



COASTAL

Collaborative Land-Sea
Integration Platform

COLLABORATIVE LAND-SEA INTEGRATION PLATFORM

DAY 2 – Conference

Systemic views on coastal-rural development



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 773782.





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Multi-Actor Lab 1 – Belgian Coastal Zone

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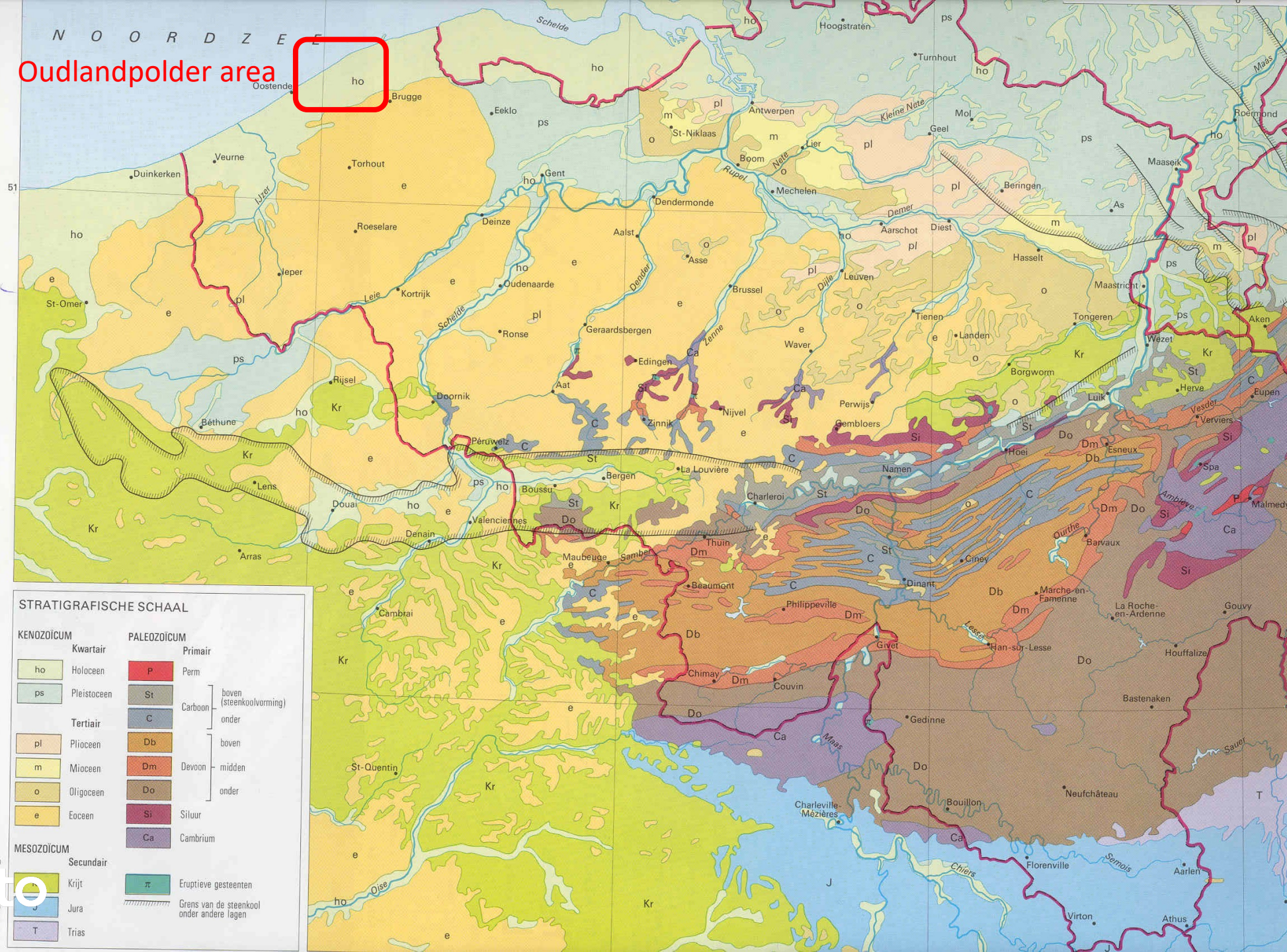


