

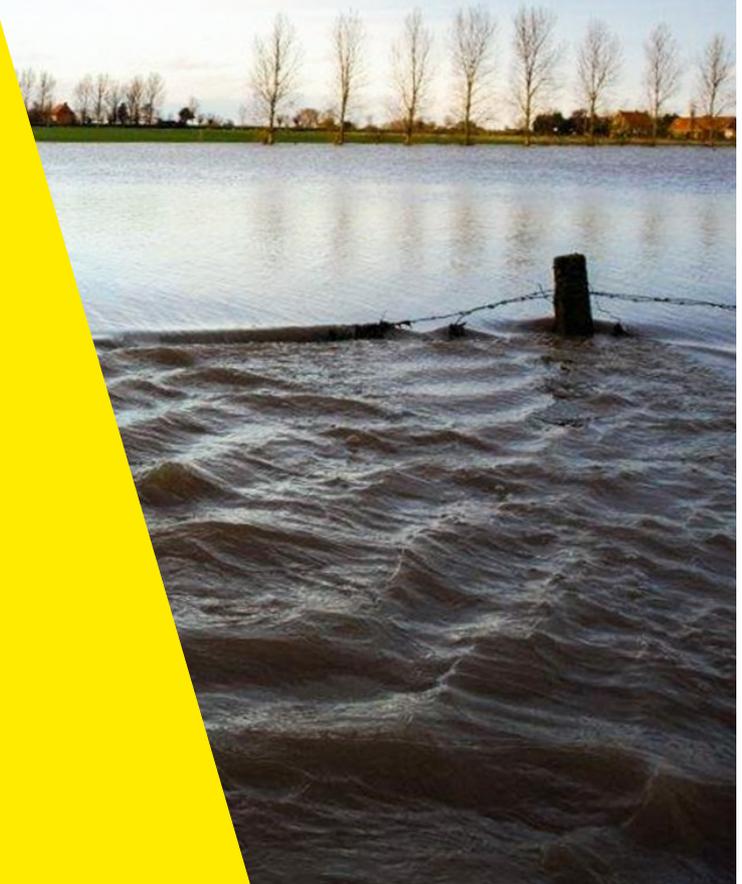


Vlaamse  
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# Water- Land- Scape

Paul Van der Sluys  
VLM, Flanders region  
Seminar on combating peri-urban  
climate change  
Brno, June 27<sup>th</sup> 2018

**WATER+LAND+SCHAP**



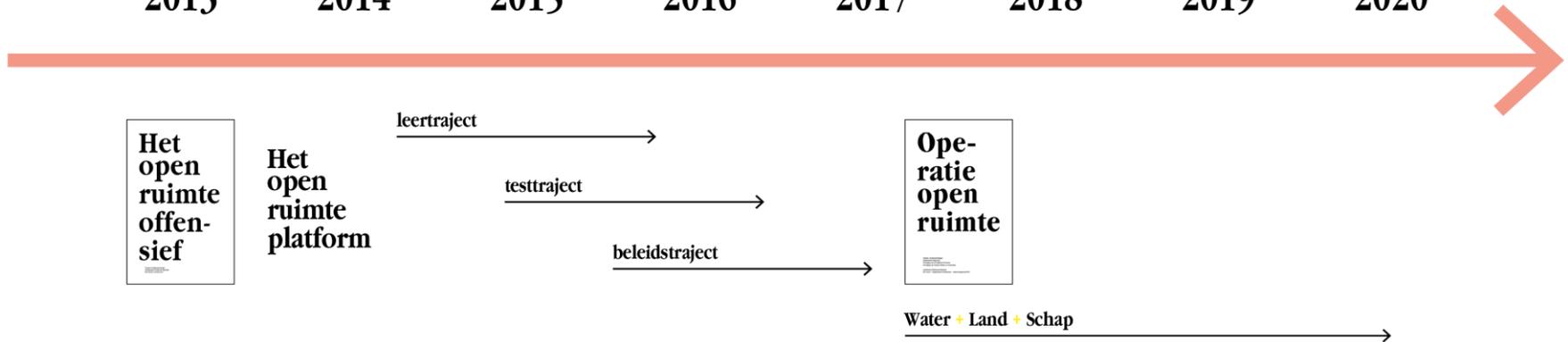
# Flemish Land Agency (VLM)

- ▶ Mission statement: “investments in the quality of (peri-urban) open spaces”
- ▶ Who are we?
  - Flemish governmental agency
  - Minister for Environment, Nature and Agriculture
  - 7 departments (incl. 2 regional offices)
- ▶ Core activities
  - Improving water quality (nutrient issues by agriculture)
  - Supporting a sustainable agriculture with measures for landscape, nature and environment
  - Land development and land banking, to create solutions for large-scale (peri-urban) open space challenges (e.g. integrated water management)
  - Rural development and policy (CAP)

