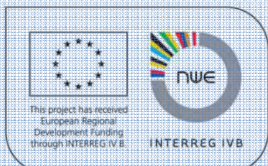




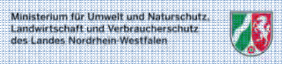
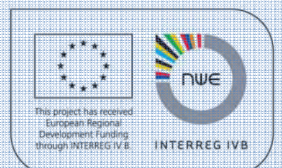
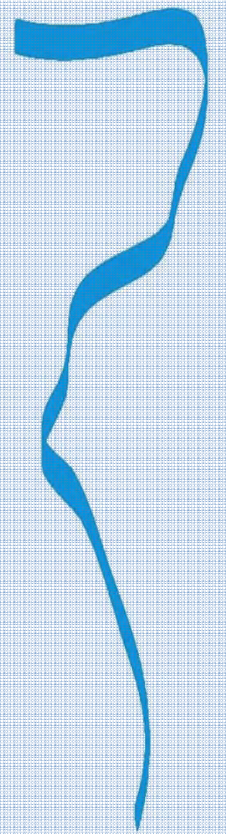
# Adaptation of the Meuse to the Impacts of Climate Evolutions

## Welcome in Aachen



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des Landes Nordrhein-Westfalen

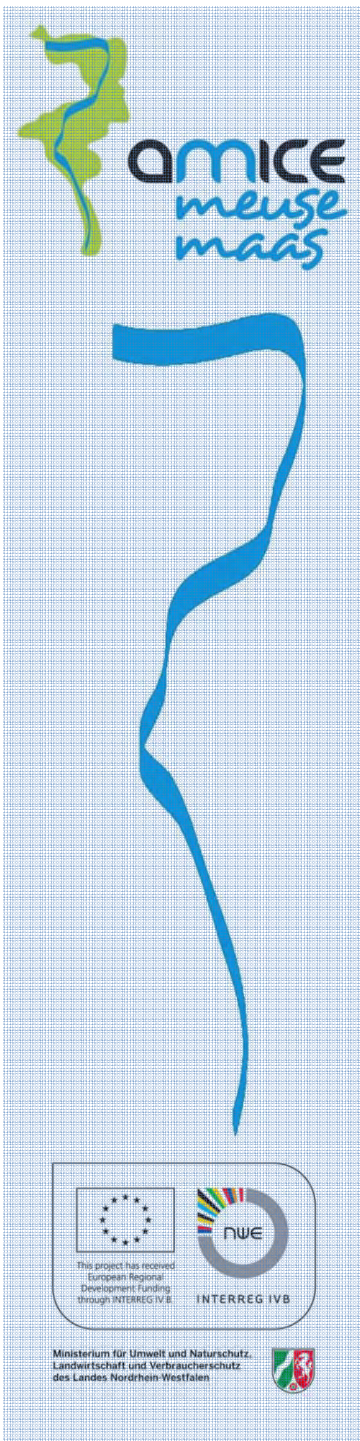




# Adaptation of the Meuse to the Impacts of Climate Evolutions

## Site Visit Rur Reservoirs, April 6<sup>th</sup> and 7<sup>th</sup>





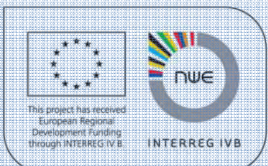
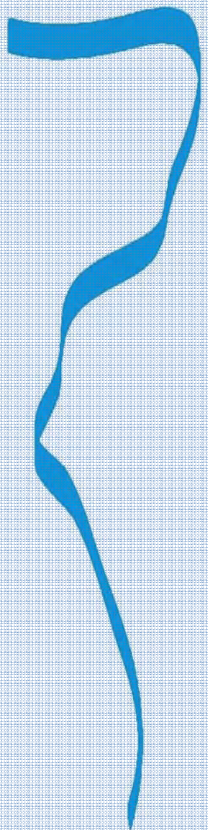
# AMICE

## Adaptation of the **M**euse to the **I**mpacts of **C**limate **E**volutions

A coordinated strategy for the Adaptation of the Meuse to the Impacts of Climate Evolutions on floods and low-flows with the perspective of sustainable development in the Meuse international catchment basin (Interreg IV B NWE)



amice  
meuse  
maas



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# Projekt

**Total Budget:**

8.879.841 €

2.808.998 € ERDF

**Duration:**

2009 bis 2012

**Partner:**

Total (17):

France (3)

Belgium:

Flanders (5)

Wallonia (3)

Germany (3)