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N O O R D Z E E

Oudlandpolder area



STRATIGRAFISCHE SCHAAL

KENOZOÏCUM		PALEOZOÏCUM	
Kwartair	Primair		
ho	Holoceen	P	Perm
ps	Pleistoceen	St	Carbon
		C	
		Db	Devoon
pl	Pliocene	Dm	
m	Mioceen	Do	Siluur
o	Oligoceen	Si	
e	Eoceen	Ca	Cambrium
MESOZOÏCUM			
Secundair		π	Eruptieve gesteenten
J	Jura		Grens van de steenkool onder andere lagen
T	Trias		

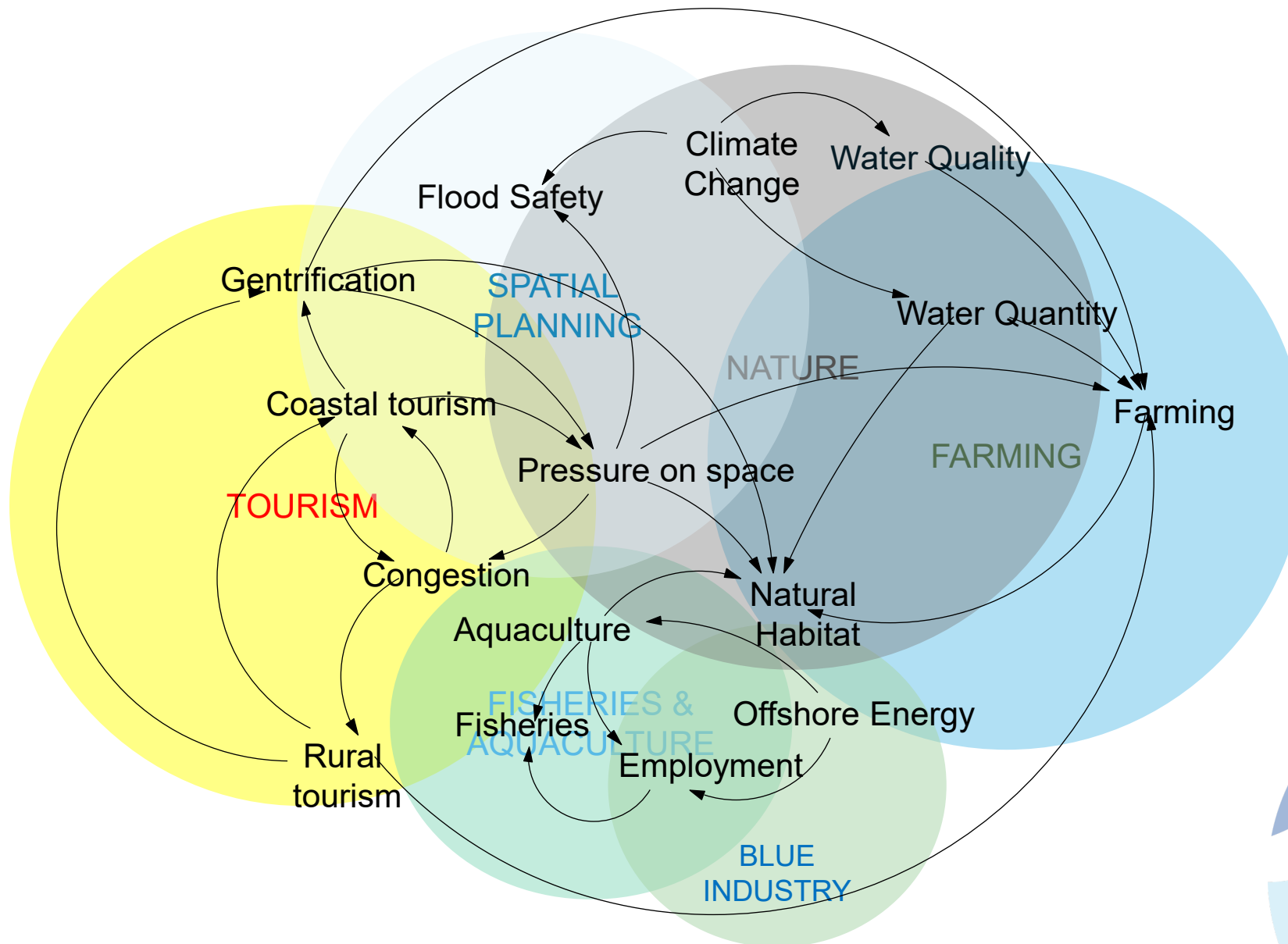


Land-sea interface Middelkerke (BE)



