

3rd INTERNATIONAL SCIENTIFIC MEUSE SYMPOSIUM  
***THE MEUSE DISTRICT : CHALLENGES FOR TOMORROW***

LIEGE, April 22 – 23, 2010

## AMICE – WP3

Transnational cooperative water management to cope  
with uncertainties related to climate change

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# Adaptation of the Meuse to the Impacts of Climate Evolutions

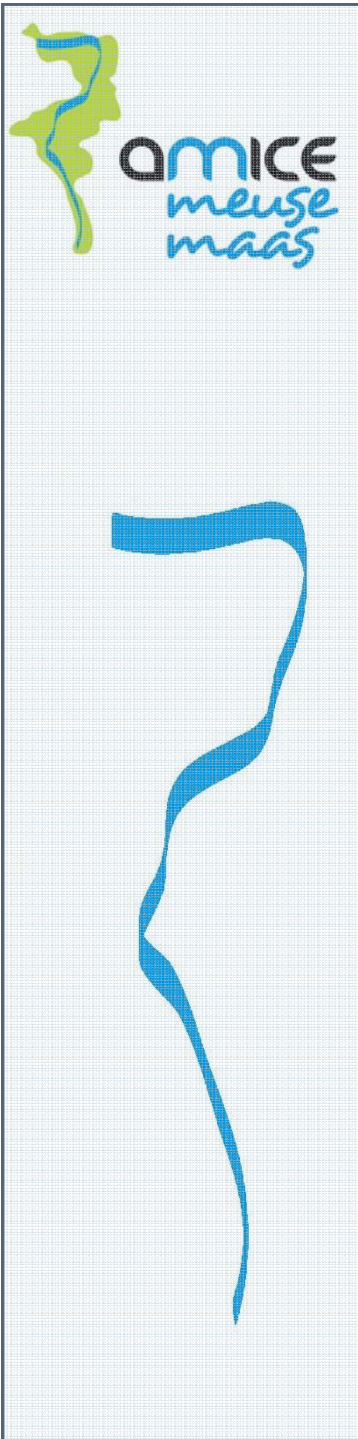


This project has received European Regional Development Funding through INTERREG IV B.