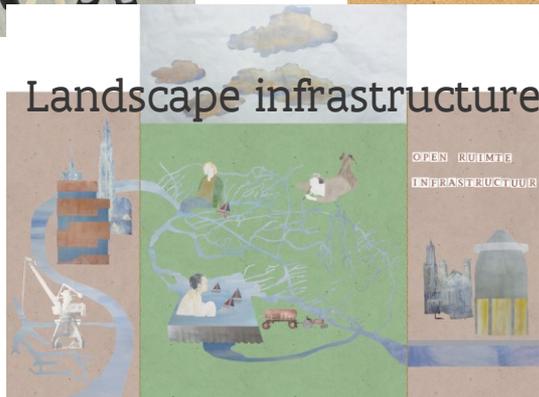
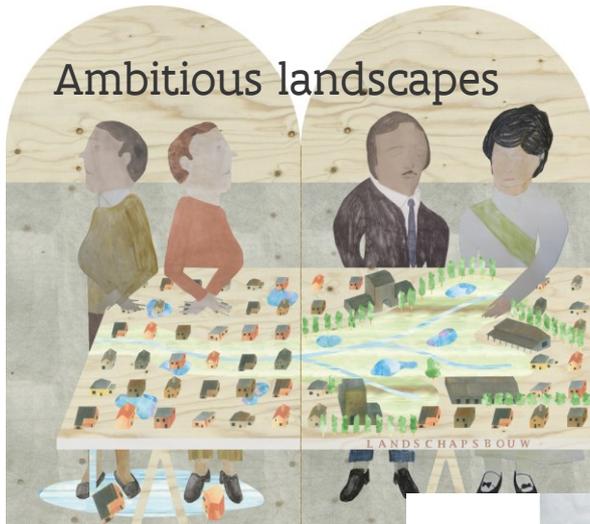
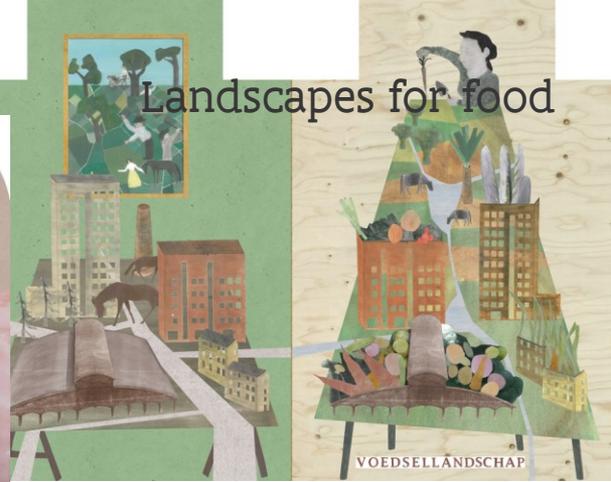
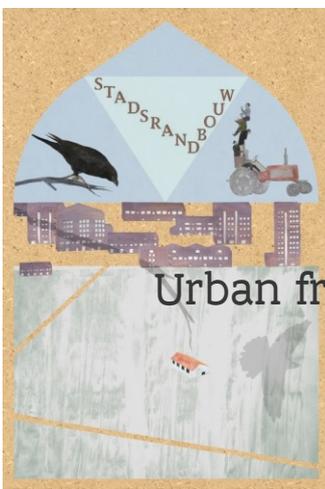
# Water-Land-Scape: a new approach



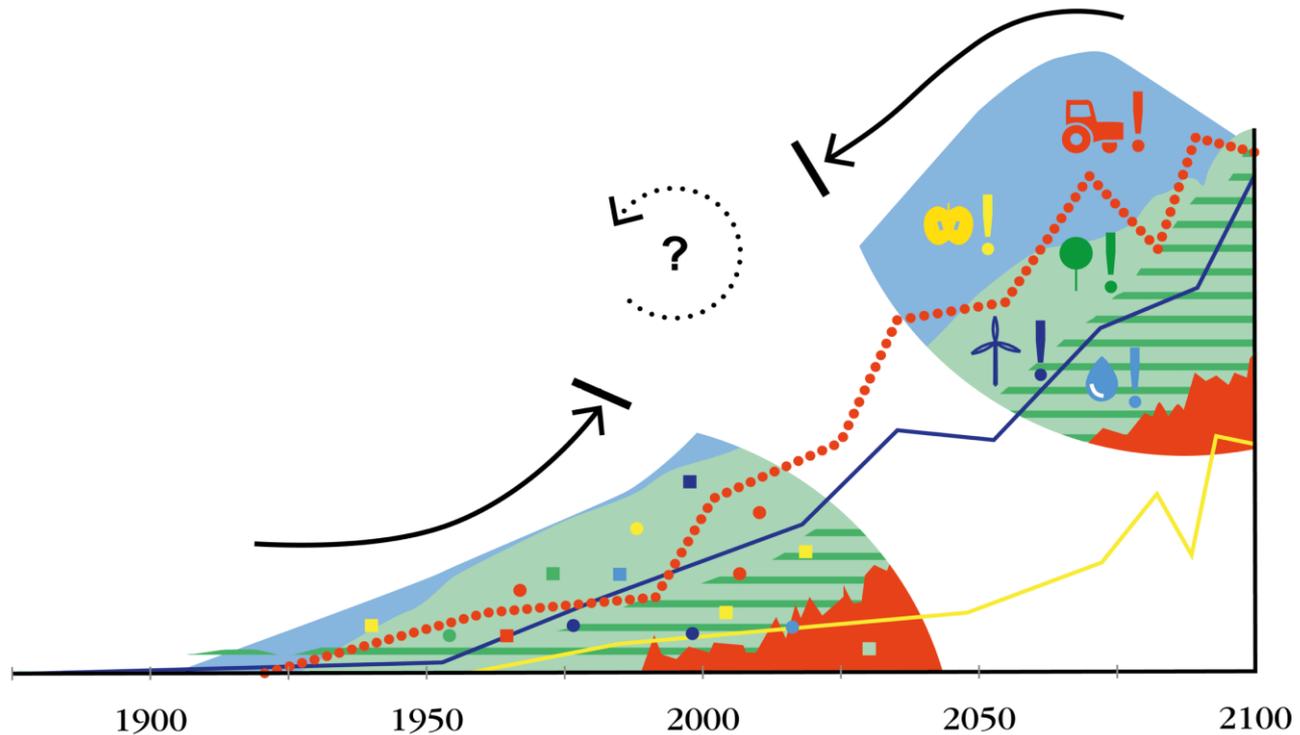
2013      2014      2015      2016      2017      2018      2019      2020