Belgian Coastal Zone – Multiple Use of Space

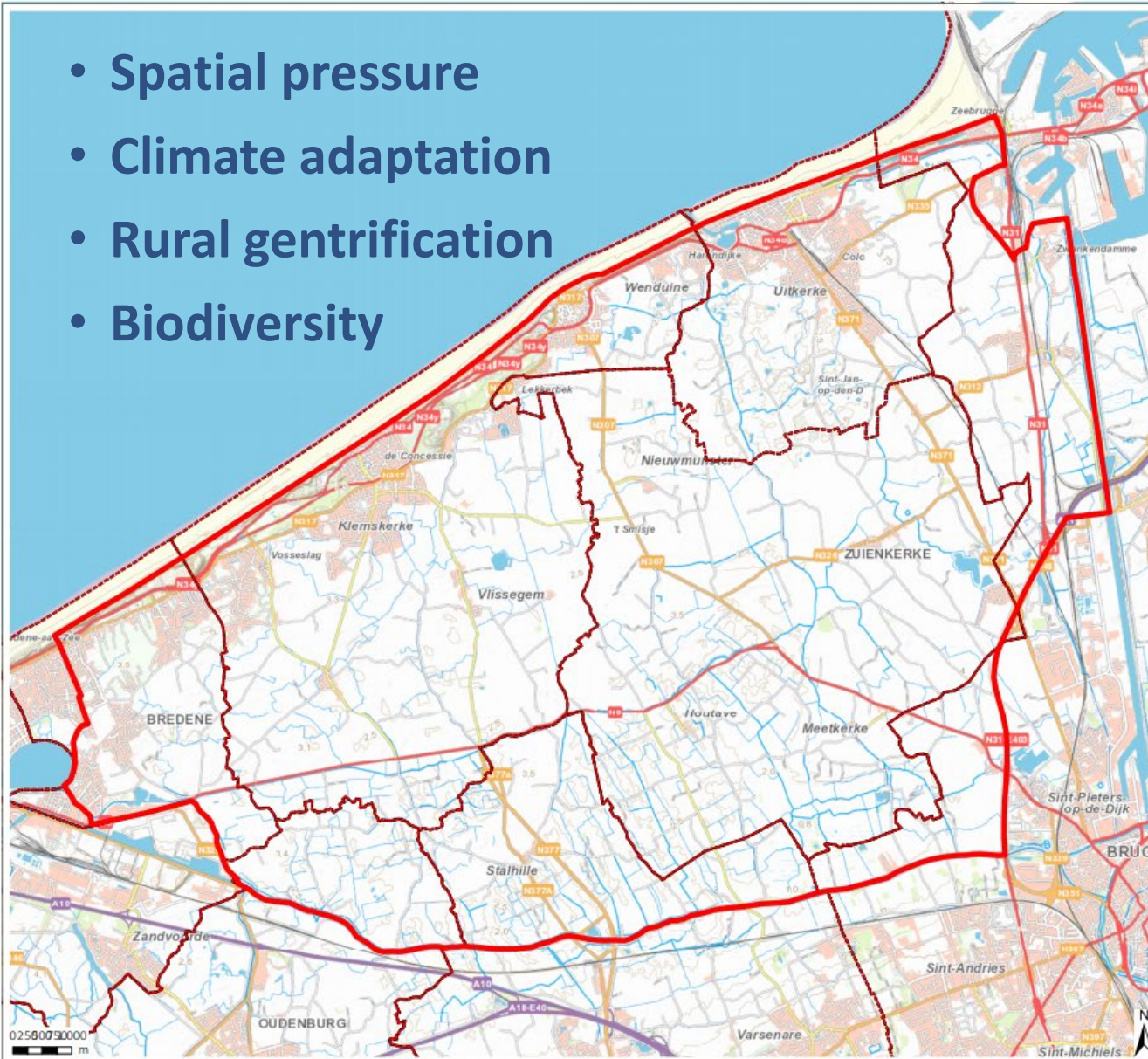




COASTAL-RURAL SCOPE & CHALLENGES

MAL 01

- Spatial pressure
- Climate adaptation
- Rural gentrification
- Biodiversity



LANDINRICHTING
Oudlandpolder

Onderzoek Opportuniteit
en Haalbaarheid

Perimeter-Basis

Legende

Perimeter_Ruw

bron:
- bronvermelding GIS-laag 1
- bronvermelding GIS-laag 2

aangemaakt op: <datum>



Vlaamse
overheid



- **Implementation of Framework Agreement**
 - **Climate robust water management**
 - **Delineation agriculture and nature**
 - Ensure development
 - Realize environmental preservation objectives
- **Improve coastal environmental quality and living quality of polder hamlets**
- **Maintain and valorize polder heritage**
- **Align with larger infrastructure development**

