

**Landscape Architecture for a
New Kind of National Park:
The Fabulous Four**

**Master Studio Regional Landscape
Architecture**

Student parade of results and designs

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Laboratorium landschap: een samenwerking voor Nationale Parken van de 21e eeuw

Resarch project and masterstudio

Aanvrager: Regionale Landschapsarchitectuur, Wageningen Universiteit

Partners:

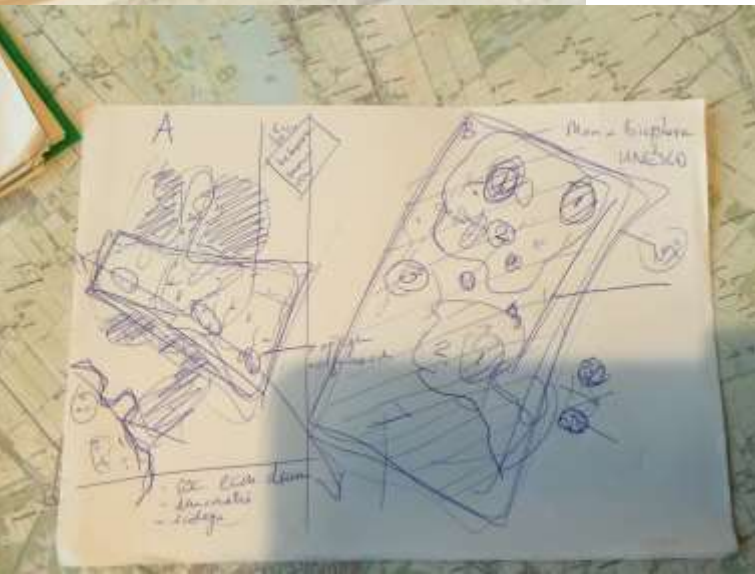
Staatsbosbeheer, Rijksdienst voor het Cultureel Erfgoed, Wageningen University,

Regionale Landschapsarchitectuur: prof.ir. Adriaan Geuze

SteenhuisMeurs: dr. Marinke Steenhuis (gastdocent WUR, extern onderzoeker, penvoerder en inhoudelijke coördinatie)

Inhoudelijk ondersteund door:

Rijksadviseur Landschap en Water (ir. Eric Luiten), Natuurmonumenten





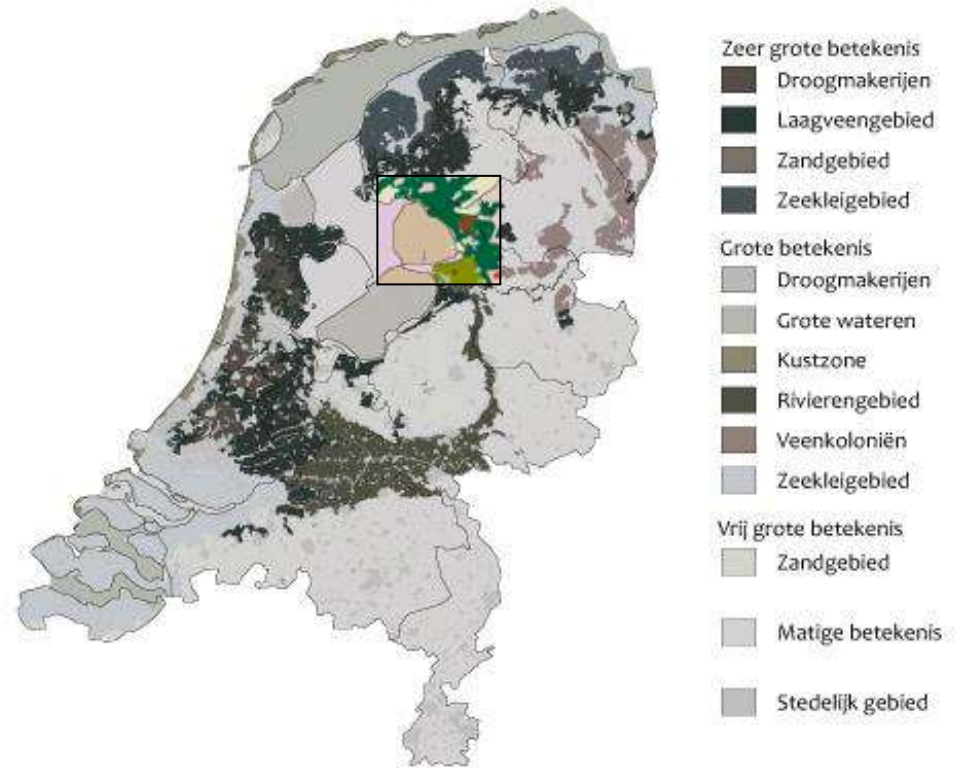
Area: Drents Friese Grensstreek & Wieden Weerribben

Location choice

- Layer approach landscape
- Landscape-ecological system as a base
- Coherent landscape, high cultural-historical values, (Colonies of Benevolence, Wieden-Weerribben, heide, Archeology, etc)
- Scale
- 3 existing National Parks
- Story of the Netherlands

Expanded to polder; Fab 4

Internationale betekenis landschappen



Specific study area: the in-between Steenwijker Peat Valley

Assignment Master studio:

- **Regional landscape design scale 1:5.000** for the *Peat Valley*
- **Rural landscape ensemble scale 1:2.000**
- **Urban landscape feature scale 1.000 or 1:500**



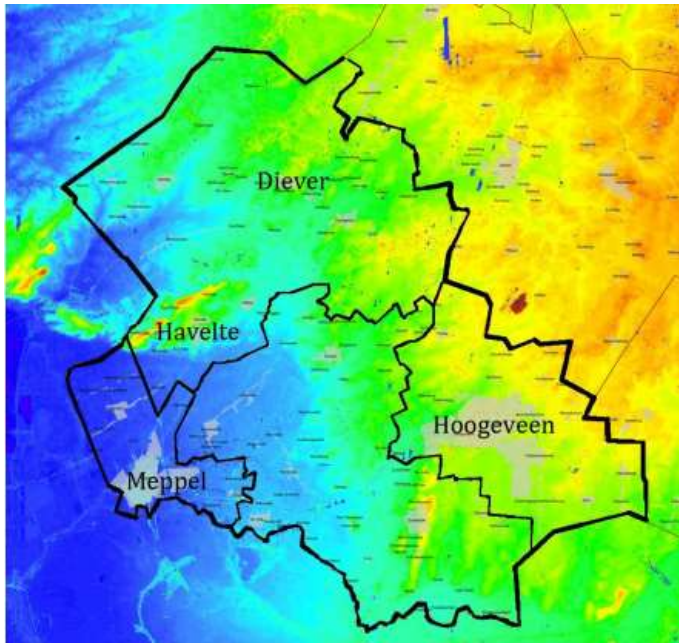
- Zeer grote betekenis
 - Droogmakerijen
 - Laagveengebied
 - Zandgebied
 - Zeekleigebied
- Grote betekenis
 - Droogmakerijen
 - Grote wateren
 - Kustzone
 - Rivierengebied
 - Veenkoloniën
 - Zeekleigebied
- Vrij grote betekenis
 - Zandgebied
- Matige betekenis
- Stedelijk gebied

Perception & time depth



Bron: Alterra.