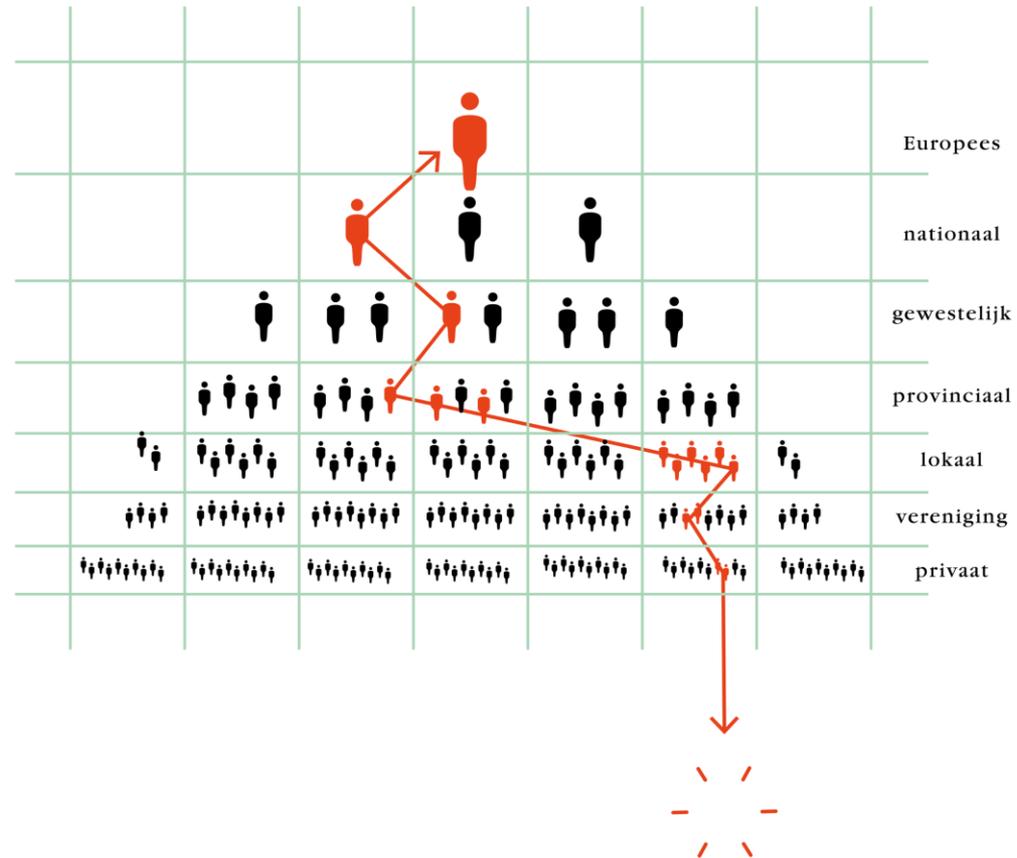
The idea: 6 new approaches for future open space management