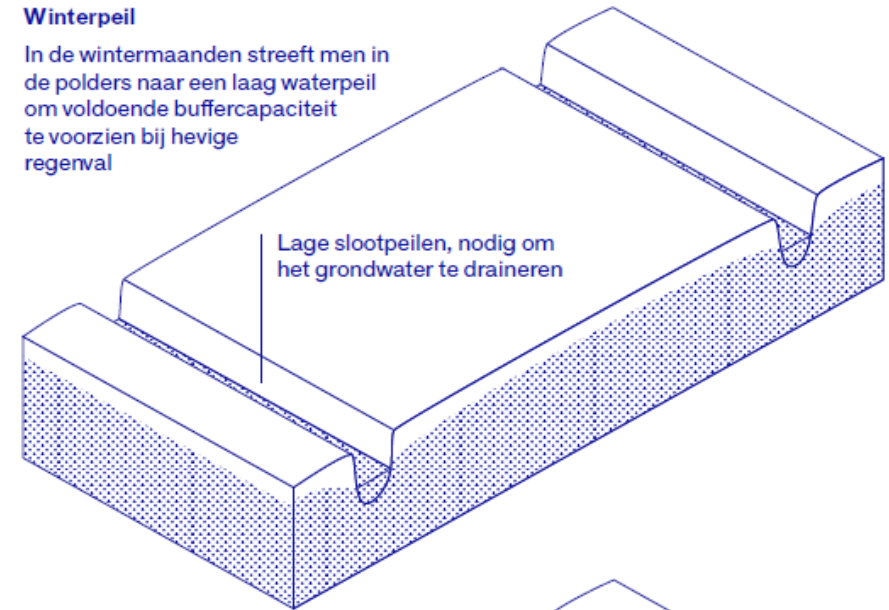


Water management

- “*Peilbeheer*” = water level management
 - Winter: low level = draining for flood prevention
 - Spring: lowest level = draining for heavy machines on land
 - Summer: high level = ditches feed water to the land
 - Gravitational discharge to sea
 - Intake from canals and domestic treatment plants