PBL/aug05
www.clo.nl/nr103404

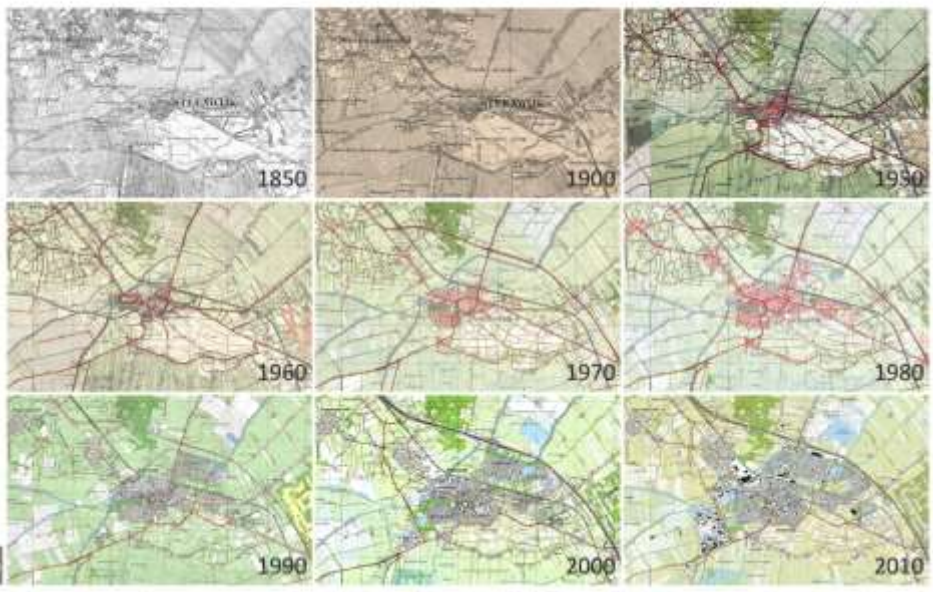








Analysis



Functions of the catchment areas of the Vledder and Waperveense Aa

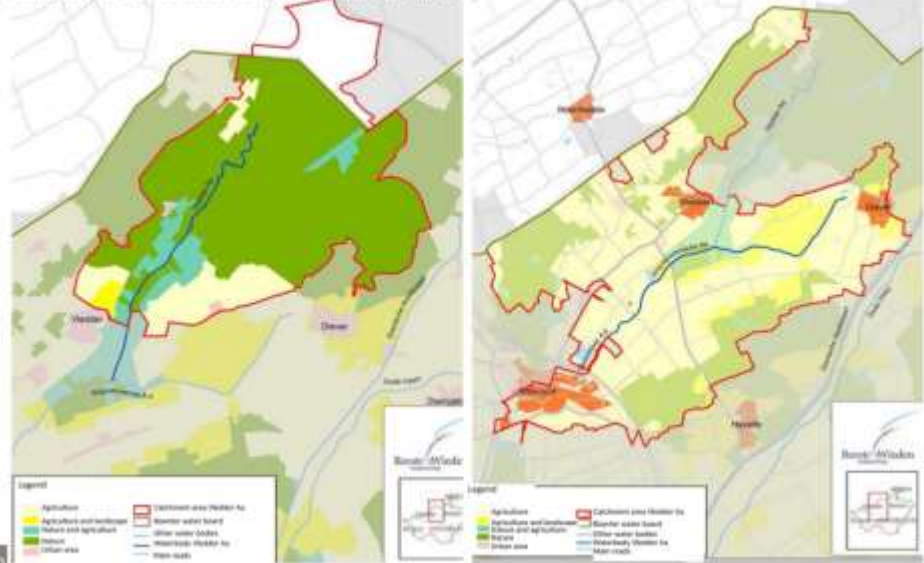


Figure 20. The functions of the catchment area of the Vledder Aa

Figure 21. The functions of the catchment area of the Waperveense Aa

Historical remnants in the landscape

Historical landscape elements that are still visible in the present-day landscape.

Map of the region of 2016



Figure 24. The different water level areas in the surroundings of Steenwijk and the Vledder and Waperveense Aa

Precedent Study: Varusschlacht Museum and Park Kalkriese

"The approach that has been realized here should prove ground-breaking for many later projects, both nationally and internationally. Neither the historic locale nor the event was architecturally reconstructed, instead a unique space for reflection was created in the middle of the landscape near the the Kalkriese Hill"

- 20 hectare park, archaeological monument and museum in German battleground
- Park allows users to explore and provides a backdrop but allows visitors to create their own thoughts about the historical events with 3 pavilions that focus on sharpening the visitors' perception and inviting them to address what happened here on the annual level
- Audio guides, Children's scavenger hunt game
- Events- ex. Festival of Lights, Roman and Germanic Days
- Museum acts as a showcase of current research results. Includes artifacts, highlights excavations, interactive displays
- Events- full moon, Summer and Winter solstice
- School tours
- 1.3 million visitors last year to Stonehenge and Avebury



Figure 15- Change in land use in the four different Delta scenarios. Green are new nature areas, red new urban areas. Brown new agricultural areas.



6 Sicco Marshall
1908-1985
Realtiment of farmland



7 Wolter Huisman
1932-2004
Shipping industry; Royal Huisman



8 Machiel Sol
present
Farmer turning farmland into nature



9 Peer Group
present
Performance group in the north of Netherlands



Marshall was a Dutch farmer and later on politician, recognized for having a big influence of the development of the Dutch landscape. The lack of food surplus after WWII and the gap between rich and poor was some of the triggers when he decided to fight for the renewal of the design of Dutch landscape to make it self-sufficient and to guarantee the farmers a certain minimum price for their products. The old system of small farms was modernized with technical solutions and strategic planning. In his later days he became an environmentalist and became an advocate for changing agriculture into nature. The last years of his life he lived in Wageningen.

Royal Huisman is the name of a successful shipping industry, which was established by the family Huisman 1864 and remained as a family-owned business, which focused on building and repairing sailing yachts. Wolter Huisman inherited the company and successfully ran it into international fame. Wolter was born in Wanneperveen, in the middle of Meppel and Giethem, and with establishing the business in the area he has been an important person of branding the region internationally.

Machiel and his wife Martha Sol stands as an example of a change in farming, in general many of the farmers children are not interested or able to continue their parents work. This could be one of several aspects that force farmers to the decision of not being able to run the farm. The project "New Estate" was founded in order to give the farmers an opportunity to change their farmland in to nature and receive financial benefit from the government.

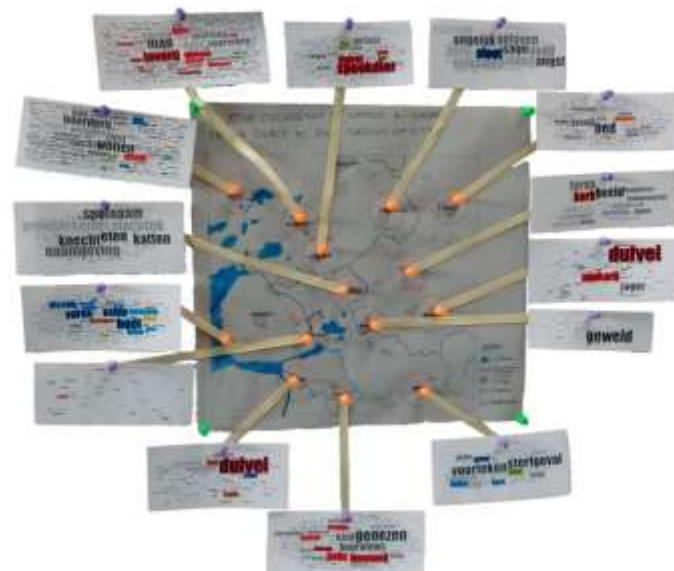
PeerGroup is based in the North of the Netherlands, in a rural area. Their performance are often site specific and focused on the people who are situated the area to get insight in the specific life in the chosen area. The group consists of different professions as architects, dancers, musicians etc. The performances take place in different cities or villages. To bring something to the community, they often take advantages of local knowledge and work together as a team. They claim that they through curiosity and fascination explore the sites to bring something new to the city.

Today the influence of digital impact many times depending on the different stakeholders which are seated in another chapter this booklet, but change often depending on environment and one single person are able to have influence a region as seen in the PeerGroup. Who will become the new rechanges in the future?

Landscape Narratives

Connections between Landscapes & Stories

Figure 17 Wordclouds connected to their geographical locations.