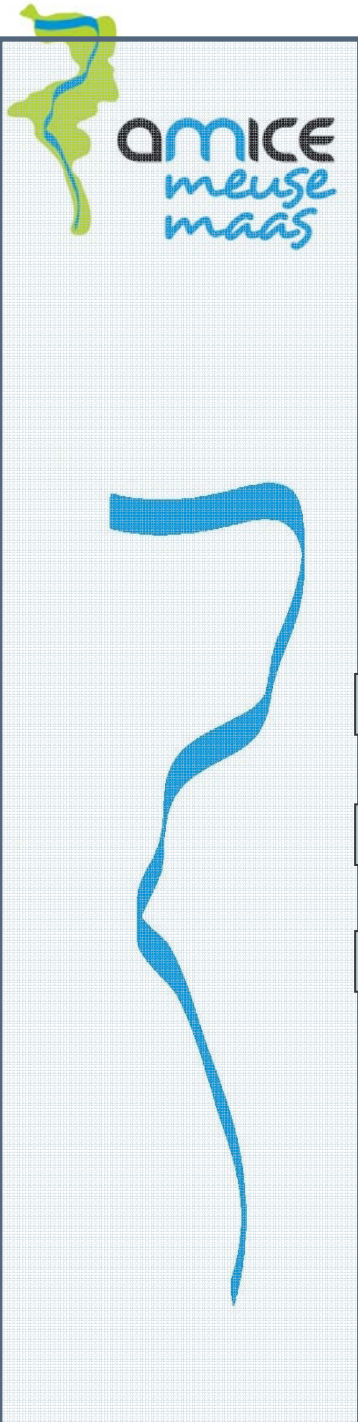
INTERREG IVB





## □ Context

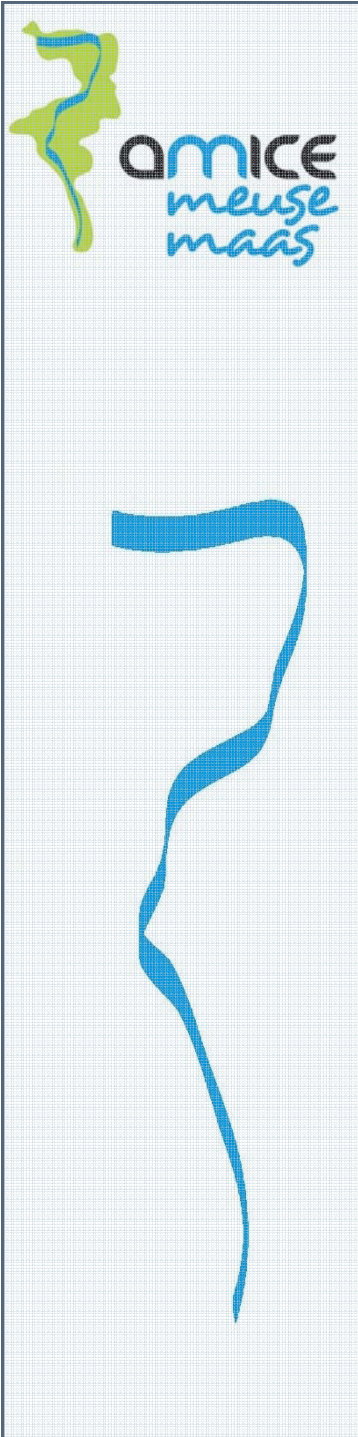
- Uncertainties with respect to consequences of climate change
- Guideline
  - How to adapt policies
  - (Transnational) Cooperation
- Investments: 3 examples
  - HOWABO
  - Pumping stations lock of Ham
  - Rur catchment: reservoir modelling and risk assessment



## □ Uncertainties

- Climate change
- What will happen to extreme discharges?