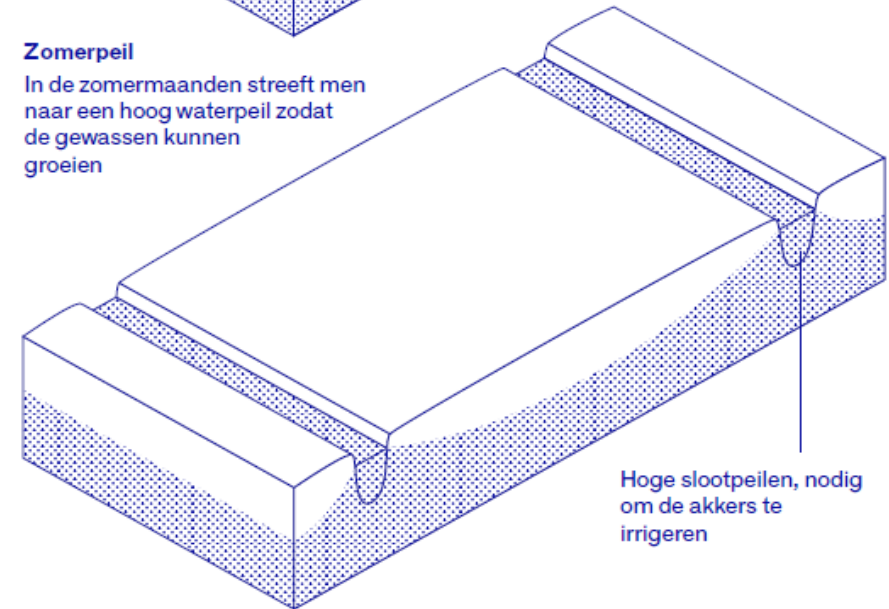
Winterpeil

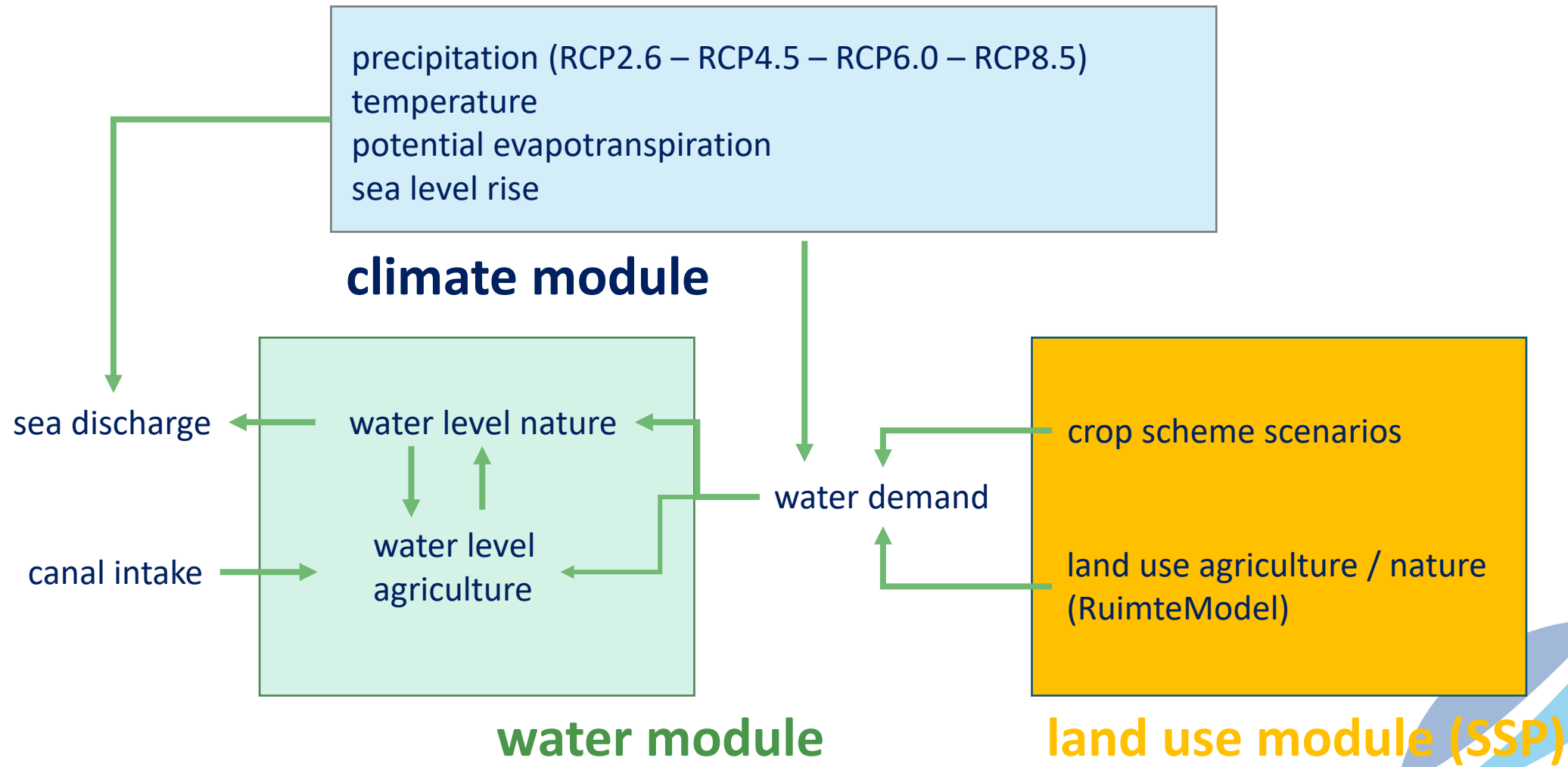
In de wintermaanden streeft men in de polders naar een laag waterpeil om voldoende buffercapaciteit te voorzien bij hevige regenval



Zomerpeil

In de zomermaanden streeft men naar een hoog waterpeil zodat de gewassen kunnen groeien