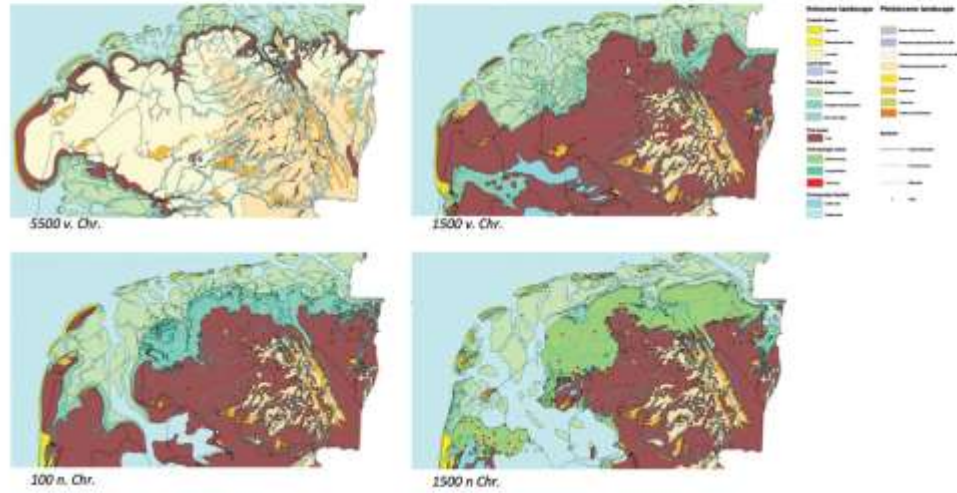


Holocene

The Holocene is the current period we are in now. It started around 11,700 years ago. The period is characterized by a strong rising sea levels caused by the melting of the ice caps, a process that some 18,000 years ago started before the start of the Holocene. Due to the rise in sea level, the groundwater level in the adjacent coastal area will also rise. In many places it is so wet that on the border between land and sea that marshes arise. Here plant remains accumulate to peat. This swampy bog slides under the influence of

rising sea levels further and further inland. Also the higher parts of the lands outside the reach of the sea, peat formation takes place. The reason why this peat could develop in this high areas was caused by the layer of boulder clay in the soil. 1 layer was formed in the Saalian period by the glacial activity in the region. Because 1 layer was preventing the water of infiltrating in the soil, wet conditions arose and 1 enhanced the formation of the peat.

Evolution of the Dutch coast during the Holocene



The ownership of the EHS areas

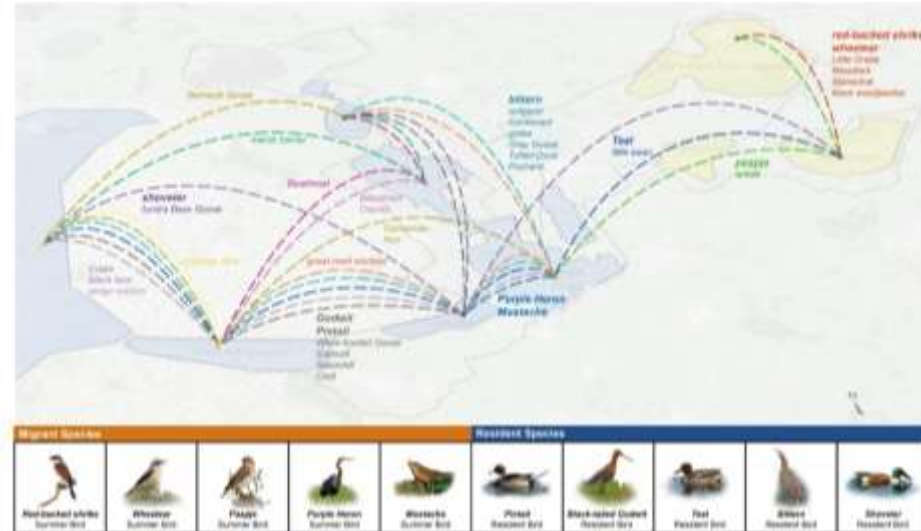
The three major project holders



Services and Functions

Services and Functions on Supra-regional scale

A map showing the distribution and location of different services. Locations of projects, commonly visited spots are marked as well and put into categories. 2015 data base was used in future-revision.



Migrant Species					Resident Species				
Red-throated Diver	Whistling Swallow	Puffin	Purple Heron	Wentletrap	Pintail	Black-necked Stilt	Teal	Shoveler	Maremma Stint

Designs

On 3 different scales:

'largest European inland boating experience'

'canal from Meppel to Steenwijk'

'bicycle paradise'

'longstay in the National Resort'

'industrial reed plantation'

'sustainable site-specific holidayhomes'

're-marke strategy'

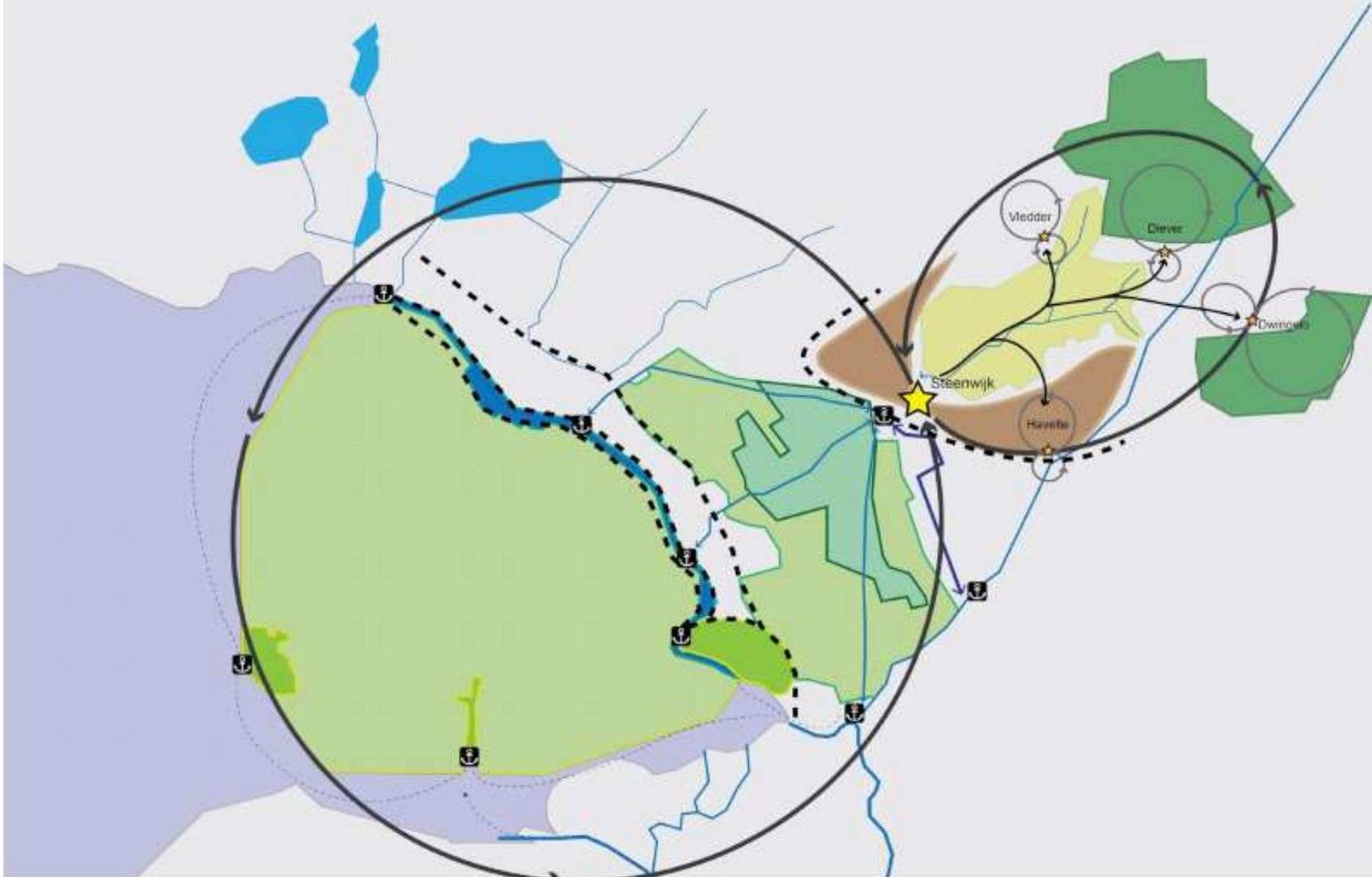
'wildlife corridor'