# There is a gap between goals and results in the field!



# Co-operation is the way to go ...



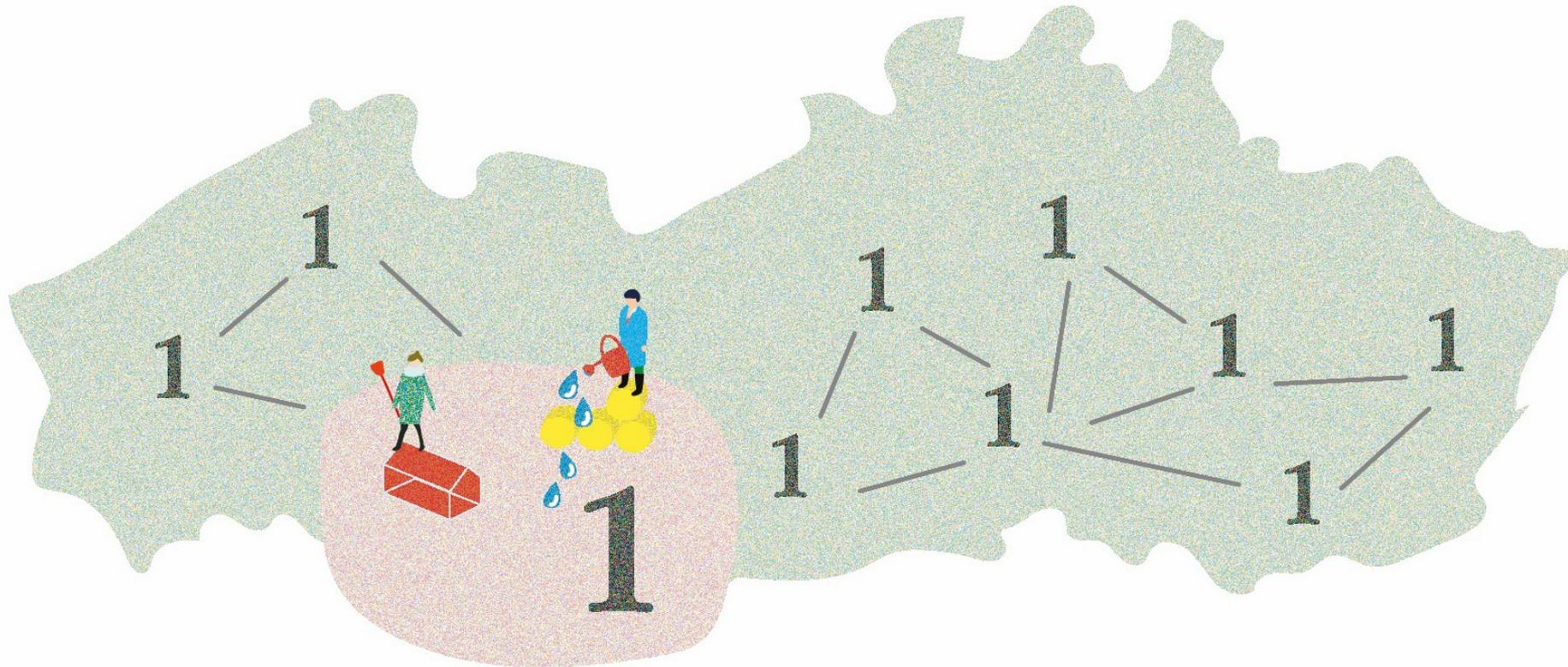
# Recent floods and droughts show the urgency!



# So, we brought together a Flemish team for the program



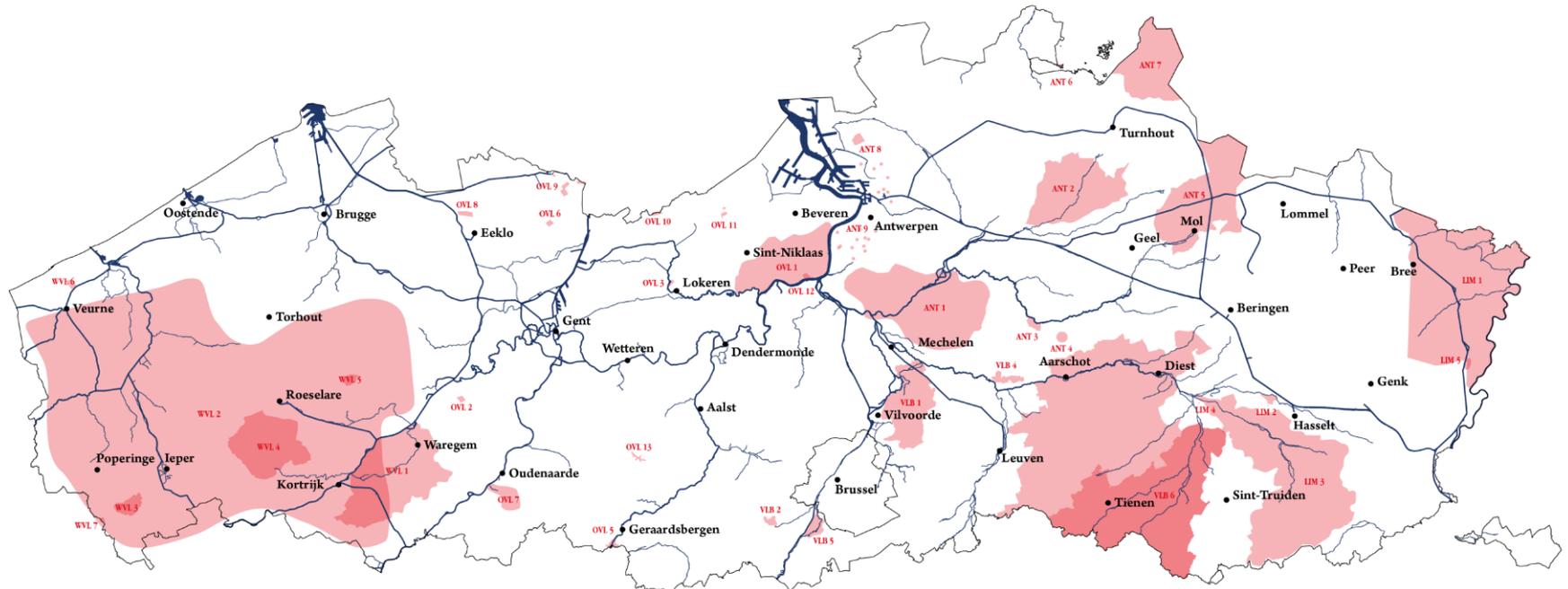
**This team will support actors in the field with knowledge, instruments, measures and actions**



