


# BETTER WETTER

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*Linking spatial adaptation  
to regional transitions*

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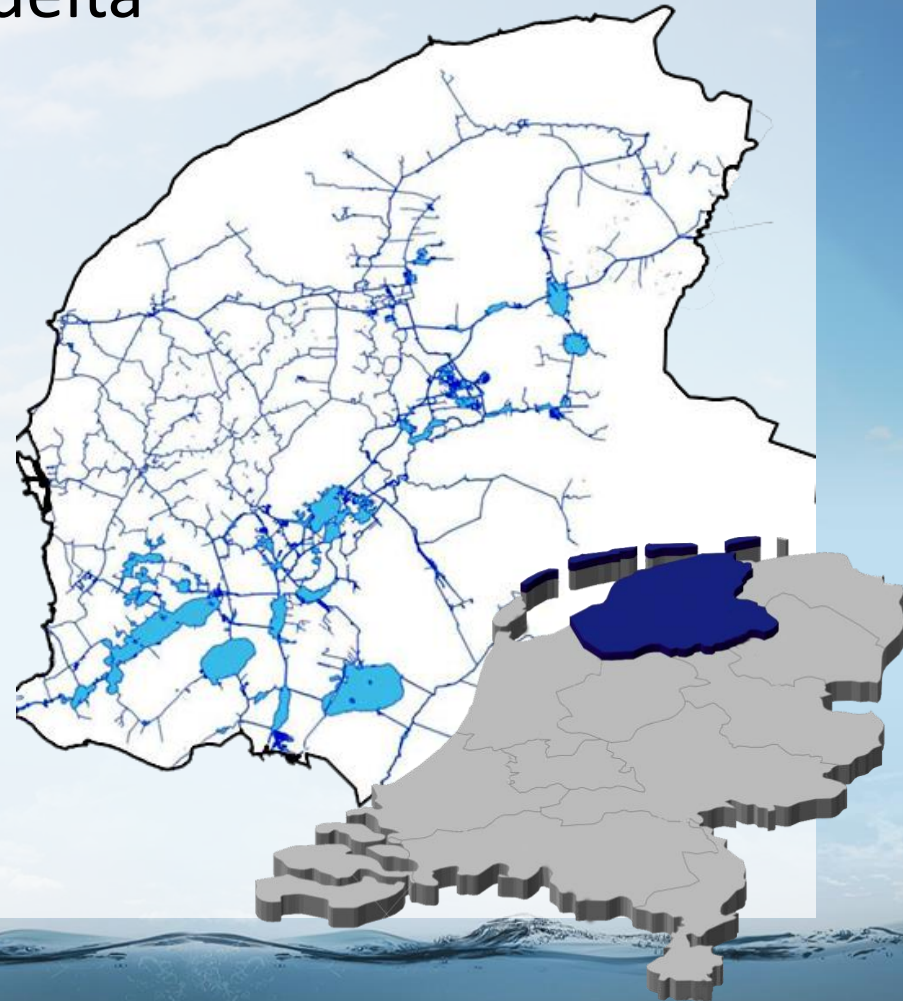
  