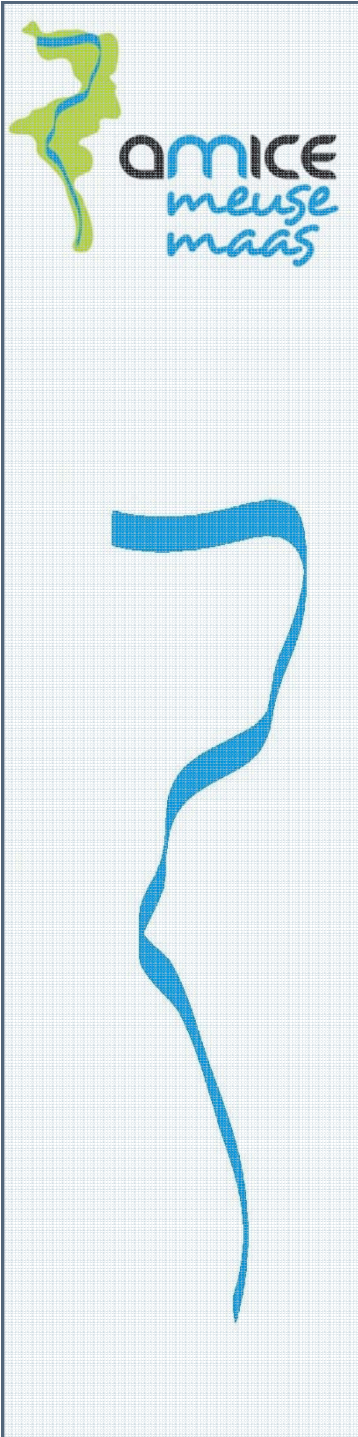




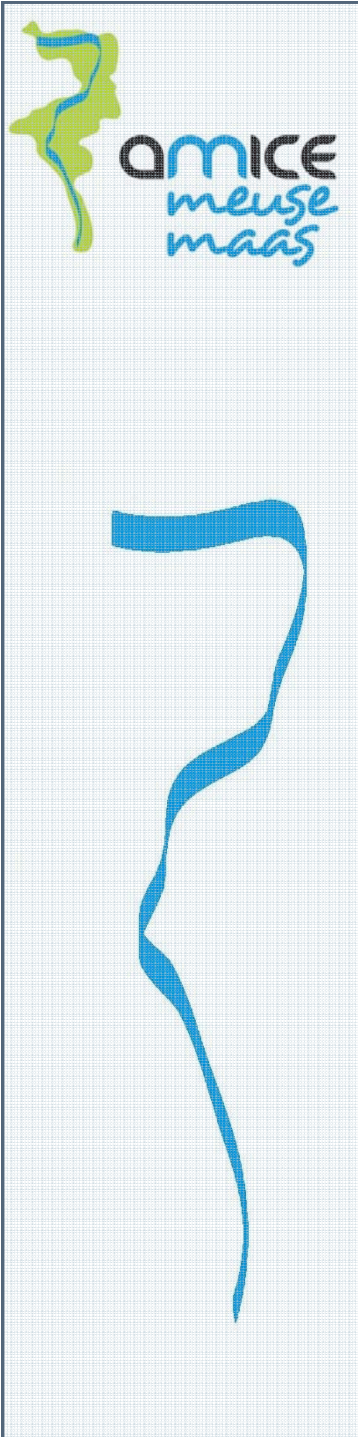
- Guideline

- Contents

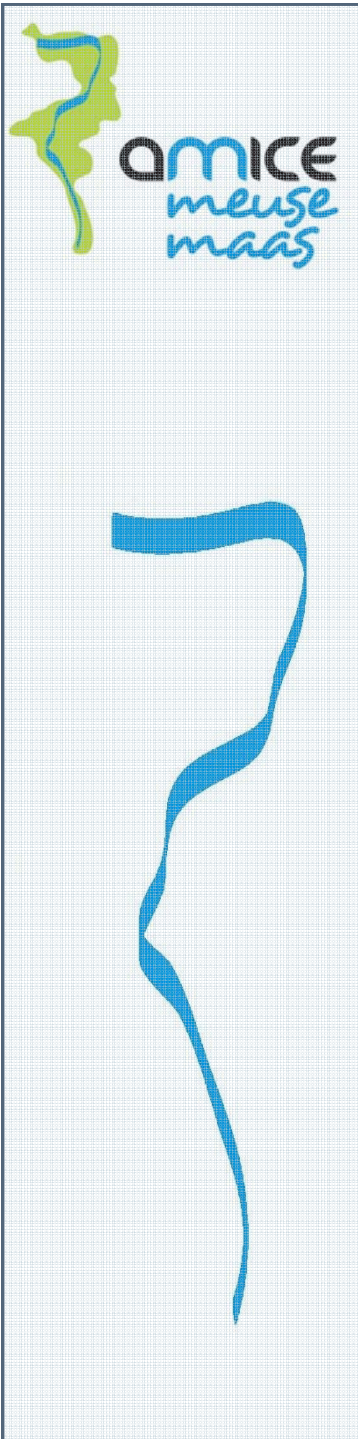
- Problem description
- Investments overview
- Operational aspects
- Relations
- Cooperation
- River Basin Management
- Exchange with other Work Packages
- Advice
- Conclusions and future perspective



