

Adaptation for nature in Dutch fen meadows; reflections from stakeholders on Green Blue

Veining

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Wageningen UR

Session: Competing Claims and Land Use in Deltas under Climate Change



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climate changes
spatial planning

Nature and Adaptation to Climate Change

■ Impacts

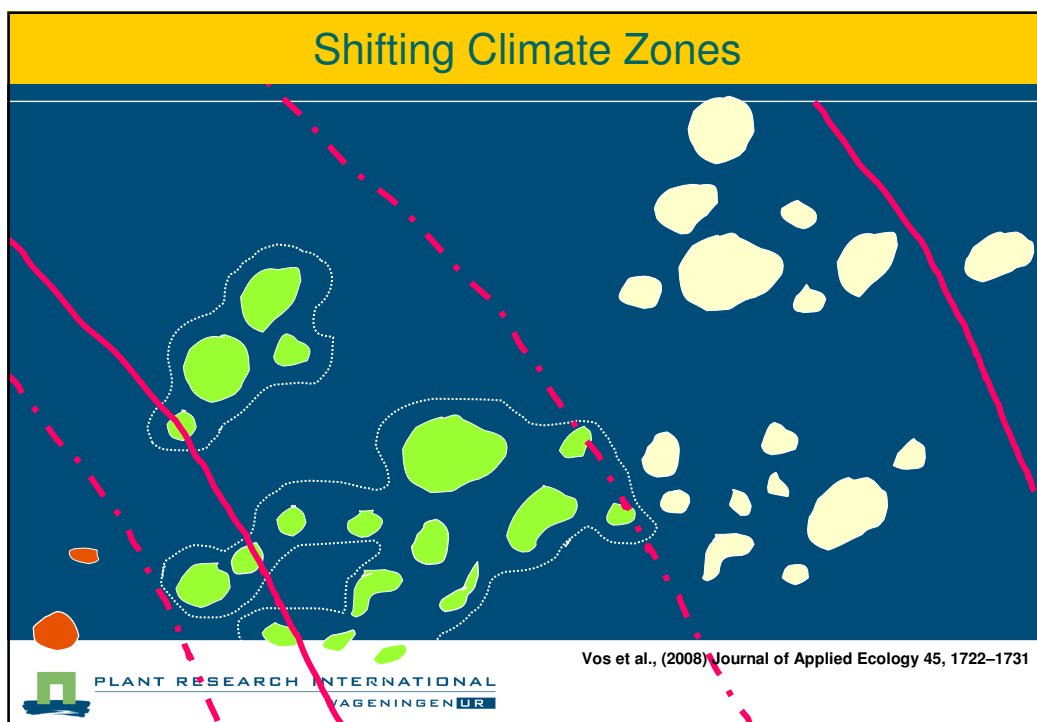
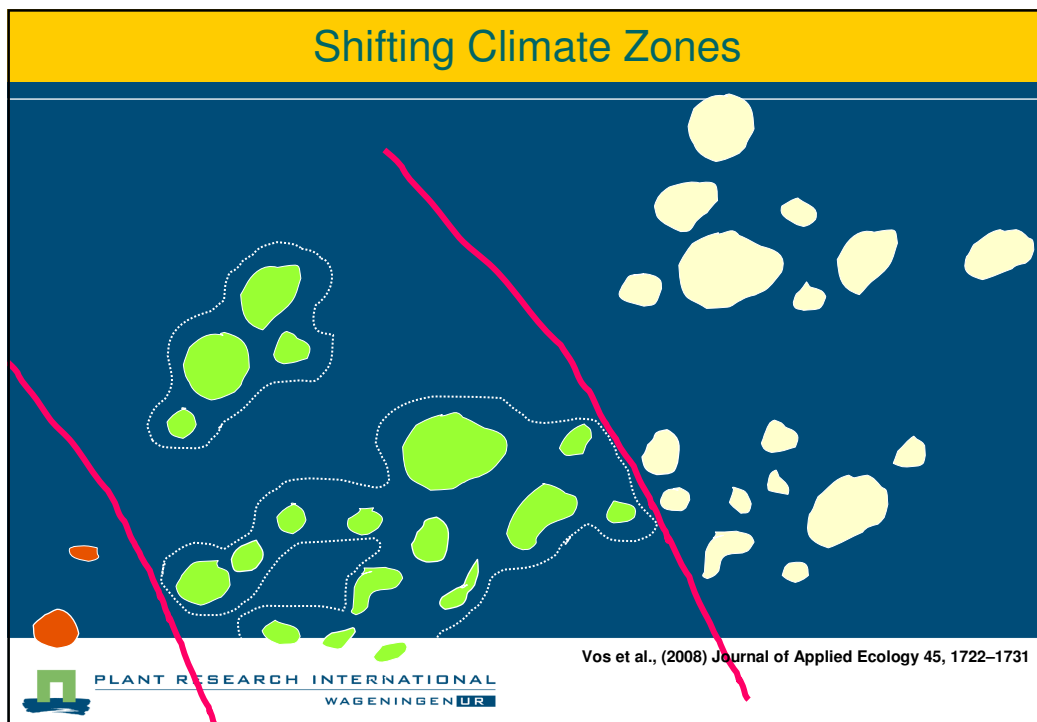
- Species extinction by shifting climate zones
- Species extinction by more extreme events