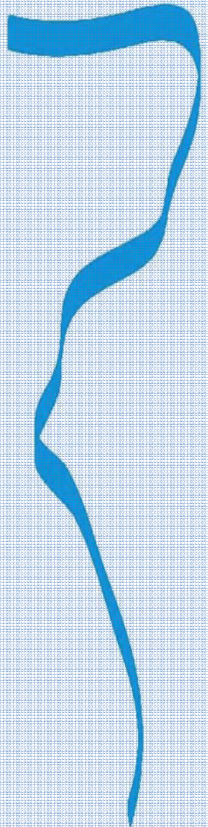
The Netherlands (3)

**Leadpartner:**

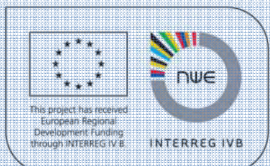
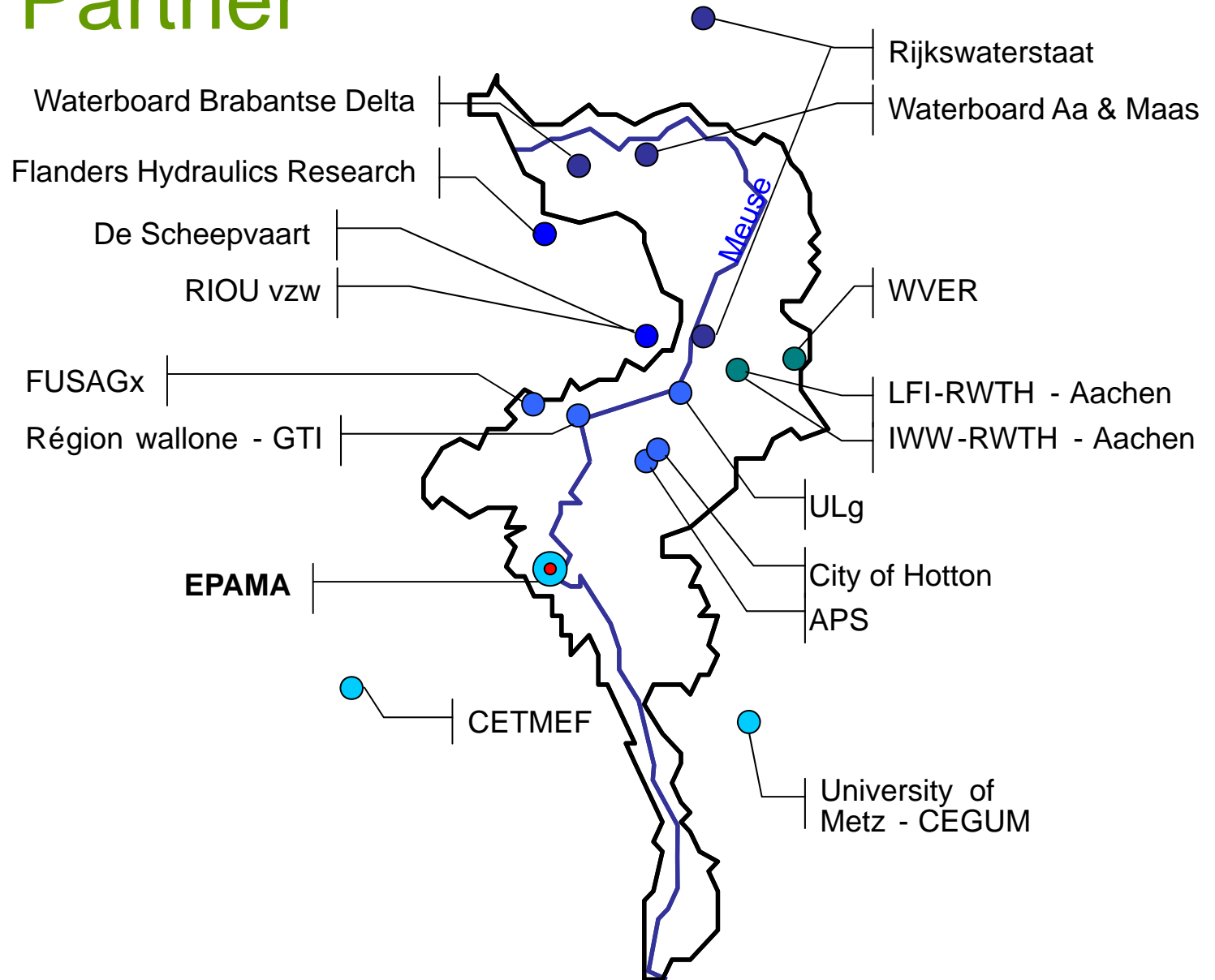
EPAMA, Charleville-Mezieres (F)