'revitalising tramway system'

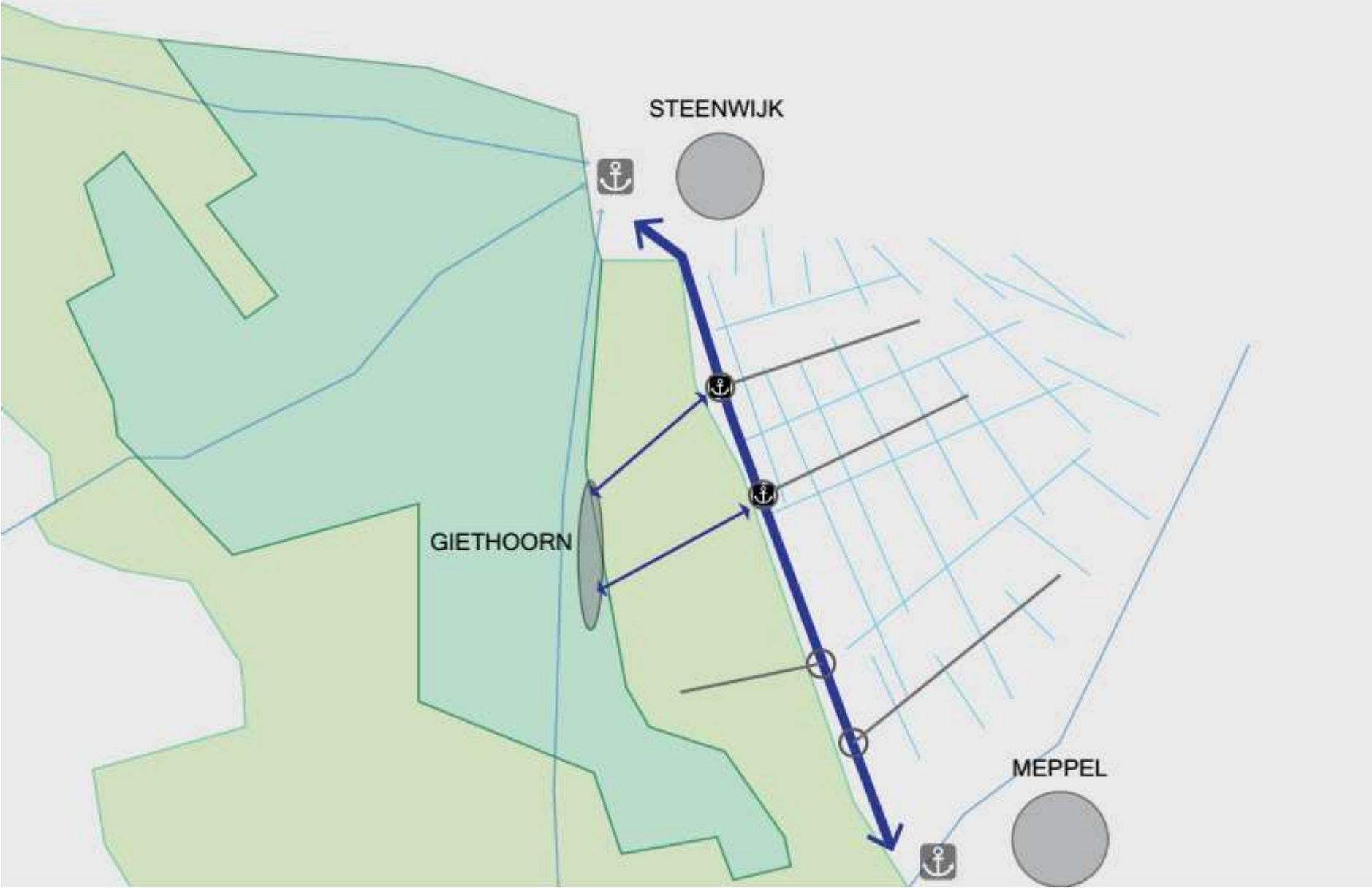
Design studio



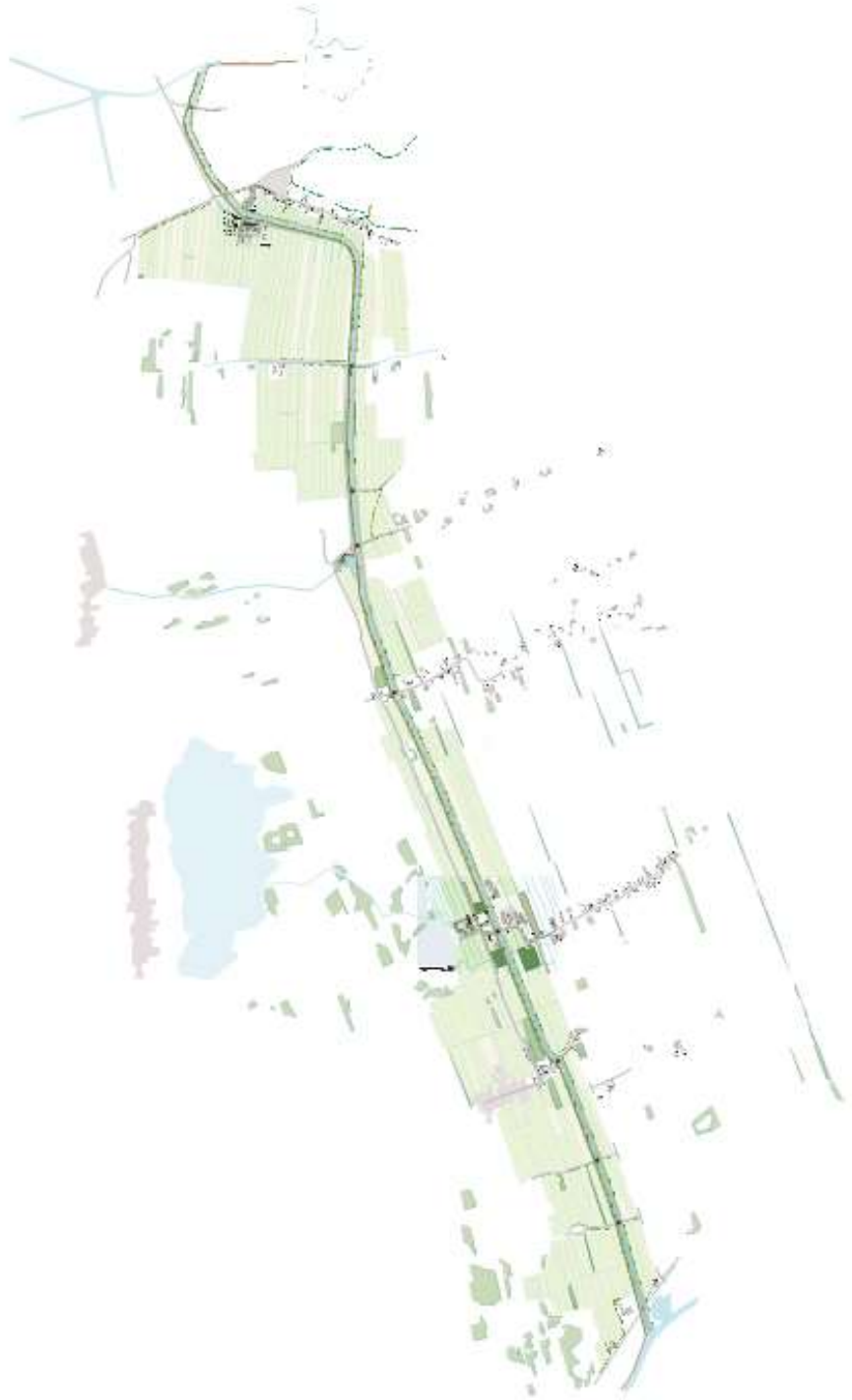
CONCEPT FABULOUS FOUR: STEENWIJK AS CAPITAL OF THE NATIONAL PARK



CONCEPT REGIONAL DESIGN:
WATER AS SOLUTION AND INCENTIVE



New canal from Meppel to Steenwijk



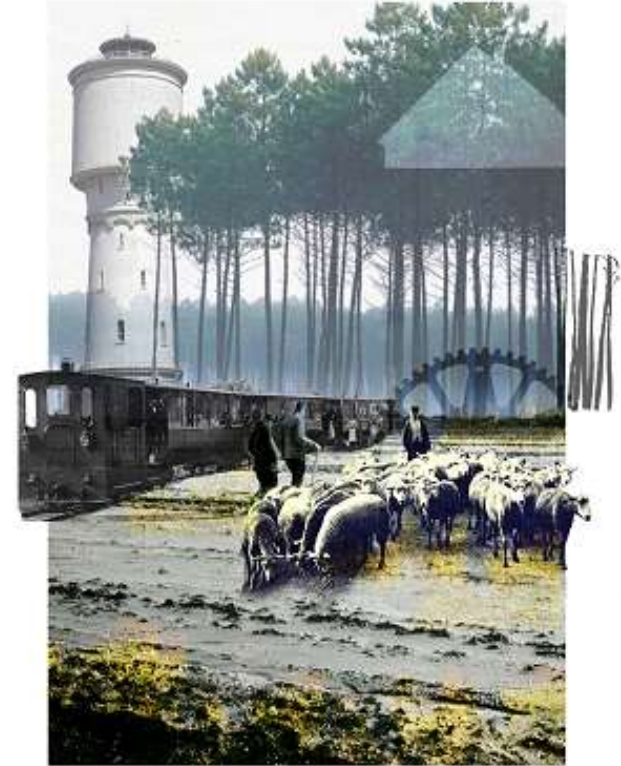
SUPRAREGIONAL
COLLECTIVE AGRICULTURAL PARKS
PILLARS OF THE CONCEPT