# Our minister did agree to fund the program of Water+Land+Scape



# Our call for proposals gave us 40 initiatives related to water issues!



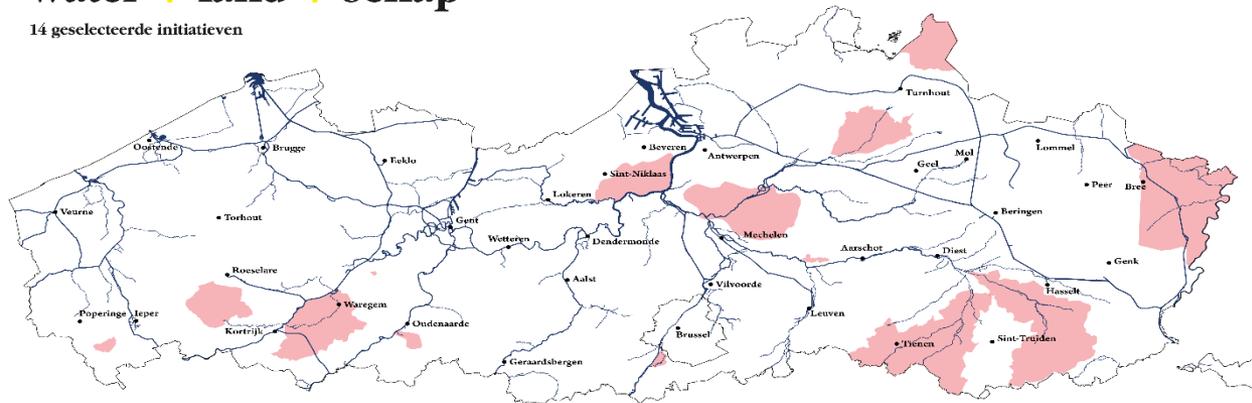
West-Vlaanderen  
WVL 1: Gaverbeekvisie-Harelbeke-Anzegem - Intercommunale Leiedal  
WVL 2: Binnenvaart op de Scheldt - Nieuwpoort

Vlaams-Brabant  
VLB 1: Floordambos-Barenbos-Steenokkerzeel - gemeente Steenokkerzeel  
VLB 2: Maatregelen voor een veilig waterkwaliteitsniveau in de Maas - gemeente Sint-Baafsbrug

# The team selected 14 proposals for the program and 8 to learn

## water + land + schap

14 geselecteerde initiatieven



# Local partners, farmers will join the arena to look for solutions



# Local partners and program partners work together

- ▶ 4 days of reflection:
  - Day 1: explanation of the program
  - Day 2: models for solutions and involvement
  - Day 3: measures and instruments
  - Day 4: synthesis
  
- ▶ Report with measures and solutions for a Flemish approach in 14 pilot areas in Flanders

# Solutions for water management in rural areas in Flanders

- ▶ 14 pilot areas
- ▶ Test of different approaches for water management together with farmers
- ▶ Themes:
  - how to provide water in intensively used rural areas during dry periods?
  - How to solve problems with water pollution?
  - How to use the landscape as a smart solution for water captation in the prevention of floods and drought?
  - ...
- ▶ !new solutions! Recent study and approaches to be integrated in local situations: European co-operations e.g. WaterProtect project

# Our plans

- ▶ Different solutions will be tested in 14 pilot areas
- ▶ Local knowledge and goals of government come together in 1 plan
- ▶ Best solutions to distribute in Flanders (and Europe)
- ▶ Learning points in other countries are welcome! (already study visit to the Netherlands in July)
- ▶ Funds are foreseen for **initiatives** with **local farmers** within the 3 main goals: **water, agriculture and landscape**.
- ▶ Quick-wins
- ▶ Long term projects: 10 years
- ▶ Program = learning platform for government and local actors
- ▶ Website: [www.waterlandschap.be](http://www.waterlandschap.be)



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# Program Water- Land- Scape

Climate robust agri-water management

*Valley of the “Herk- and Mombeek”, blue green  
infrastructure in the peri-urban area of Zuid-Limburg*