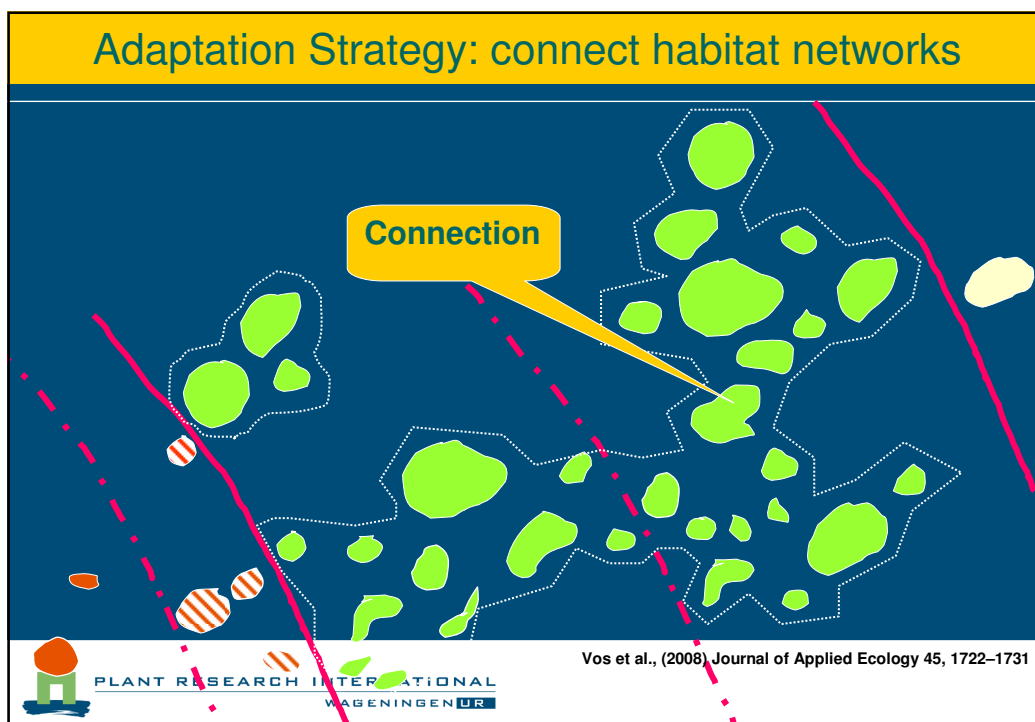
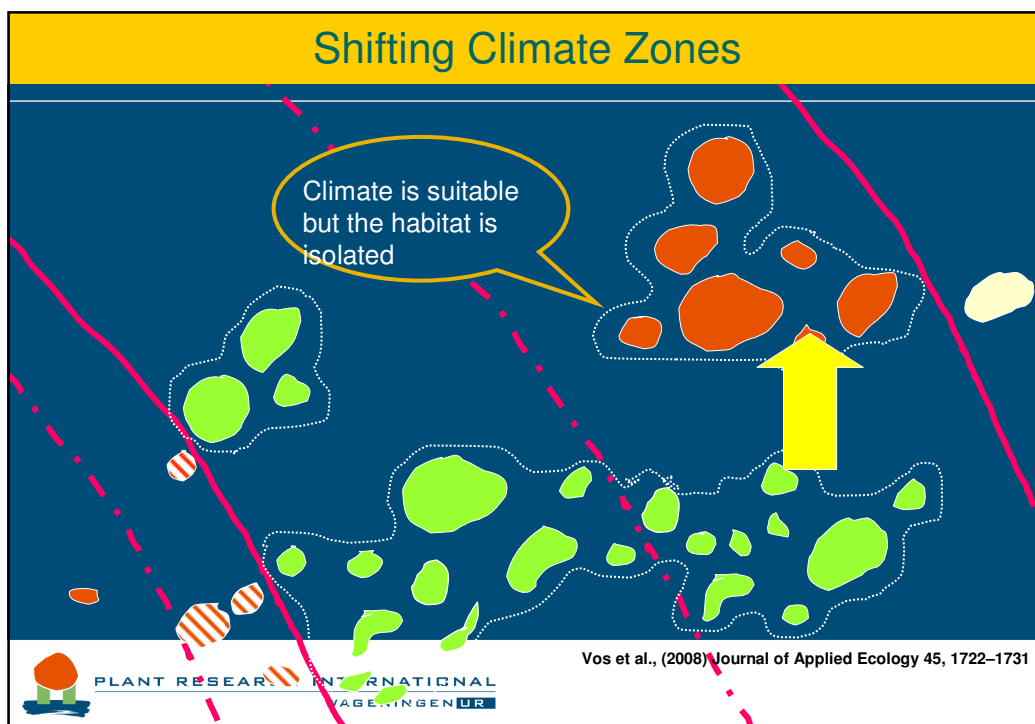
■ General adaptation strategy:

- Connect, improve and enlarge habitat



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Context: Climate Change and NEN

NEN is being developed since 1990...

and consists of monofunctional nature and agri-environmental schemes..

this network is increasingly important for species vulnerable to climate change..

but the development stagnates..



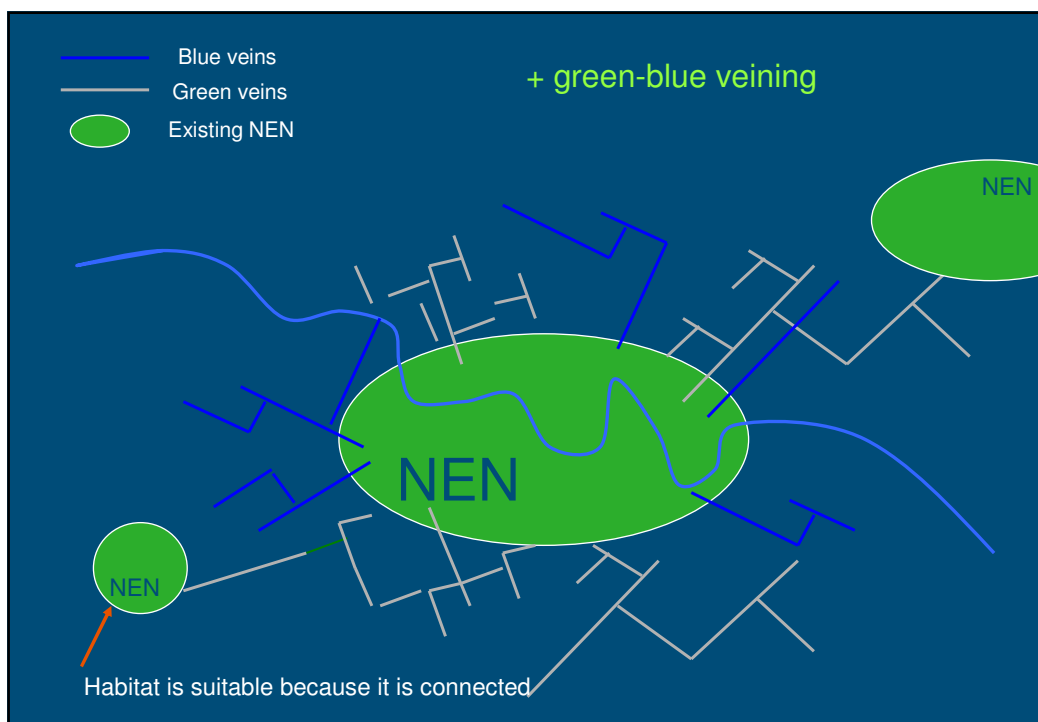