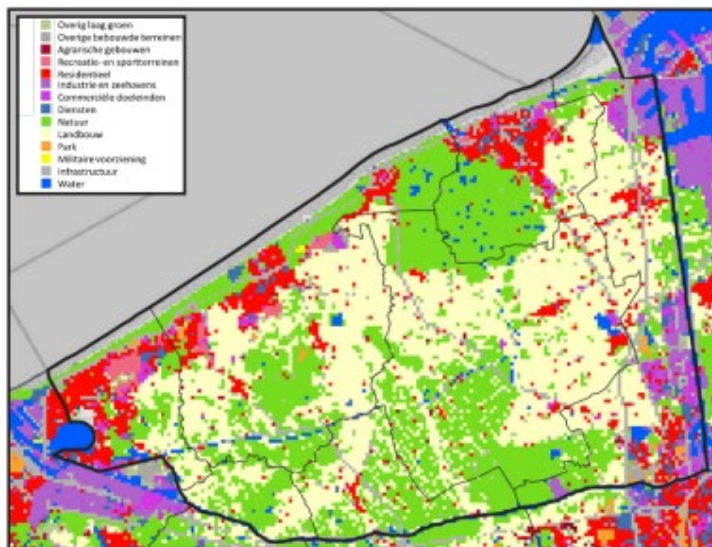


Figure 6. Spatial use in the Oudland Polder in 2050 in accordance with the Flanders Spatial Model in the 'anti-urban sprawl' land use scenario.

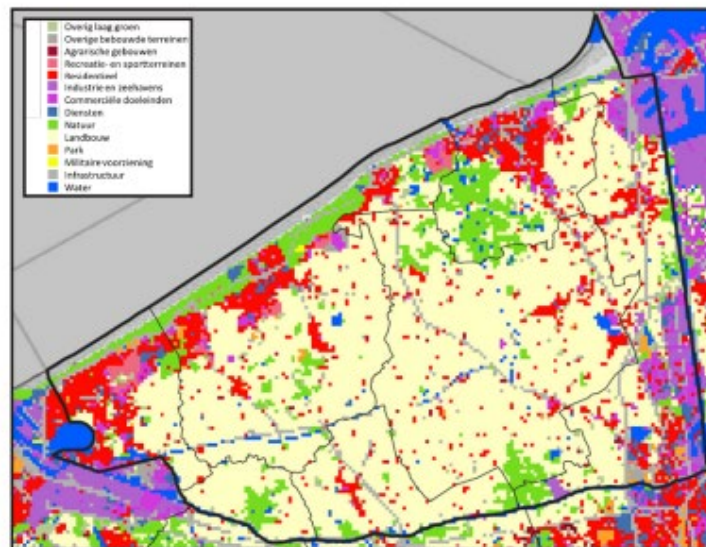


Figure 7. Spatial use in the Oudland Polder in 2050 in accordance with the Flanders Spatial Model in the 'business as usual' land use scenario.

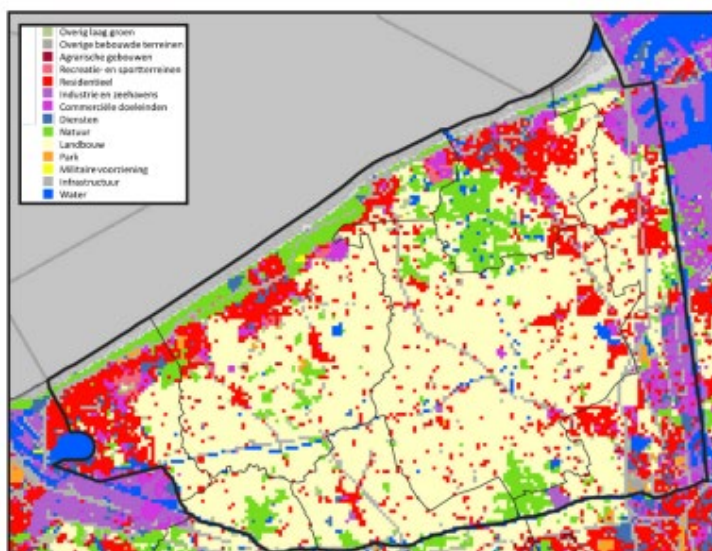


Figure 8. Spatial use in the Oudland Polder in 2050 in accordance with the Flanders Spatial Model in the 'growth as usual' land use scenario.