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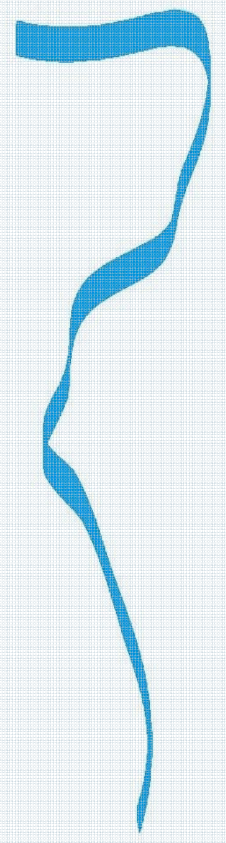
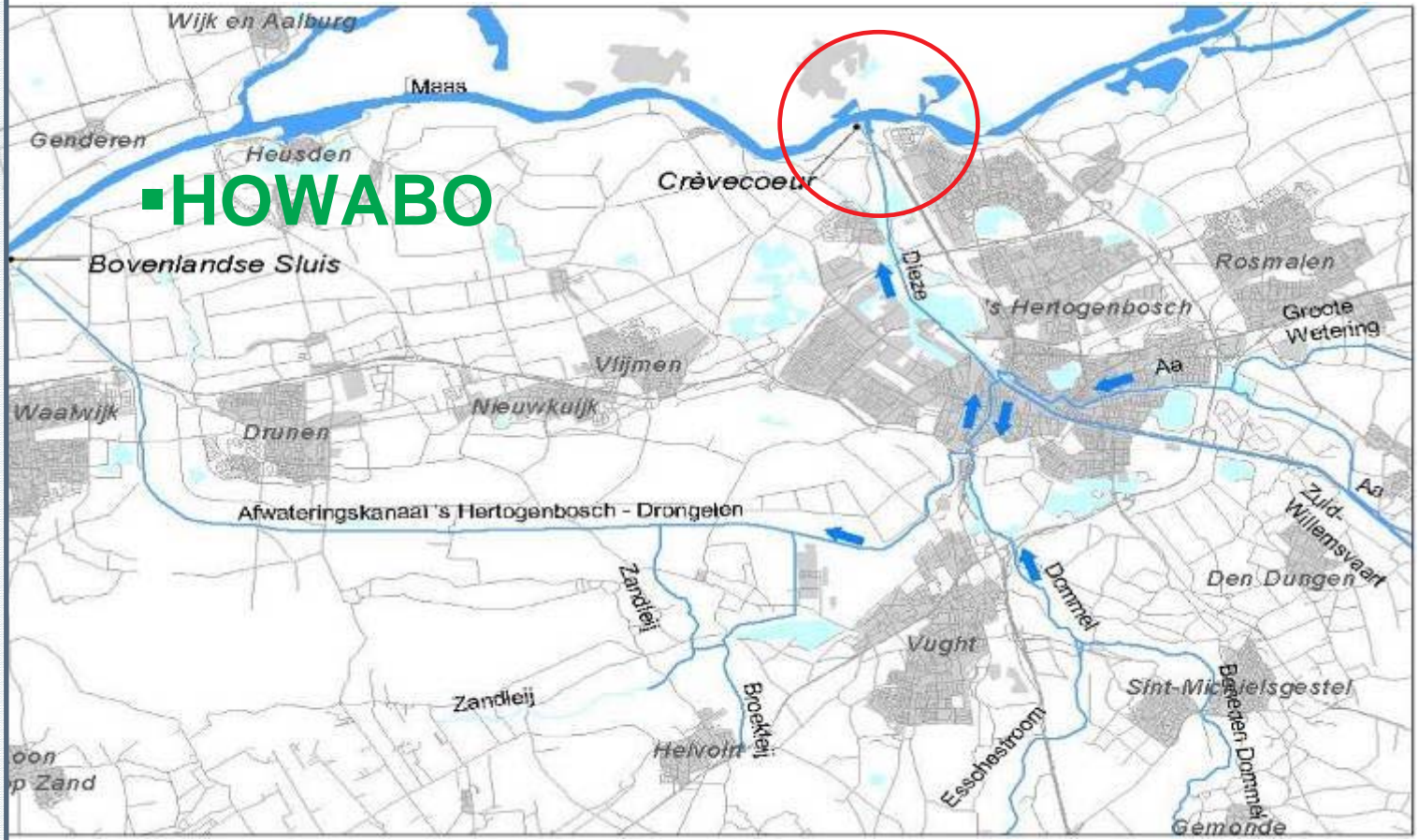
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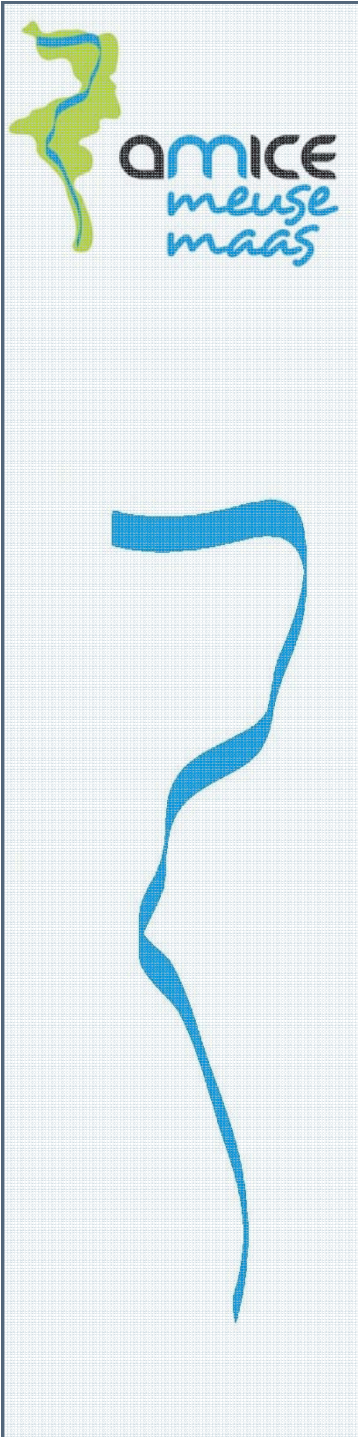