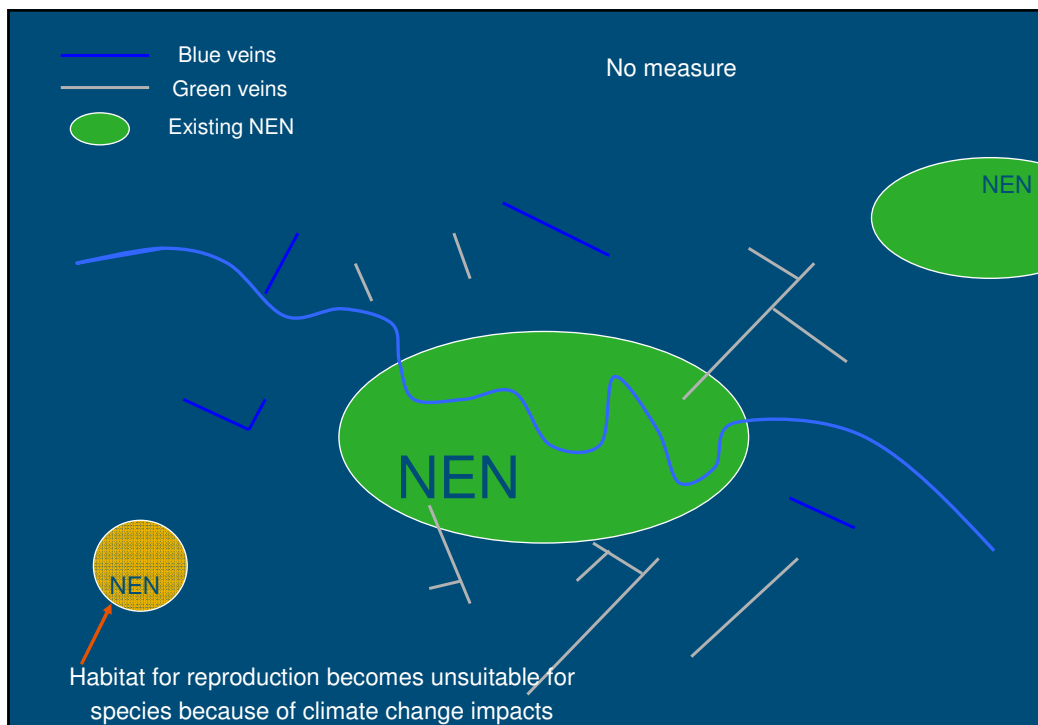
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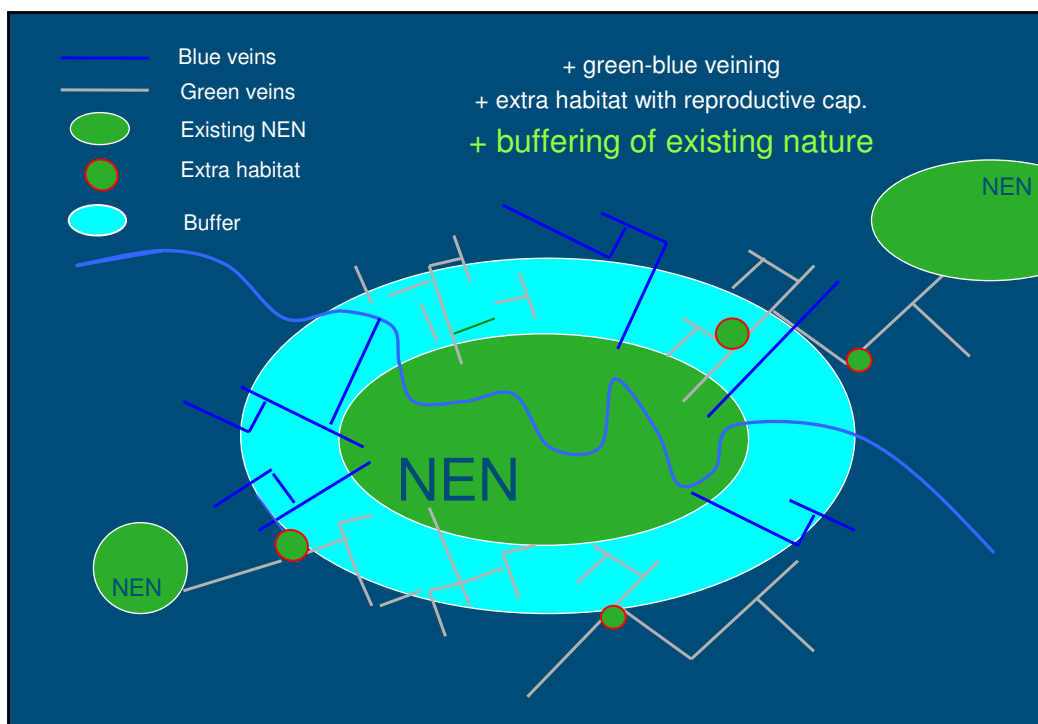
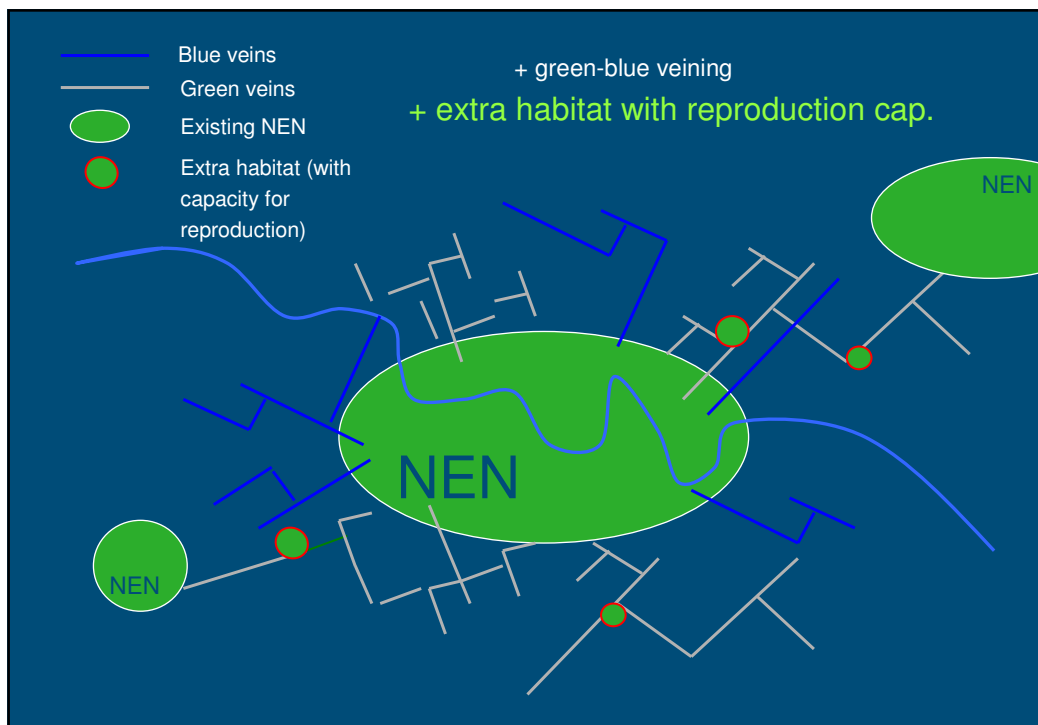
Case: Fen Meadow Area