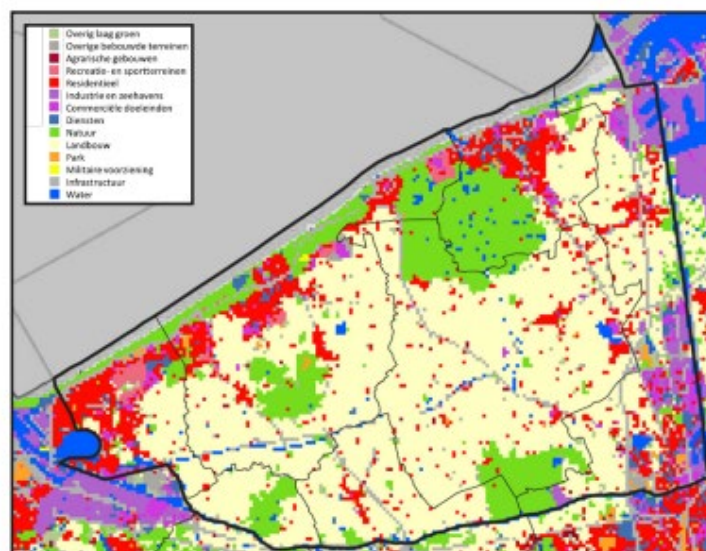
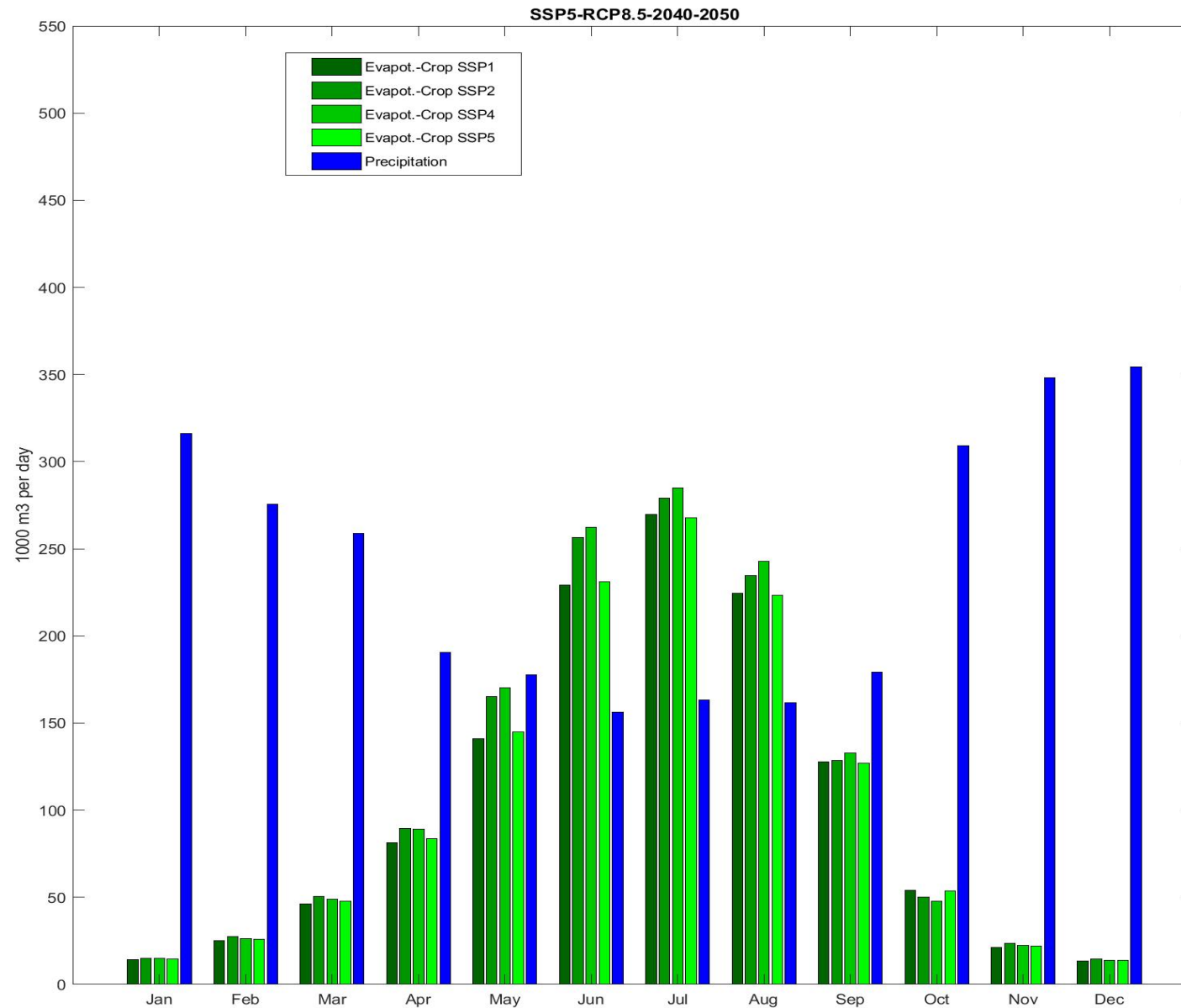


Figure 9. Spatial use in the Oudland Polder in 2050 in accordance with the Flanders Spatial Model in the 'Flanders Spatial Policy Plan' land use scenario.