ENERGY



PRODUCTION



DWELLING

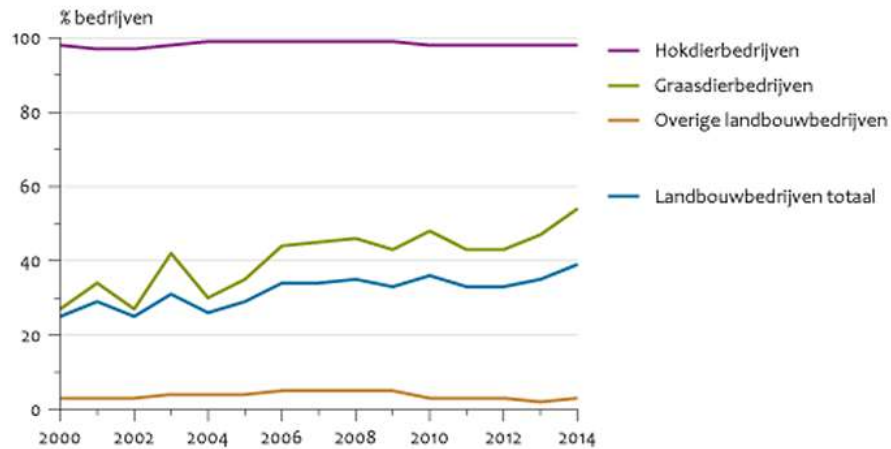
Re-marke strategy

Manure =

limiting farmers and creating problems for biodiversity. Milk farmers produce 1,5x more manure than they can spread on their land.



Landbouwbedrijven met overproductie dierlijke mest



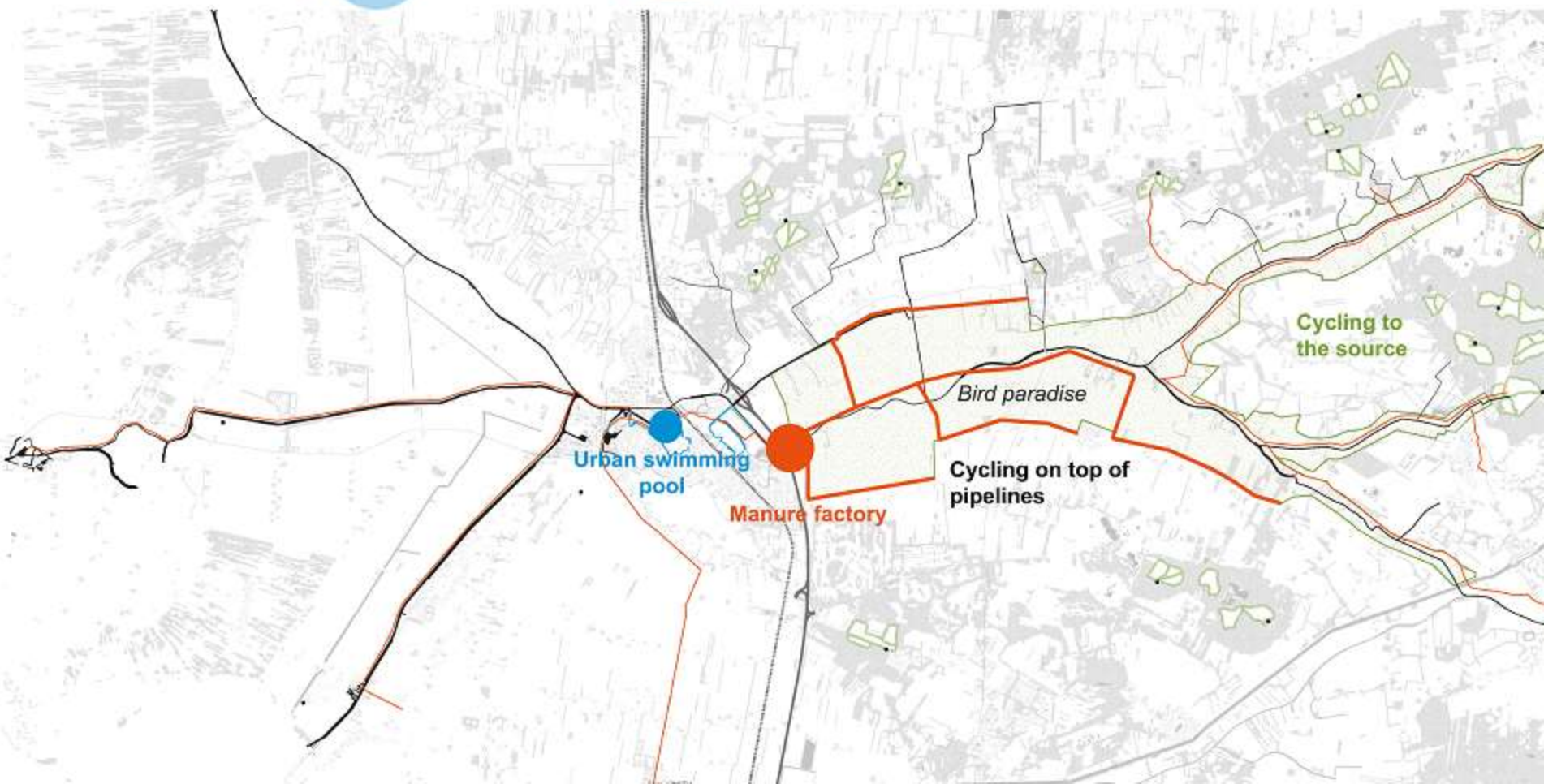
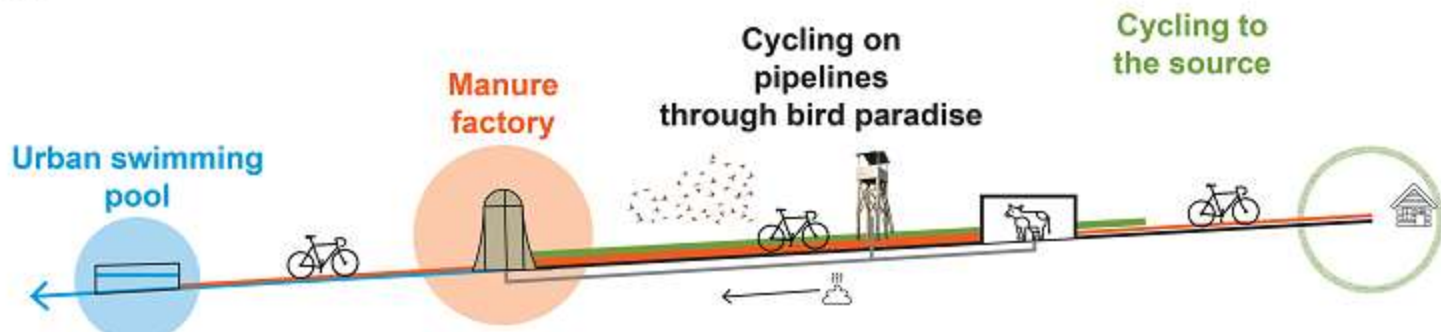
Bron: CBS.