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# Coalition

## Partners of the program

### Province of Limburg

Unit of Water management

Unit of Agriculture and Rural Development

Provincial Nature Centre



### Provincial research centers

PC Fruit

PIBO Campus Tongeren



### Watering De Herk



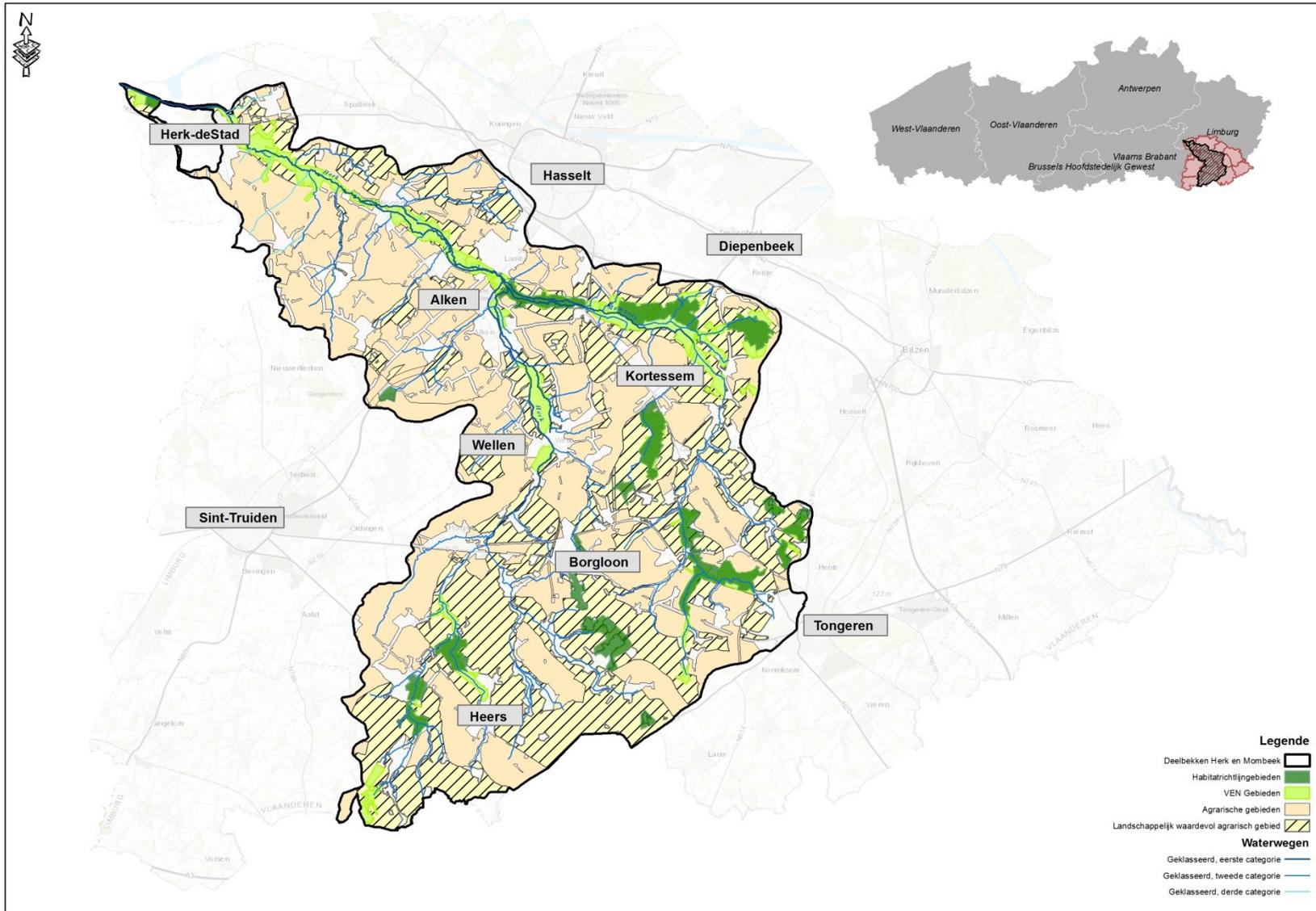
### 10 “Herk and Mombeek” municipalities’

Netwerk of individual farmers and fruit growers, landowners, local citizens, ...

## Partners from the local actors “Herk en Mombeek”



# Map of the area



# Mission statement

## ▶ **Integrated water management in focus area**

**Substantial contributions to achieve ' good condition ' 2021 and 2027**

## ▶ **Brook structure recovery, open laying**

- Upscaling of the public domain and natural areas
- Also for individuals and farmers
- 'Bottom up' support

## ▶ **Source aiming erosion actions**

- Hedges, woodsides, trees, woodland, hay parcels
- Bufferstrips on arable parcels aside waterbodies
- Cultivation adjustment and alternative soil processing
- Improve soil relateability
- Pilots set up around Leader 'bask the carbon' and 'cultivation adjustment-alternative editing'

## ▶ **Alternative buffering 'plant protection products' on parcels next to the waterbodies in fruit sector**

- Hedges and woodsides
- Extensive management of grass strips
- Pilots set up around Leader 'More consciously dealing with fertilization and plant protection products'

## ▶ **Problems of drought, water availability for farmers in drought period**

- Enabling existing buffer basins
- Knowledge from leader projects 'drainage – Plus, and Irrigation-wise'
- Concrete research focuses case/pilot project

**Win-win for agriculture, nature, landscape and local residents**

{BEEK.BOER.BODEM}

ER+LAND+SCHAP

An aerial photograph showing a rural landscape. A central feature is a winding brook valley, characterized by lush green grass and trees, which meanders through a patchwork of agricultural fields. The fields are in various stages of growth or harvest, showing shades of green, brown, and tan. The overall scene depicts a harmonious integration of water, land, and agriculture.