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# Introduction

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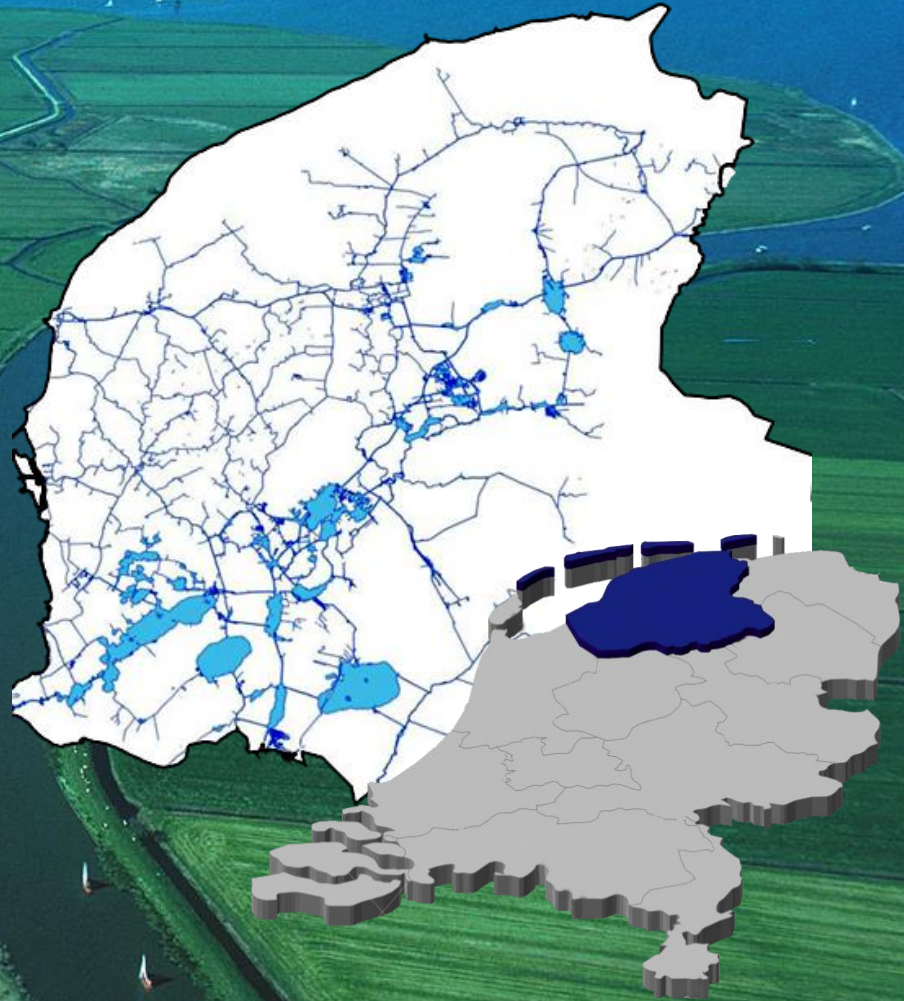
- Friesland: a low-lying delta
  - Open, flat, nutritious
  - Ecological hotspots
  - Optimal conditions for agricultural food production
  - (Traditional) water management tuned to agriculture





Lakes: high water level

Polders: low water level





# Former floodplain

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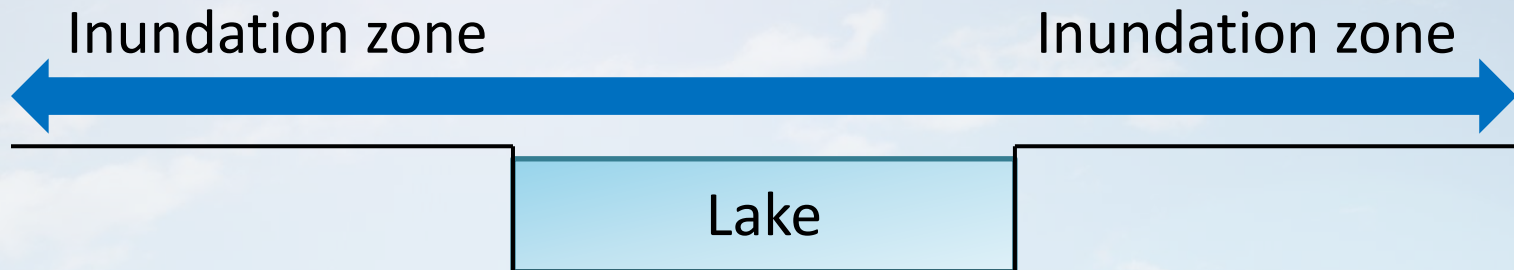


- Regular floodings during winter
  - Still ca. 100.000 ha inundated in 19<sup>th</sup> century
  - Floodings were common until the 1950's