CBS|jan16
www.clo.nl/n1052810

source: CBS, PBL, Wageningen UR (2016). Mestproductie bij gebruiksnormen: bedrijven met overproductie, 2000-2014⁵

Manure-pipeline cleans the Valley

Concept To the source



Regional:
Cycling on top of the pipeline

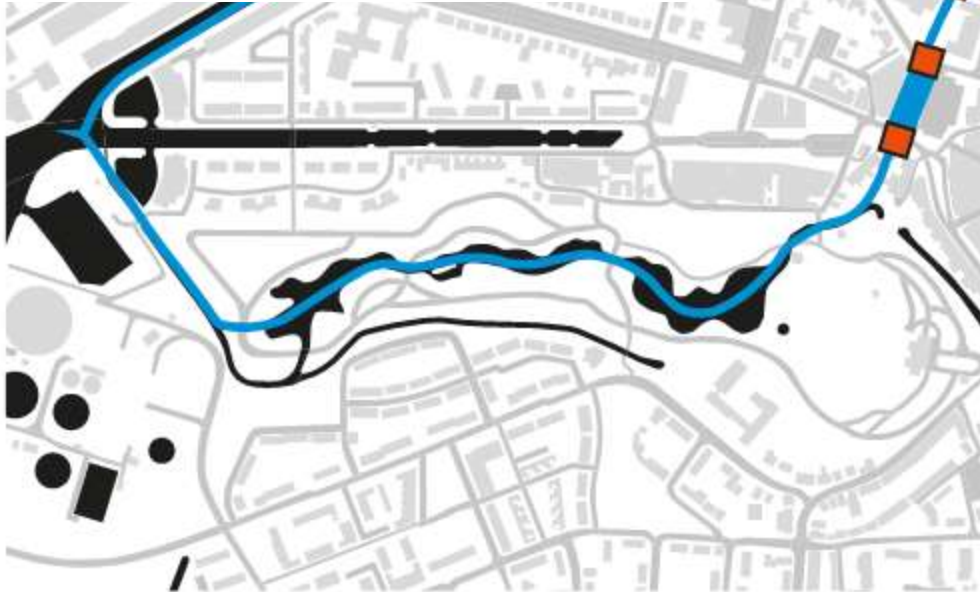
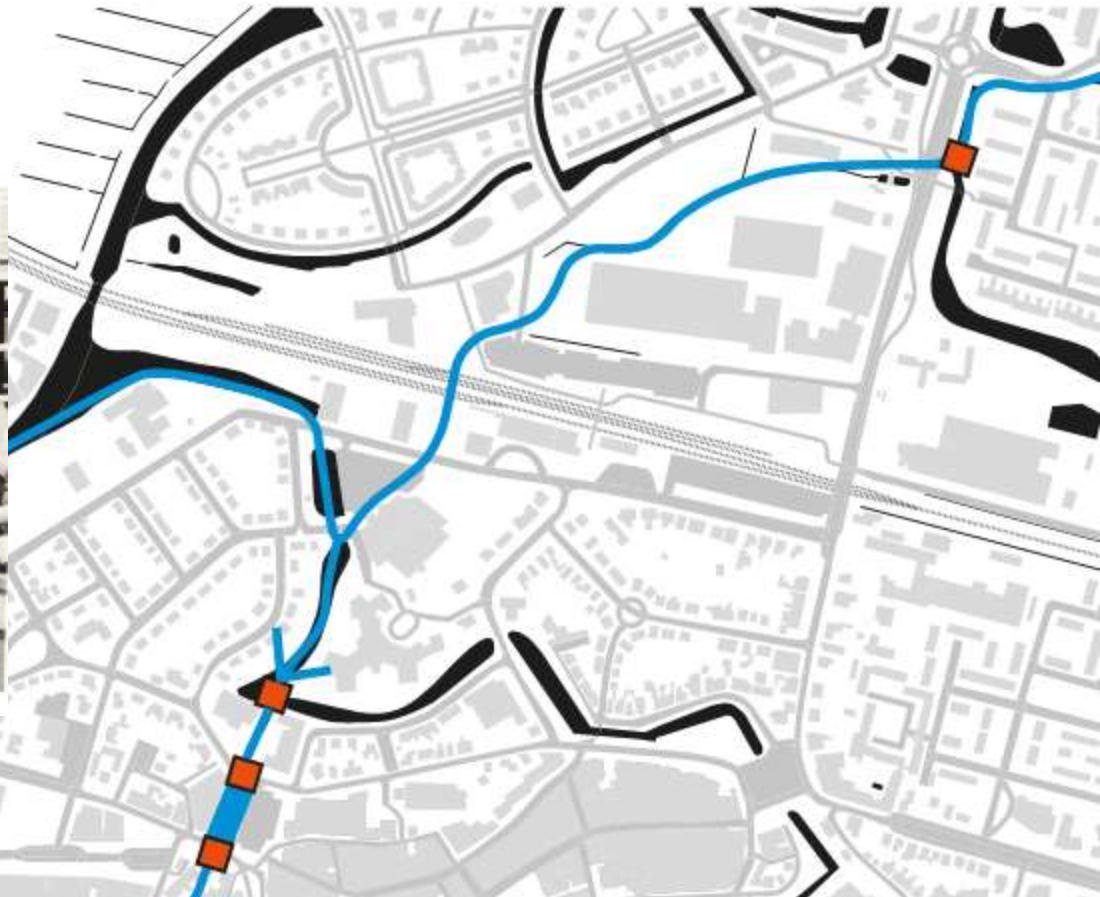
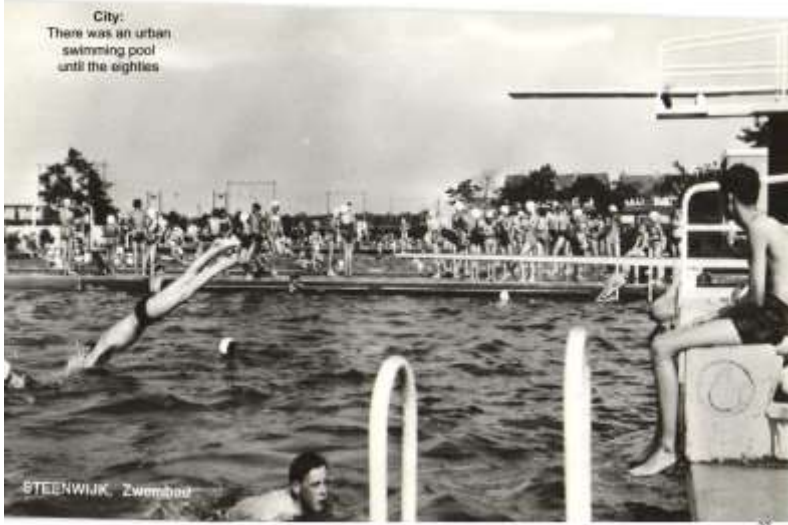


