

# NATURAL CLIMATE BUFFER



Netherlands



## De Onlanden

### Introduction

An area of large lakes, reed lands, meadows and alder carr, situated between the higher sand plateau of Drenthe and the clay grounds of Groningen. Some parts are old, but for the greatest part the area was redeveloped in the past decade. In a formerly low farm area a vast water storage area was set up with room for 10 million m<sup>3</sup> of water. This area has developed into a beautiful nature reserve of more than 3,000 hectares.

### Issues & key challenges

- A major challenge is to monitor the balance between the functions for water safety and nature. The safety function requires extra space (5 million m<sup>3</sup>) that may be at the expense of natural values.
- The challenge now is to organise the entire stream valley system as a natural climate buffer. Nowadays, especially the lower reaches is used as climate buffer. The middle and upper courses not yet!
- From an ecological point of view, it is a challenge to reduce the input of nutrients and crop protection products. It is also exciting how quickly the succession will proceed.
- The nature reserve is threatened by drainage, unnatural water level management and eutrophication.

### Legal Status

Ramsar (Leekstermeer)

Natura 2000 (Leekstermeer)

Special Area of Conservation

Special Protection Area

National nature network

### Habitats and Protected Species

Freshwater lake, surrounded by reedbeds, peatbogs and pastures with small marshes and wet grasslands within seasonally flooded agricultural land.

Corn crane, Bailon's crane and Spotted crane / Sedge warbler / ducks and geese / northwestern Siberian and northwestern-northeastern European white-fronted goose.

Desmoulin's Whorl Snail / The Eurasian water shrew / Otter

### Management

Natuurmonumenten & Staatsbosbeheer

### Information and videos

Further information:

<https://www.klimaatbuffers.nl/projecten/onlanden>

Recommended video:

<https://www.youtube.com/watch?v=s9PDjZAK2e8&feature=youtu.be>



### Outcomes & benefits

- Prevention of water damage; water retention
- Bolstering tourism and environmental values, holiday makers and inhabitants of Groningen come out for walking, cycling and birdwatching
- Habitat for plants and animals and restoring biodiversity
- Fewer problems from drought
- Improvement of fresh water quality
- Decreasing subsidence
- Reduction of greenhouse gas emissions.

### Lessons learnt & future

That it is possible to restore a dynamic swamp area in such a short period! As long as it is robust and there are some refugia present.



ROOM FOR NATURE AND WATER MANAGEMENT



CARBON SINK

natuurlijke klimaatbuffers

NATURA 2000

Eurosite



Eurosite Factsheet

Wetlands and Climate Change

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