and open area outside the dike, without any buildings. It consists of summer-polders, saltings and mud-flats under influence of tidal water. Although the summer-polders are formerly saltings, surrounded by low dikes, the surface level is often lower than that of the nearby saltings. The cause is that since the reclamation, hardly any sediment is deposited, and because the soil has compacted.



The saltings have an important role as breeding ground and forage-area for coastal birds, geese and duck. At flood they also form a shelter for birds that live in the Waddenzee. Cows, sheep and horses graze the summer-polders. In the past, there was also some arable farming.

The main purpose of the restructuring is to get a valuable area for nature. Besides its natural value, the area is also important for recreation. A walking-trail makes the area outside the dikes within easy reach. A bunker from WW II is rebuilt as a platform for the observation of birds.

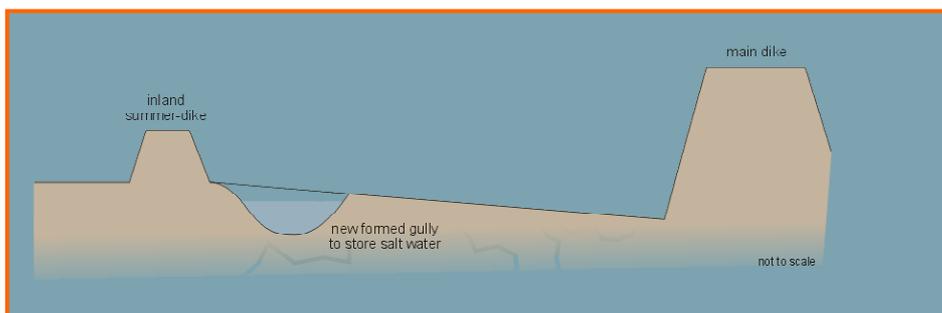


Because It Fryske Gea, one of the nature-keeping organizations in The Netherlands, who will in future manage the salting, does not yet own all the land between the Waddenzee and the Frisian main dike, the restructuring could not be formed by just removing the most outward summer-dike. Other owners were not to have any trouble of the restructuring.

Therefore, some limiting conditions were made:

1. The safety may not be altered. This means the length of inundation and the number of inundations per year of land outside the area should remain the same.
2. The water levels and the degree of salt water in neighbouring areas may not change.
3. The restructuring should lead to forming of saltings. Tidal water should flow in and out freely.
4. The conditions for restructuring should be controlled.
Holes in the summer-dike may not erode further.
5. Some time after the restructuring, grazing by cattle must be possible again.

The first and second conditions make strong demands on the water management of the area. The forming of breaches in the most outward summer-dike (third condition) does not alter change the discharge of the surrounding areas, because they are separated from the project-area by dikes and have their own outlets.



To guarantee the safety of the neighbouring areas (first condition), the inland summer-dike is heightened. This in itself does not guarantee the degree of salt water does not change. With flood and heavy storms, large quantities of salt water flow over the dike. Because the surface level in the polders reduces in the direction of the main dike, the salt water would flow towards the agricultural land outside the dike. To prevent this, an extra retention area is made. This retention area lies directly behind the heightened summer-dike and is formed as a gully, to give it a natural look. In this gully, the seawater is stored. After lowering of the seawater-level, the water is discharged of by the sluices at the east and west of the area. Only when more seawater flows over the dike than can be stored in the gully, the water flows over the surface to the agricultural areas.

In 1998-2000 a plan for the restructuring and builder's specifications were made. From June 2000 to autumn 2001 the works were engineered.



The project Noard Fryslân Bûtendyks is a EU-project in the Life Nature program. The total costs are estimated at around 8 million euros. The EU pays for half of this amount. Other contributors are the state, the province Fryslân, It Fryske Gea and funds raised by It Fryske Gea.

In a few years time, the project will make clear whether agricultural land can be formed into saltings. In five years time, several aspects are monitored:

- processes of deposition and erosion
 - forming of vegetation
 - Inundation periods and inundation frequencies
 - Behaviour of breeding and forage of birds
- The results will influence other projects for the forming of saltings.