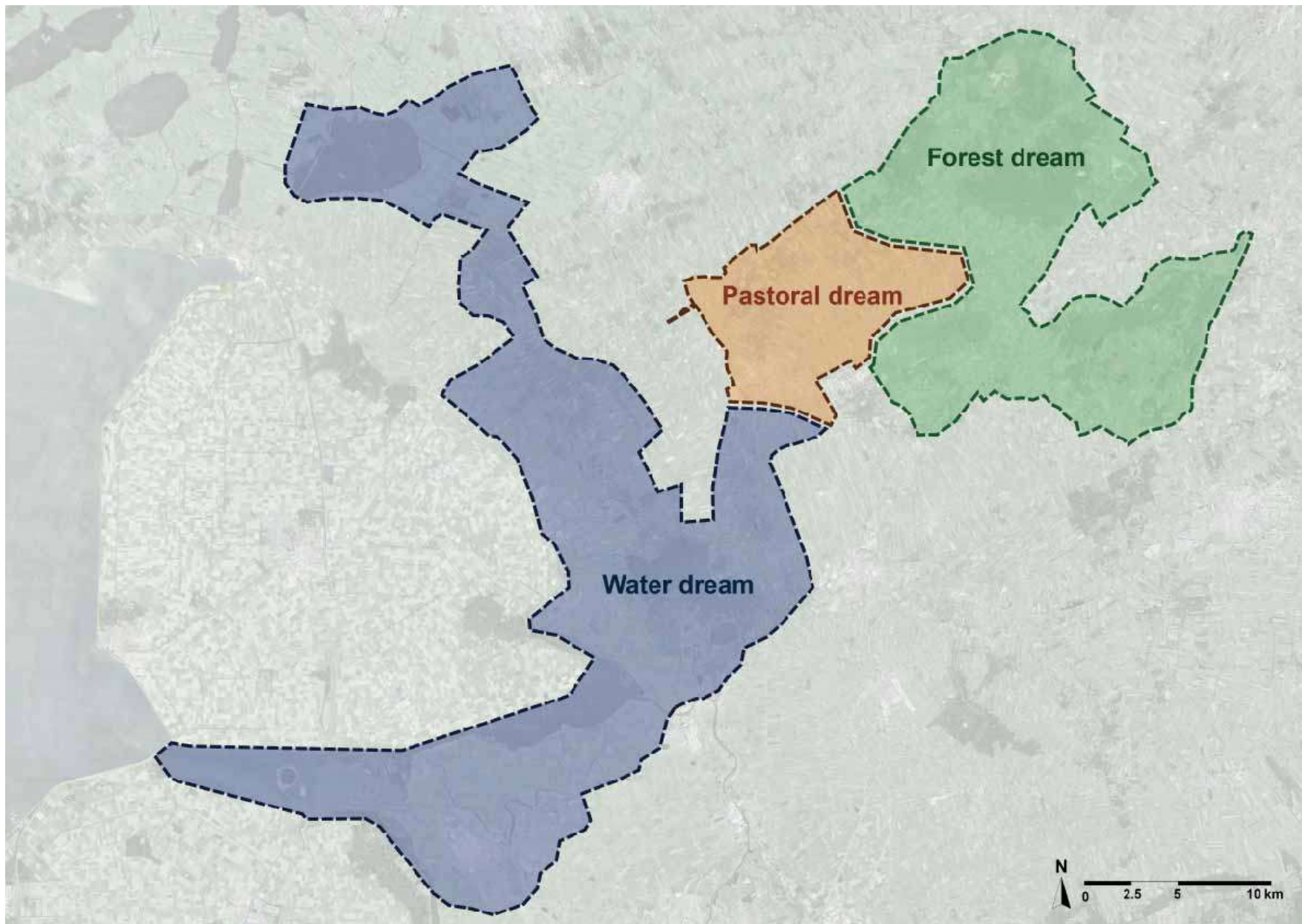
Normal profile, 1m deep, 4m wide cycling path



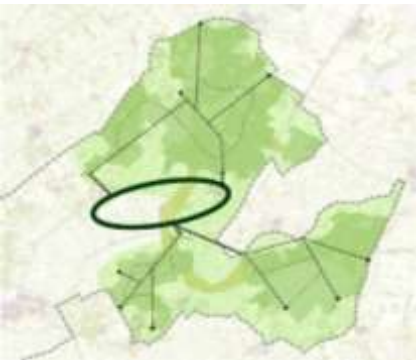
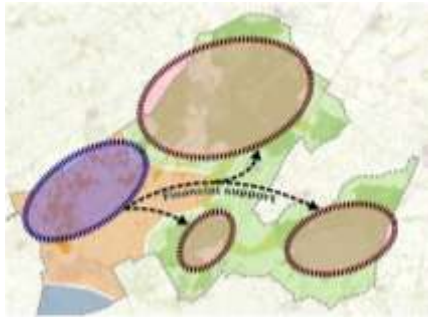
Inspection point profile, double use as signage