- Open Landscape
- Heterogeneous peat (oxidation) and clay soils
- Grassland and dairy farming
- Meadow bird protection
- Open water
- Water quality issues
- Cultural history (famous field layout)
- Close to large cities (recreation)



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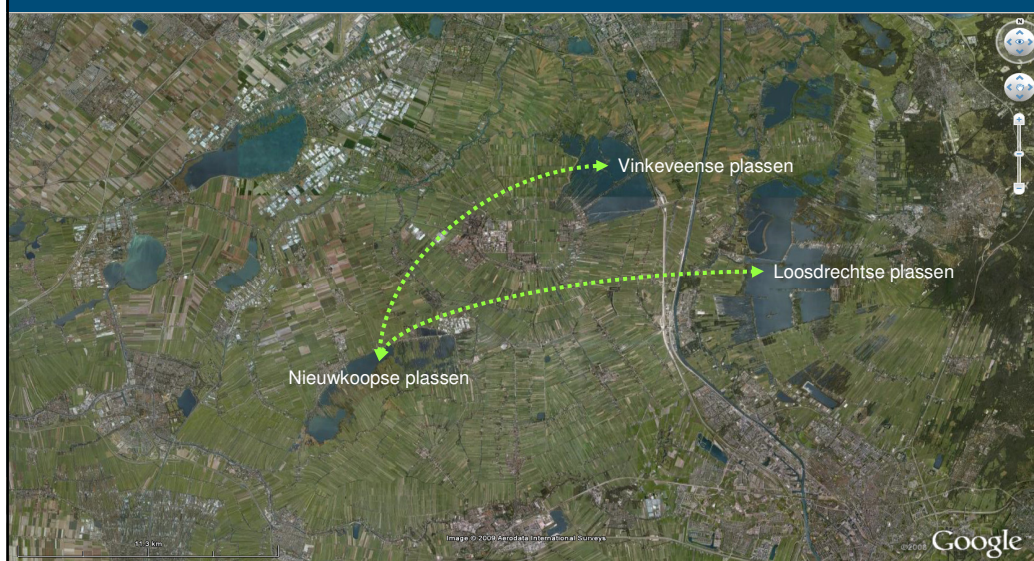
Focus Group discussion: three types of measures