# Water+Land+Schap Barbierbeek connects !

**Working together for a unique brookvalley**

# Coalition

*Who are you and whom do you represent?  
Which partners are already on board?  
Which partners do you want to join?*



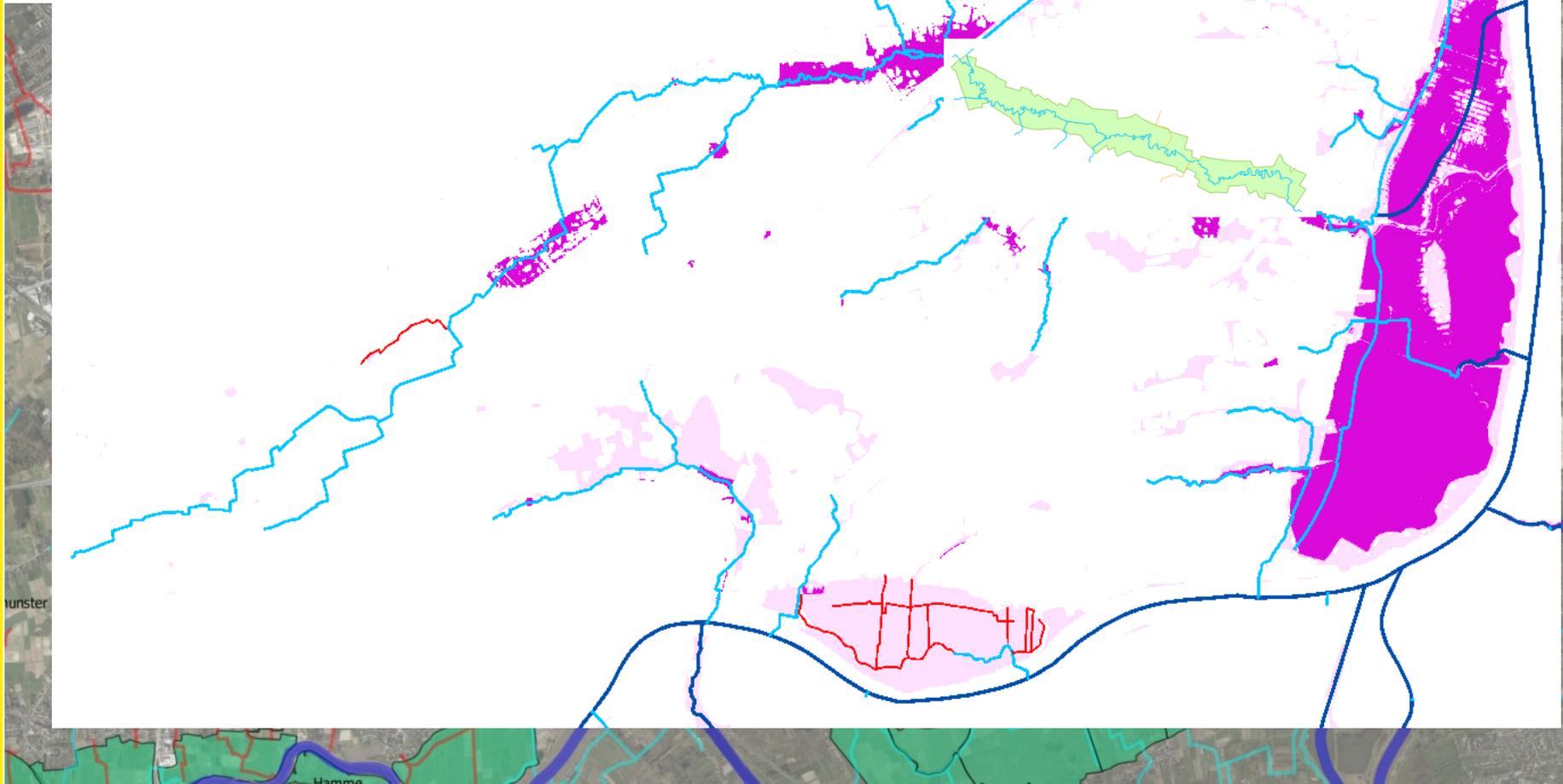
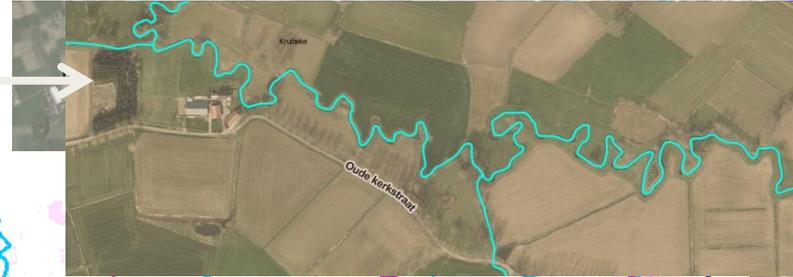
Unit for integrated water management  
Unit for protection of the environment  
Unit for agriculture  
Provincial centre for environmental research



# Map of the area

■ stroomgebied Barbierbeek  
■ sigmagebieden  
waterlopen

Afstroomgebied: 3400 ha  
Lengte in vogelvlucht: 15 km  
Lengte in afstand: 22 km