City: New clean water thanks to the cleaning water plant

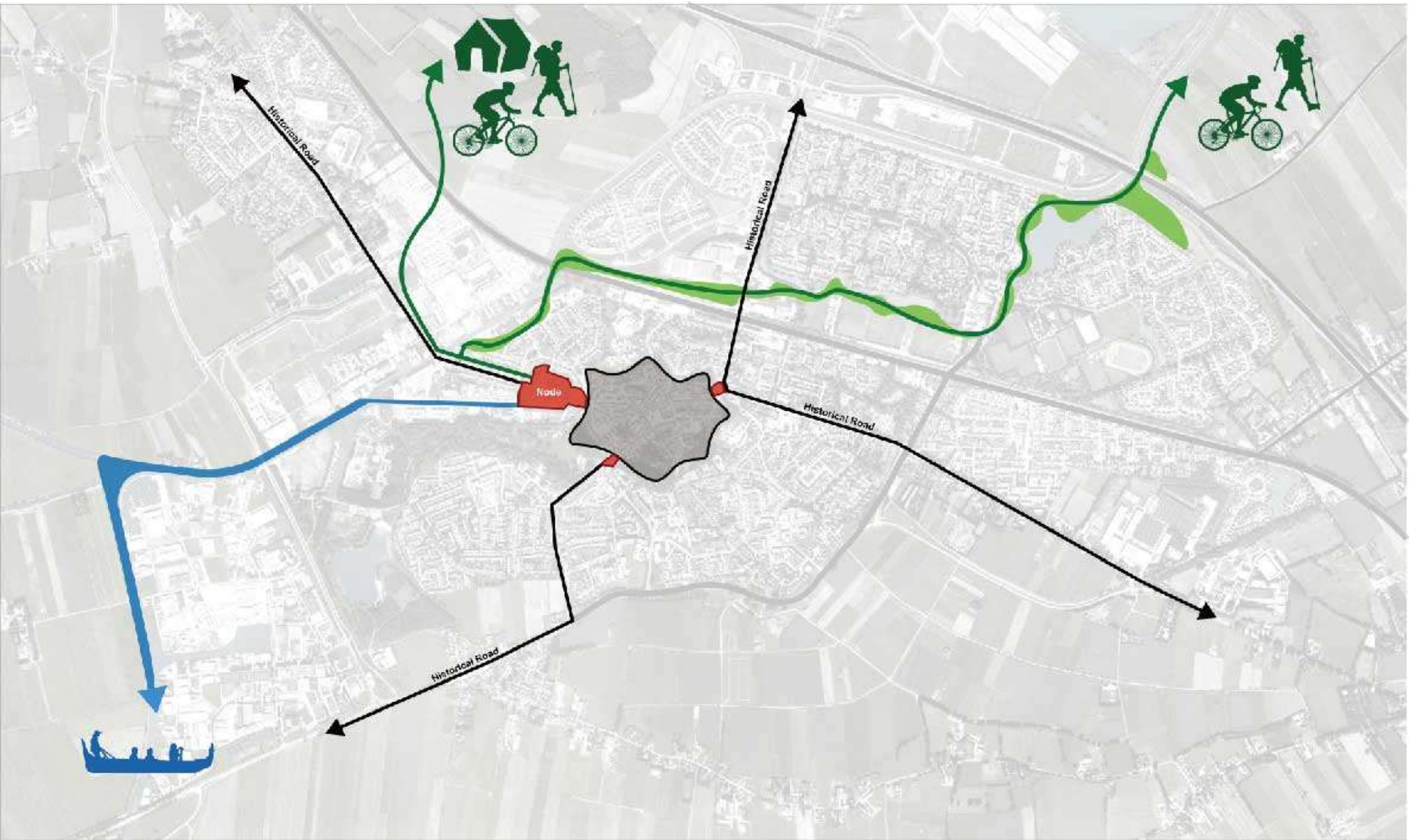




Nature Dreamland

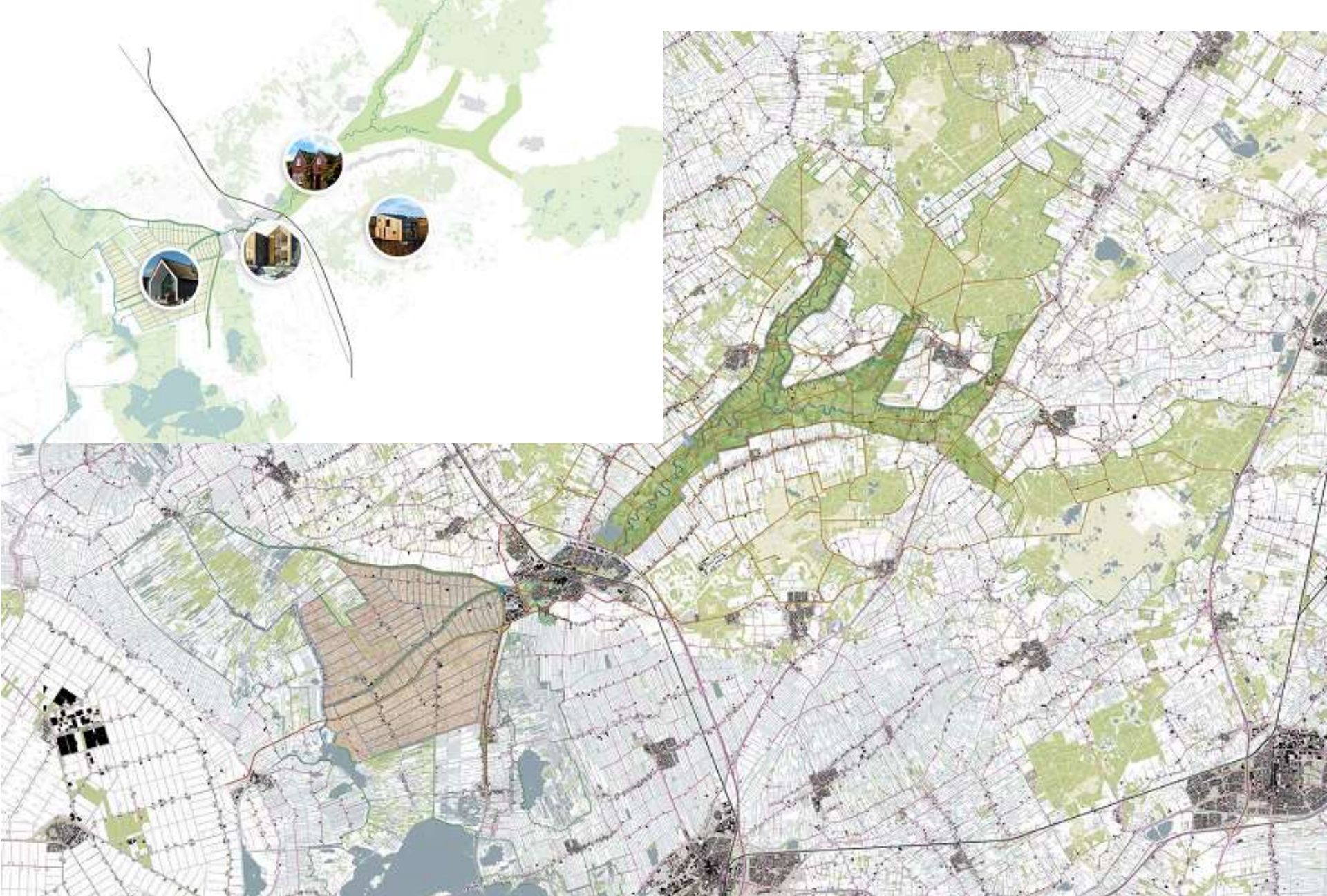












Site-specific eco-homes

Biggest importer consumer of the reed produced in the project area will be Steenwijk as it will use the reed as one of the main building materials. Riet can be processed in walls and serve a great, sustainable insulator.

Besides the financial benefits of this area. The area will also contribute to the area als natural habitat (wetland) and it will also have a lot of recreational value, as this sublime world of reed can serve as a giant maze that is waiting to be explored.



Concept of the wet, reed area

v

PRODUCING LOCAL BUILDING MATERIALS



HARVEST

PROCESSING

USED FOR ECOHOMES

Industrial reed production to build ecohomes

Regional design

Turfhouses in the valley

Illustration caption



DESIGN PRINCIPLES

PROGRAM



ROUTING & GATEWAYS



EVENT SPACE



ECO RESORT



PRODUCTION

TYOLOGIES



TURFHOUSE



REED HOUSE



ECO NEIGHBORHOOD



WOODEN HOUSE

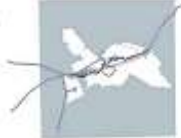
WATER



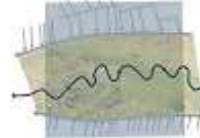
REMEANDERING



REWETTING FOR REED



CREATING CONNECTION



SEPARATE SYSTEMS

ECOLOGY



BIG CORRIDOR



NEW WETLANDS

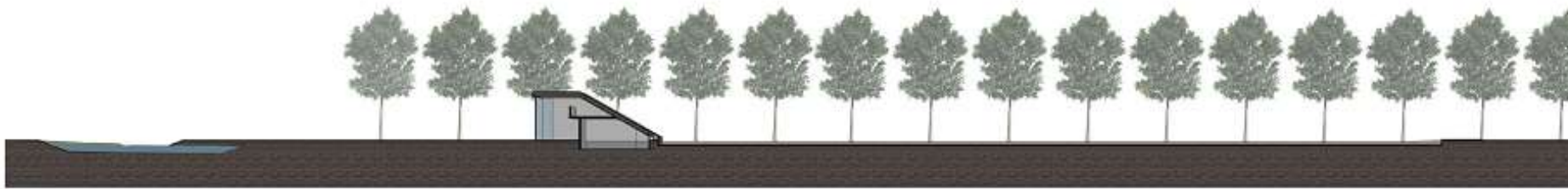


CREATING PEAT MARSHLAND



REFORESTATION

2
3
4
5



8

EMMA

WOODEN FUR HOUSE

PEAT BARRIERS

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