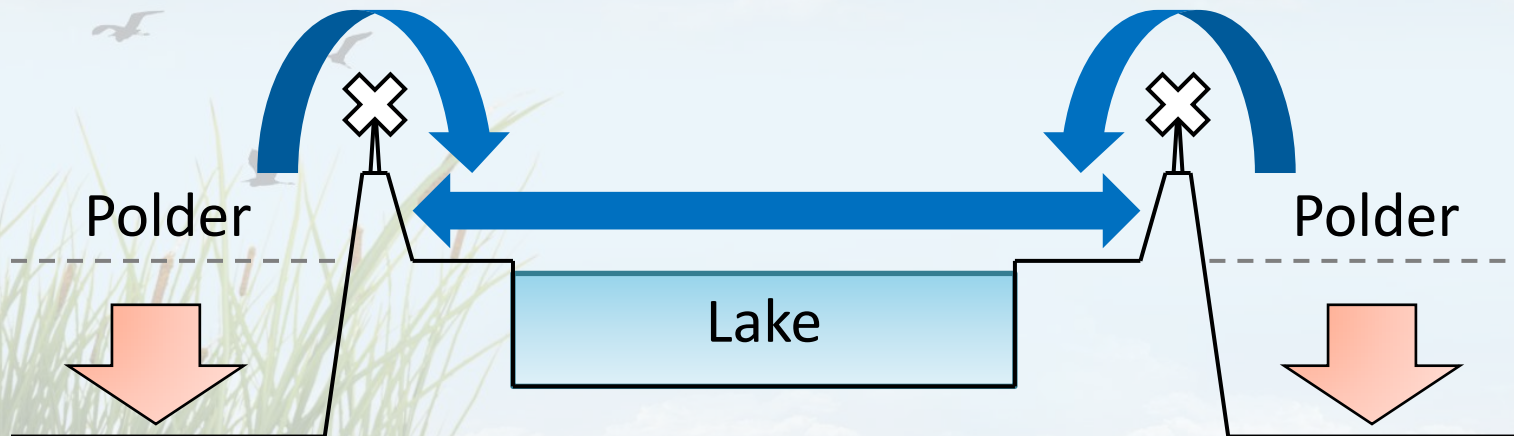


# Current management

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98% has been reclaimed and drained:

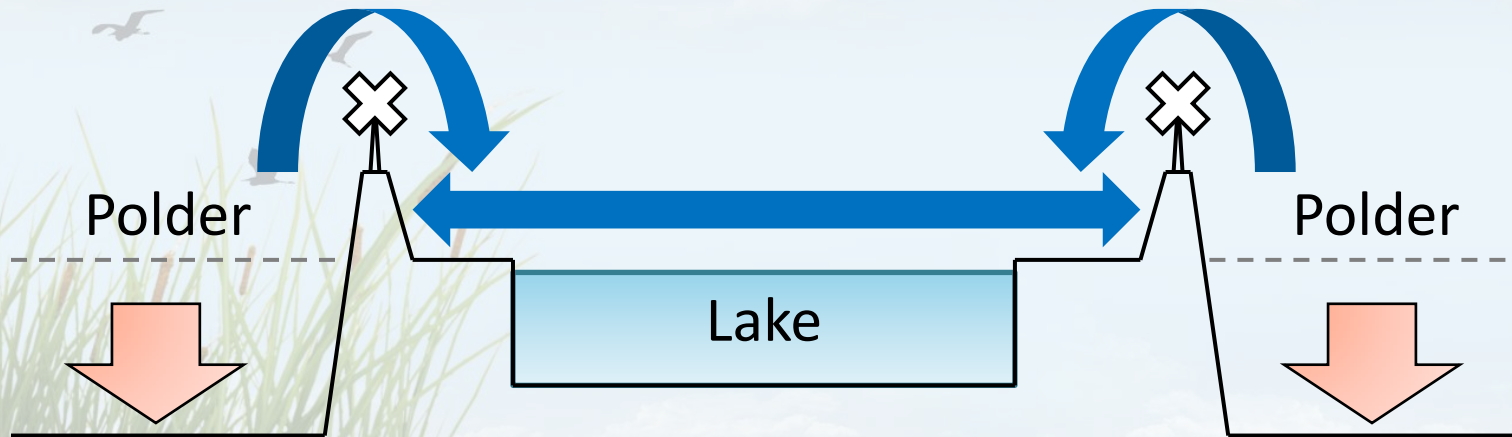


# Current restrictions

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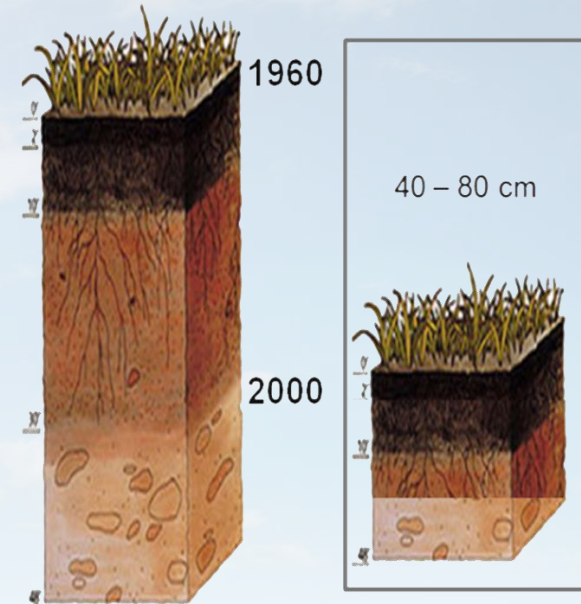
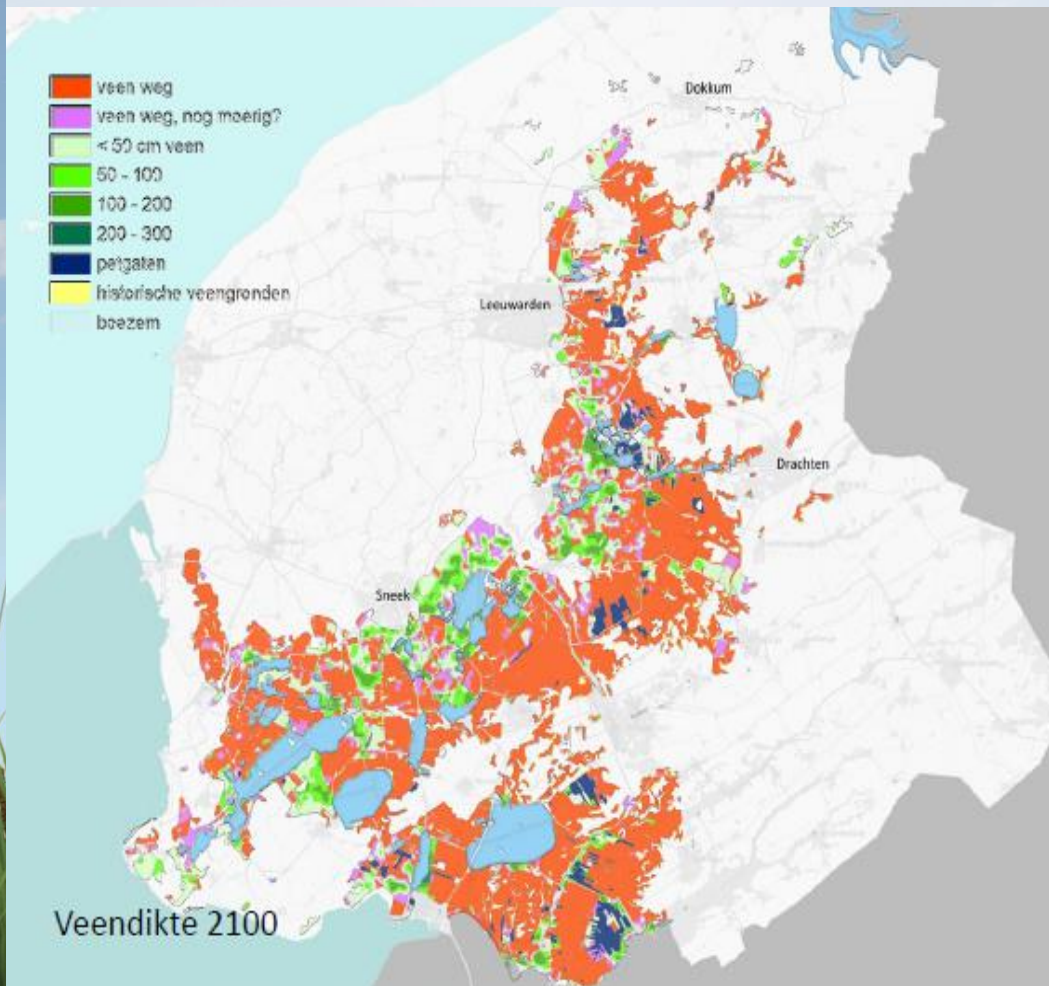
- Strong drainage results in
  1. Loss of storage capacity: problems during rainy periods
  2. Loss of retention capacity: problems during drought
  3. Strong and ongoing subsidence of peat soils
  4. Emission of greenhouse gases
  5. Loss of biodiversity / ecosystem services





# Current restrictions

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Derived from:



Kennis  
voor  
Klimaat

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# Towards climate proof!