# ■ HOWABO

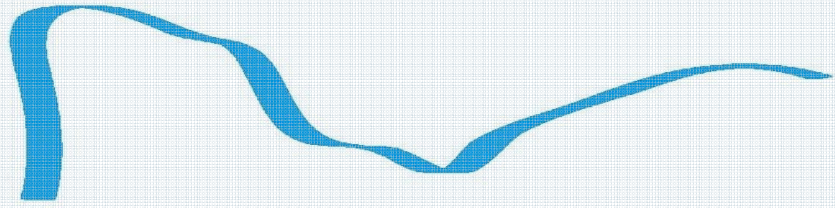




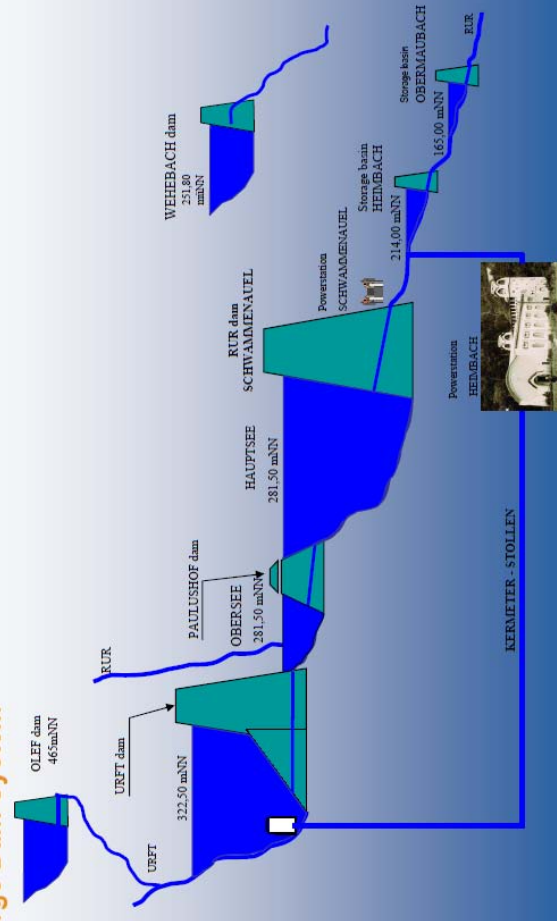


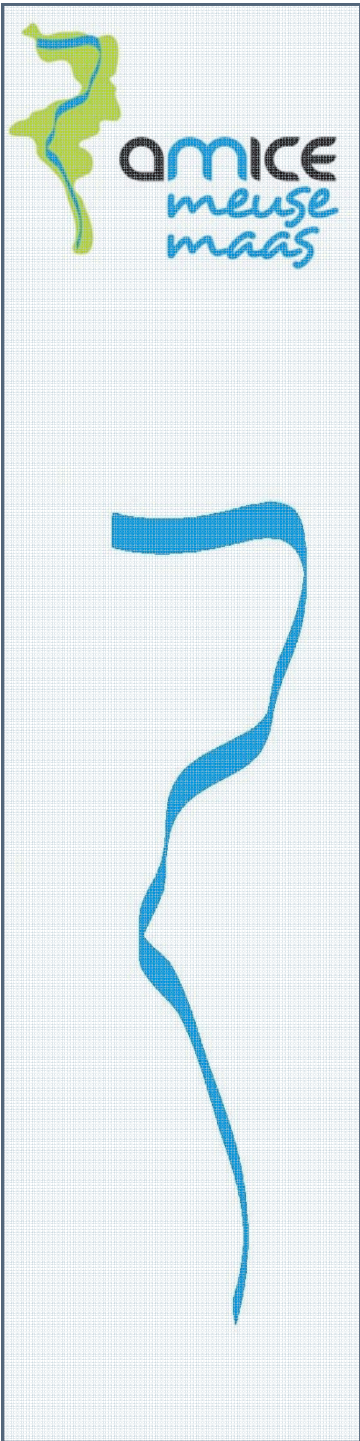


- Rur Catchment: highlights:
  - Reservoir modelling
    - Regulating both high and low Q
  - Risk assessment
    - Adaptation of existing risk assessment procedures to **low flow** problems
    - Analysis of the main focusses of **damage** potentials and vulnerability due to flood and low flow
    - Risk analysis for **floods** and low flow for the Meuse/rur catchment area
