



Current situation

## Westenholte dike displacement

In the coming years, Groot Salland Water Board will work on the River IJssel in order to keep Zwolle and the surrounding area safe and dry. In Westenholte, the dike will be displaced and channels will be dug. Work will start in 2011 and be completed in 2015.

### Space for the river

This project is part of the national 'Space for the River' programme: 39 government measures for the purposes of both increasing safety and protecting the area against flooding in the future. In addition to safety, the programme will also improve the environmental quality, as the area will be made more attractive and will offer more space for nature and recreation.

Groot Salland Water Board, with centuries of experience in such matters, will ensure that the plans are carried out correctly and punctually. In the past, such planning has been carried out by the Province of Overijssel. The dike displacement will ensure that the water level of the IJssel at Zwolle will be reduced by 14 cm during normative high-water. Prevention of floods is the number one priority, although attention is also given to the special significance of the IJssel to Zwolle. It is an area of natural beauty, where people go to enjoy the water and the nature. We wish to strengthen this aspect of the IJssel. The phasing out of farmland will allow the nature to blossom once again, and we will ensure that the newly created countryside is made accessible, allowing everybody from Zwolle and beyond to enjoy it.

### Inconvenience caused by the work will be minimised

Of course, the measures taken as part of the 'Space for the River' programme are not all positive for everyone. In the interest of public safety, the familiar environment must change. Some people in the planned area will even have to move or sell their business. Furthermore, the work involved in creating the channels will also cause problems.

In conjunction with all government bodies involved, Groot Salland Water Board will strive to notify residents of the area and surrounding areas of all developments, to involve them in the plans and, wherever possible, to compensate for any inconvenience and damage.

### What is going to happen, and where?

The foreland that will be enlarged is situated on the IJssel, to the west of Westenholte. Between the area in question and the river is the hamlet of Spoolde. In the current foreland of Vreugderijkerwaard, a channel was dug at the turn of the century. The new channels will branch off the existing channel. The following is a short summary of the work planned:

- Firstly, a new dike will be constructed with a length of 2.2 km.
- This dike gets the same height as the current dike, but approximately 300 m further inland.
- $\bullet\,$  When construction of the new dike is complete, the old dike will be levelled out.
- In the area outside the new dike, a new channel system will be constructed that connects to the existing channel.
- A number of residents of the area will be displaced to three houses that will be constructed on terps on the new dike, and two farms will be relocated.
- Farmland will be created for these purposes.







### **Dike displacement**



Moving dikes further inland broadens the forelands and gives the river extra space.

Future situation

### What will the area look like in the future?

- The dike will be situated further inland, increasing the size of the foreland.
   The channels will act as an overflow for the river at high tide.
- The larger channel will have an open connection to the IJssel, giving nature
  a chance to develop in the transition between water and land.
   The area to the south of the channel will be grassland.
- Upstream, water will be supplied by means of a culvert (a shaft or tube
  that connects waterways with each other). This will enable replacement
  of the water in the channels. When the water level rises, the forelands will
  fill up first via the downstream connection with the IJssel. It is expected
  that the overflow will be filled in several weeks at a time, and will be flooded
  into the area.
- The land outside the dike(s) will be redesigned as a nature reserve and include recreational facilities.

### **Groot Salland Water Board and Space for the River**

The Westenholte dike displacement is not the only 'Space for the River' project in the Zwolle area. South of the railway bridge over the IJssel, the excavation of the forelands of the Scheller en Oldeneler Buitenwaarden will also take place. In Deventer, Groot Salland Water Board will also conduct excavations in the forelands of the Keizers-, Stobben- and Olsterwaarden and Bolwerksplas, Worp and Ossenwaard.

# 'Prevention of floods is the number one priority'

### **Facts and figures**

### Motivation for 'Space for the River'

- In 1993 and 1995, the river's waters were extremely high
- In 1995, 250,000 people had to be evacuated due to high-water level

### **Schedule**

- Plan development: Up to 2009
- Predesign of zoning plan: 2009
- Adoption of zoning plan: 2010
- Commencement of work: 2011
- Completion of work: 2015

### Scale/details

- By normative high-water levels, 16,000 m³ per second at Lobith equates to an 14 cm reduction
- Length of new dike: approximately 2.2 m
- Average width of new channels: 50-100 m
- Maximum excavation depth: 4 m
- Maximum amount of excavated earth: 1,300,000 m<sup>3</sup>
- Relocation of four houses, of which three will become dike residences
- · Relocation of two farms
- · Creation of new farmland (approximately 10 hectares)
- · Construction of footpaths
- New cross-channel connections

### Financing

• Budget: approximately € 38 million