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- In the long term, not all low-lying polders can hold their current function
- A paradigm shift is required

Isolated areas



Reconnection to the regional water system

- Flexible water management: water storage & retention

Drained polders



Waterlogged conditions

- Innovative ways of land- and water use with high water levels should be investigated



# Focus of Better Wetter



1. Explore, develop and show possibilities:

- *pilot studies with function combinations*

2. Link with regional transitions:

- *involvement of local stakeholders in an early stage*

- *actual products/business cases, no 'concepts'*

- *involvement of education*





# Cultivation of Cattail

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*March*



*April*



*June*



*August*



# Harvest, production, business cases





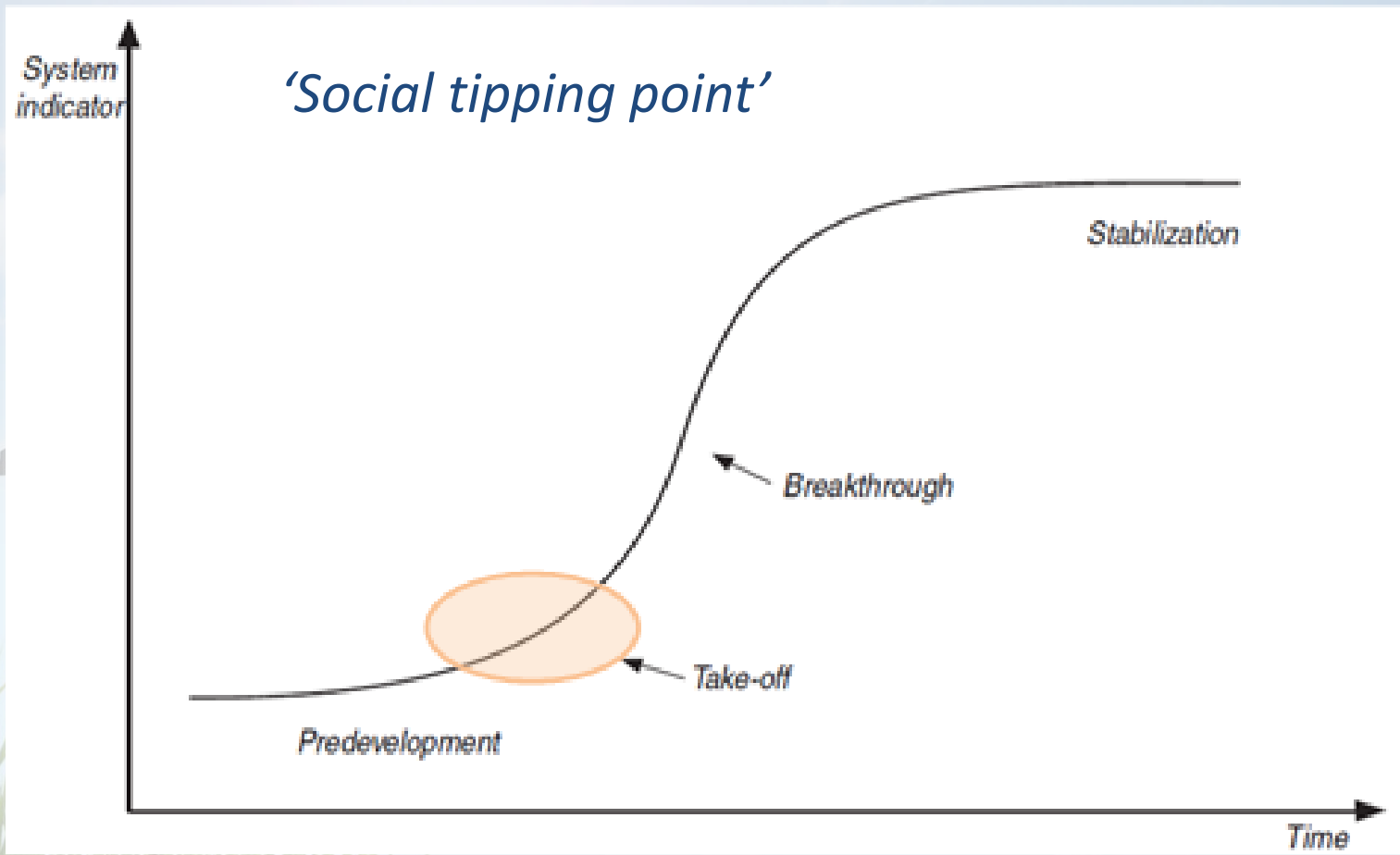
# Cultivation of *Sphagnum* spp.





# Regional transition

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# In conclusion

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- It is crucial that water level fluctuations are re-introduced by reconnecting polders to the regional water system. Function combinations including paludiculture form a great opportunity for triggering regional transition in Friesland.
- What we do to ‘trigger’ regional transition:
  - *Conducting pilotstudies in cultivation and production (no concepts! actual products/businesscases)*
  - *Involvement of education and local stakeholders from the start of the project (reaching fo a ‘social tipping point’)*



# Questions/discussion?

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