

History

As we have seen before the methodical organisation of surface water management emerged as the lowlands were drained for agriculture. The first water councils were formed in the 12th century, often controlling no more than a single polder or dike. Along a branch of the river Rhine windmills were in use as early as the beginning of the 15th century to pump water from the lowlands into the river and drainage canals.

Nowadays around 26 percent of the surface of the Netherlands is at or below [sea level](#). It is not surprising then that the Netherlands have seen a lot of coastal and river flooding. Flood prevention therefore is a national policy priority, since about two-thirds of this densely populated country is vulnerable to flooding.

Both natural and man-made sand dunes along the coast, dikes, dams and floodgates provide defence against high-tide and storm surges from the sea. River dikes prevent flooding of land by the major rivers Rhine and Meuse.

19th century

After the defeat of Napoleon a new map of Europe was drawn at the Congress of Vienna. The southern Netherlands (the present Belgium) were added to the north to create a strong country on the northern border of France. In 1015 William of Orange, returned from exile in England and became ruler of the United Netherlands and Luxembourg. Unfortunately the United Netherlands ceased to exist only 15 years later when the people of Belgium decided to revolt against the North. William, an absolute ruler, had lost half of his kingdom and considered himself at war with Belgium for the next 9 years.

The port of Antwerp was to suffer from his revenge. As the only access route to the port of Antwerp was via the Western Scheldt, located on Dutch territory, it was decided in 1830 to charge tolls on ships to and from Antwerp. Though this toll was lifted again some 30 years later it took a long time for Antwerp to recover.

A similar fate befell Antwerp two hundred years before. In 1585 the Spanish invasion of the Netherlands led to a blockade of the Scheldt by the Dutch and resulted in a decline in trade. In the following two centuries, the port had to bear the negative effects of blockade and stagnation that ensued. The Dutch employed various methods to thwart the free movement of ships to and from Antwerp.

In recent years a new problem arose due to the stubborn attitude of the Dutch government. The Scheldt river needed to be made deeper in order to keep the port of Antwerp accessible. In 2005 a treaty was signed between the two countries but for ecological reasons it was agreed that six hundred hectares of nature would be created outside the dikes bordering the river Scheldt. This was necessary because nature in the Western Scheldt had deteriorated in previous decades. In the Netherlands the 'depoldering' (i.e. inundating the land) of the Hedwigepolder was proposed to achieve the desired result. Understandably the people of Zeeland who had suffered so much from floods of their lands, in particular as recently as in 1953, when hundreds of people died after the dikes broke as a result of the spring tide crashing on to the shores of these islands. Depoldering the Hedwigepolder should have

started in 2007. However, because of all the protests and dissension it took until last year before the work was actually started.

20th century

In the course of the 20th century major works were executed. The Zuyderzee was transformed into IJsselmeer and the delta works in Zeeland were completed.

In the 1930s a 32 kilometre dam was constructed damming off the Zuyderzee from the North Sea. A land winning project that took place in the following decades resulted in a new 10,225 square kilometre province, now known as Flevoland.

Delta works

To protect Zeeland from future disasters such as the 1953 flooding, an ambitious plan was made and executed in the second half of the 20th century. The entire estuary was sealed off with sea dikes and floodgates, except of course for the Western Scheldt, the mouth of the river, the lifeline of the port of Antwerp. A masterpiece of civil engineering.