# State of the art

*Projectarea: valley of the "Barbierbeek"  
Problems and challenges*



## → Water

- Waterquality (pesticides and nutrients, local water waste infiltrations)
- Flooding of agricultural fields and erosion

## → Agriculture

- Accessibility of agricultural fields/meanders
- Lower rate of crops through flooding
- River bank erosion and field erosion

## → Landscape

- Protection of valuable landscape typical for the area
- Connecting natural areas





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# Program Water- Land- Scape

Climate robust agri-water management

Robust waterbodies for a good drinking  
water quality in the region of the  
“Westhoek”



# Coalition

## Who are you and whom do you represent?

### ▶ Which partners are already on board?

- Province of West-Vlaanderen (Units for integrated water management and waterbodies)
- City of Ieper
- Municipality of Heuvelland
- Regional Landscape Westhoek
- Drinking water company “De Watergroep”
- Inagro provincial centre for agricultural research
- Farmers union “Boerenbond”

### ▶ Which other partners do you want to involve?

Farmers union “ABS”

Horizon2020 project “WaterProtect”

# State of art

## Description of the area and problem issues?

Valley of the “Kleine Kemmelbeek → Dikkebusvijver”

### ► Problem issues:

→ **Water:** Silting up of “Dikkebusvijver” (pond), poor waterquality

- Capacity for drinking water production decreases
- Buffer capacity by intensive rainfall insufficient
- Blue algae bloom by high P inflow
- To much plan protection products in the brooks

→ **Agriculture:** high erosion issues

- Hilly area sensitive for erosion
- Erosion of river banks
- Higher demand for irrigation water (crops and vegetables)

→ **Landscape:** low hydraulic robustness

- Downgraded “bocage”landscape in the valley
- Only fragmented hedges and wood sides next to brooks

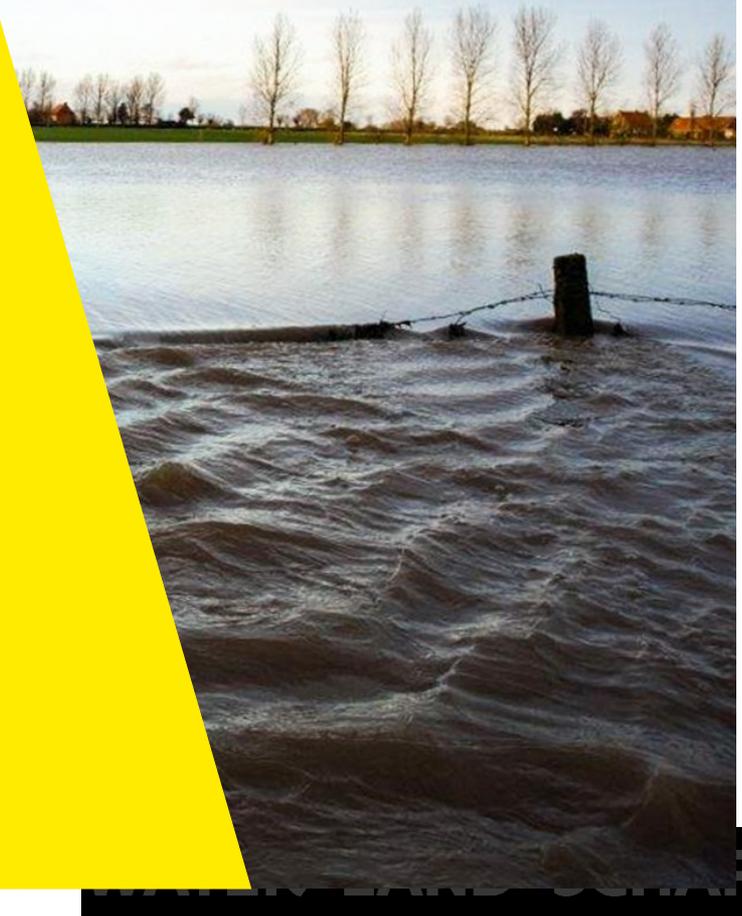


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# Water- Land- Scape

Next steps

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# Land development plans for the program of Water-land-scape

- A Program team of experts will guide the coalitions of the 14 proposals to develop a local plan:
  - Guidance on content
  - Facilitation with help of a design advisor
- Timing: end of October 2018
- Approval end of 2018

# Guidance of the coalition

- ▶ Bundled knowledge of the program team on water system, climate change, landscape structure, nature,... in the area:
- ▶ 4 Guidance Days Organization AWB:
  - ▶ 23/5/2018: Introduction programme water-land-shelf
  - ▶ 13/6/2018: Working with ambient quality
  - ▶ 5/9/2018: Introduction to Country equipment
  - ▶ 3/10/2018: Synthesis
- ▶ Supporting the process by an external facilitator
- ▶ Input VLM-Expertise (manure bank, BO, land and land management and through region managers/project leaders)
- ▶ Input knowledge ILVO and INBO environmental quality and ecosystem services

# Thank you



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is open ruimte



[www.vlm.be](http://www.vlm.be)