    - Adapted dam **operation** rules and implementation into TALSIM for the benefit of the Meuse/Rur catchment area
- Low flow, floods, damage, operation

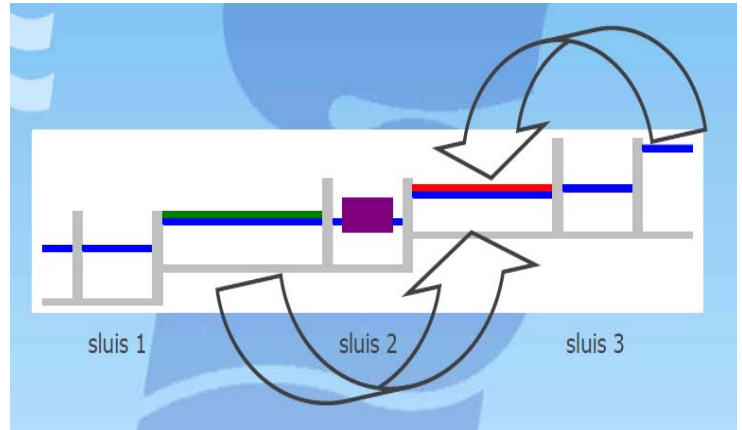


### Large Dam System



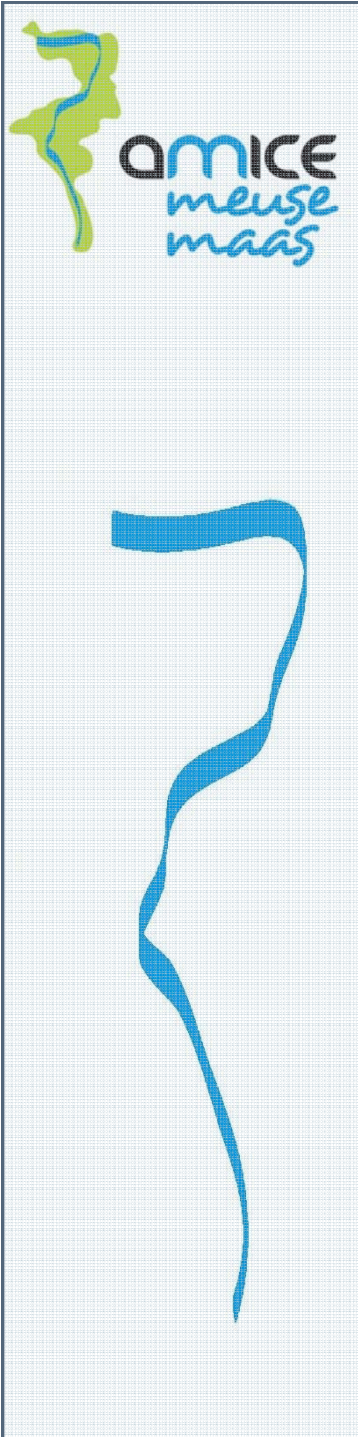


- Locks of Ham



- Safeguarding discharge
- Saving water
- Noise, fish migration, cost and benefit





- Conclusions
  - Uncertainties
  - Investments: flexibility!
    - Floods
    - Low flows
    - (prevention of (ecological) damage)



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