D'Haese et al., 2022

1. Maximum focus on maintenance and restoration of high quality open space
 - Safeguard all remaining open spaces.
 - Infill development of existing centres
 - Make use of the strong and shared societal support for preserving the traditional polder landscape



2. Reserve space for water (buffering, drought)

- Provide sufficient space (in the soil) for retaining rainwater in the polder for a long time
- Take into account integrated water management to plan agriculture and nature areas



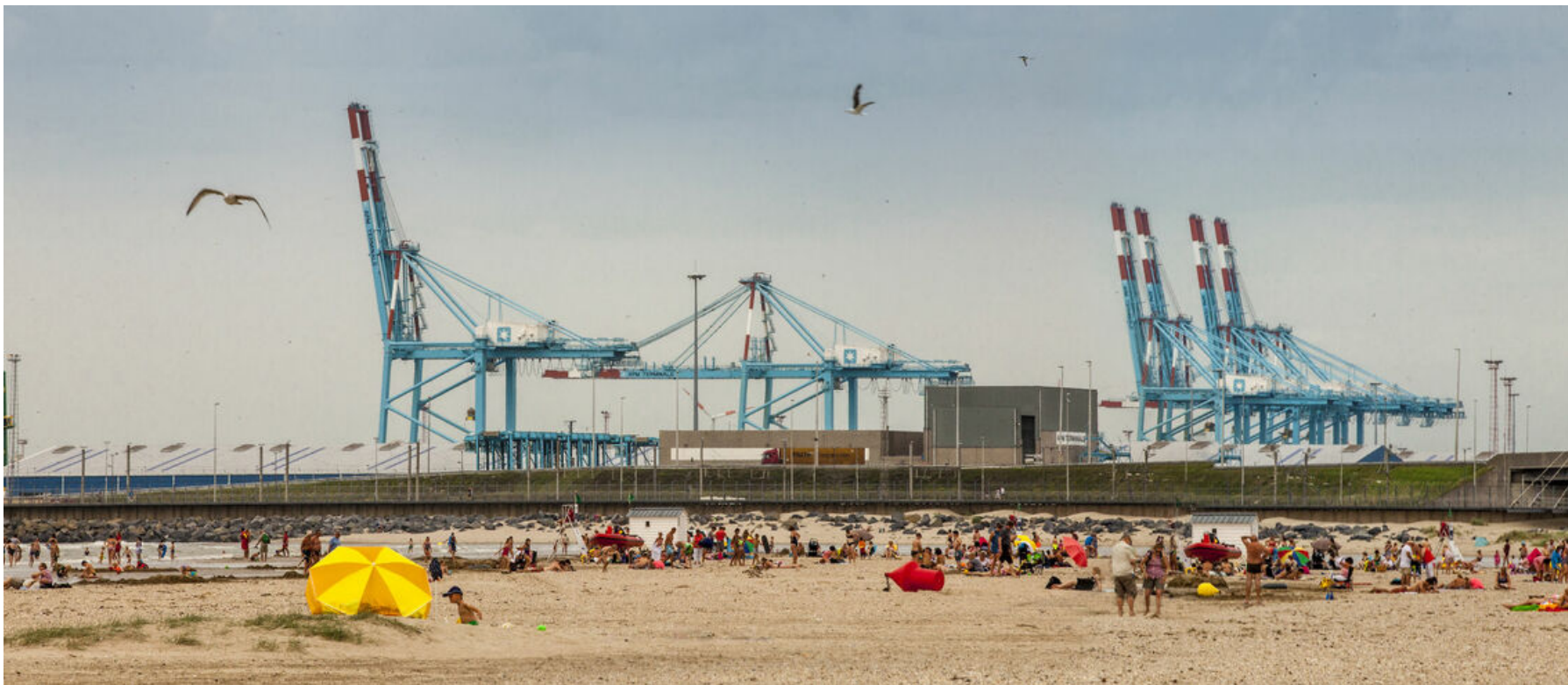
3. Reserve room for ecosystem recovery

- Plan nature and agriculture from core areas in an integrated manner
- Convert all bird and habitat guideline areas into natural areas
- Calculations of ecosystem services of different nature areas



4. Provide sufficient buffering for logistical/port activities to protect hamlets

- Solution for noise
- Buffer strips around villages





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