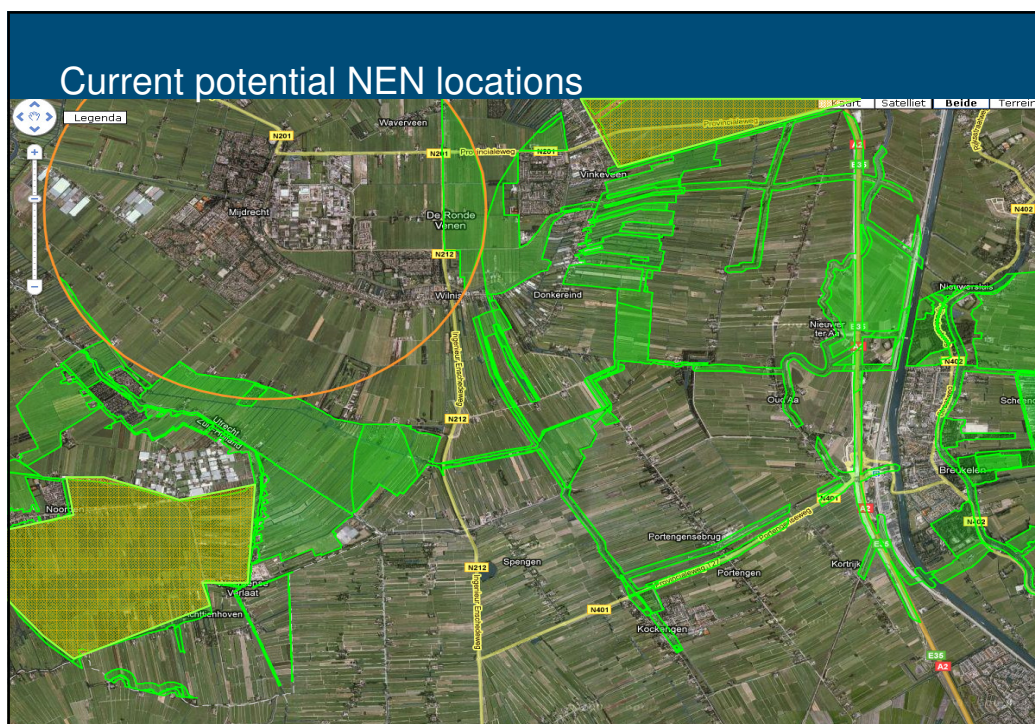
- Green Blue Veining
 - Natural ditch banks
 - Hedgerows
 - Field margins
- Extra habitat
 - Water surface elements
 - Alternative management of environmental conditions
- Buffering NEN area
 - Alternative surface water levels



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Connect shallow marsland lakes





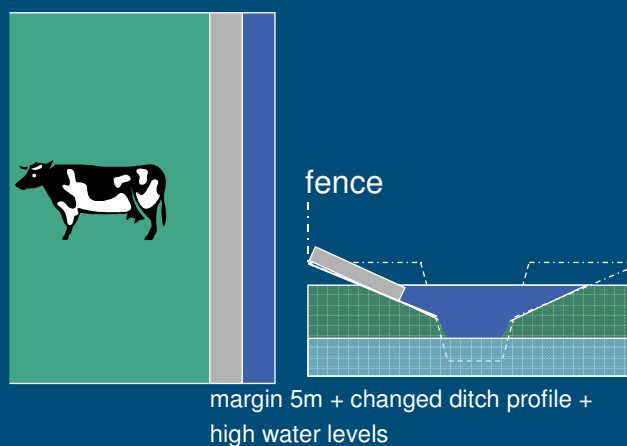
Natural Ditch Banks

- wet margins along ditches
- new profile of ditch banks
- no fertiliser application and no use of herbicide
- fence ditches (to give plants a chance to flower)
- re-introduction of species in ditch banks
- alternative mowing regime
- nature along water infrastructure



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'Natural' Ditch Banks



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Results

- In focus group discussions land owners and other stakeholders rate the possibilities for GBV positive
- GBV as an adaptation option for nature is a concept that is not easily applied because the adoption rate needs to be high for closed networks
- Farmers are willing to implement GBV if production loss is compensated and if the GBV fit farming practices



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Concluding remarks

- Large mitigation potential in Fen Meadows
- New CAP is a chance to revise payments for environmental services for to goals on adaptation and mitigation
- Agronomic knowledge needed for local adaptation!
- Threats and benefits: invasive species and pest control
- How do current farms develop in different socio-economic contexts?



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Thank you!

Any
questions?

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