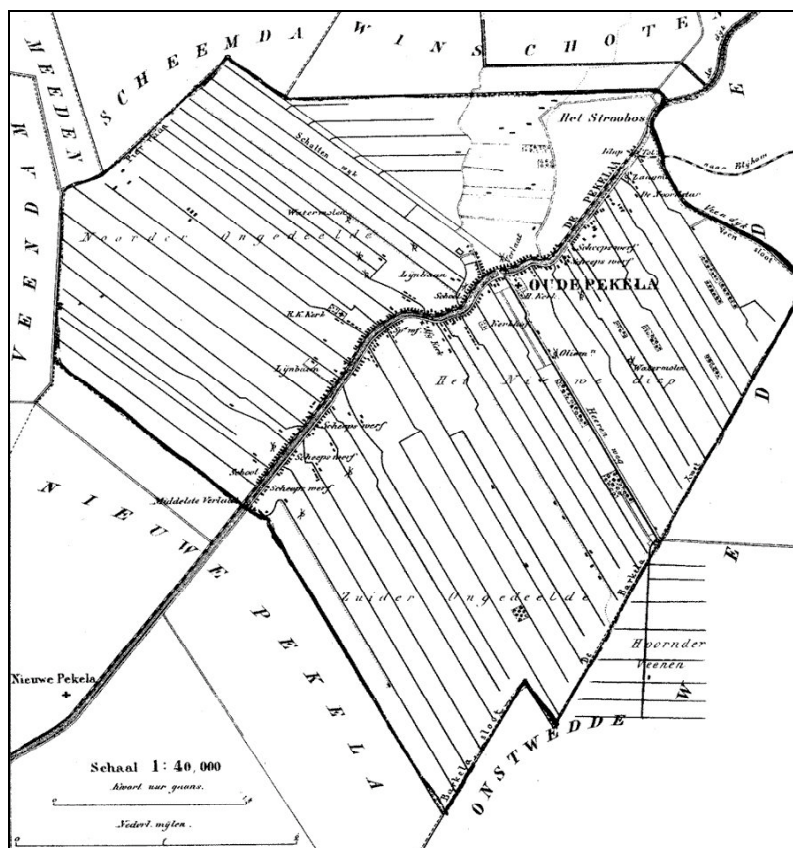


## A tour through 100 years of waterpollution in the Groningen Veenkoloniën

The Groningen Veenkoloniën (Peat District) experienced episodes of severe water pollution between the mid-19<sup>th</sup> century and the 1970s. The text and images below present this history in pictures. This document is the text version of the map based tour available on the [Environmental History Resources website](http://www.eh-resources.org).

### Map Oude Pekela



This map of Oude Pekela and surrounding area shows the typical strip reclamation pattern of the Veenkoloniën. These strips are called "wijken" and were reclaimed from a central drainage canal, the Pekelder Diep, on which the houses were centered. From the main canal smaller drainage canals were dug to drain the peat before it was removed.

Source: *Gemeente Atlas van Nederland*, J. Kuyper 1865-1870.

## Peat cutting



A thick layer (4 to 5 metres in places) of peat once covered the Groningen Peat District (Veenkoloniën). This peat blanket extended from the province of Drenthe in the west and across the border into Germany in the east. During the Dutch Golden Age in the 17th century the demand for fuel in Holland, and particular Amsterdam, increased

significantly and since peat was the prime fuel, traders started to look for new supplies. This was found in East Groningen and from the late 18th until the early 20th century the peat was drained, cut and exported by ship to the cities in Holland.

## Landscape transformation



The peat cutting transformed the landscape on a large scale. After the peat was cut away a wide expanse of new agricultural land dissected by canals was left behind. The sandy soils that emerged from under the peat were mixed with the top layer of the peat (called "Bolster") and the resulting soil structure was very suitable for the production of

grain and from the 18th century potatoes.

## Agricultural Industry



The combination of peat cutting, agriculture and canals laid the foundation for the agricultural industry that arose during the latter half of the 19th century. The image above of the factory at Foxhol captures this neatly. The factory in the foreground

processes potatoes for the production of potato starch; the fields in the background are the source of the potatoes and the ships in the canals in front of the factory transport potatoes to the factories and the final product, the starch to customers. In addition the canals supplied the water needed to process the potatoes and to get rid of the wastewater.

## Shipping



Shipping was one of the major industries in the Veenkolonien until deep into the 20th century. When the transport of peat declined during the 19th century the skippers naturally turned to transporting straw and potatoes. The many canals created for drainage during the peat cutting formed a perfect infrastructure for the agricultural industry

providing fresh water and transport for raw materials and final products. The ship in the image above was taken around the turn of the 20th century and shows one of the hundreds of boats and barges in use on the canals of Groningen.

## Strawboard industry



over from the grain harvest to produce cardboard for packaging.

The production of grain created a large amount of straw that was used to make straw board. In conjunction with the potato starch industry many strawboard factories, like paper mill Erica in Oude Pekela, appeared in the Veenkoloniën.

These factories used the straw left

## Oude Pekela



in this image is the water pollution that was caused by the factories.

The town of Oude Pekela became the centre of the straw board industry and in the last decades of the 19th century eight factories were there established. The image below shows the bustling town of Oude Pekela in the early 20th century, centered on the main canal showing barges delivering straw to the factories in the visible in the background. What cannot be seen

## Water pollution



Water pollution in the Veenkoloniën reached epic proportions in the 20th century. By 1960 the factories in the region produced combined an amount of wastewater equivalent to a city of 20 million people. Foam covered the canals during the campaign in the late summer and early autumn and a nauseating smell rose from the canals. This picture shows the Pekelderdiep (name canal) at the Union Strawboard factory in Oude Pekela, covered with black foam during the late 1960s.

## Cartoon



The water pollution was so bad that the watercourses in the Veenkoloniën were amongst the most polluted in Europe in the decades after the Second World War. It became a huge political issue and it made headline news on a regular basis. Cartoonists in national newspapers had also a go at the issue, as the image left testifies. Caption reads: "Pekelder Hoofddiep most polluted water in Europe. - You can best cross here sir."