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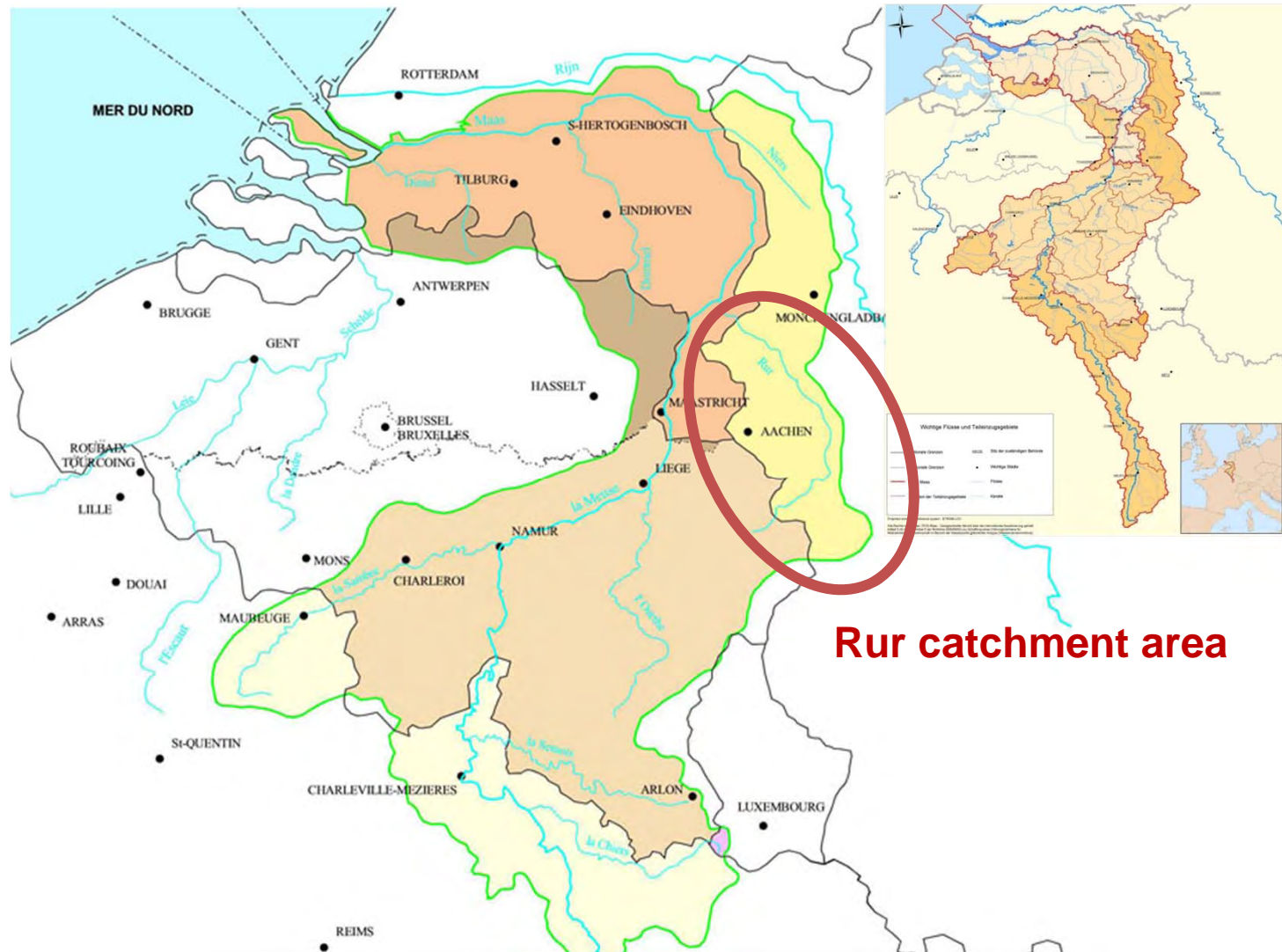
# Partner



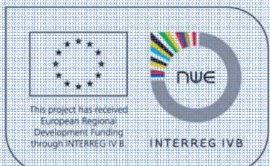
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# Project Area

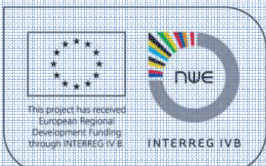
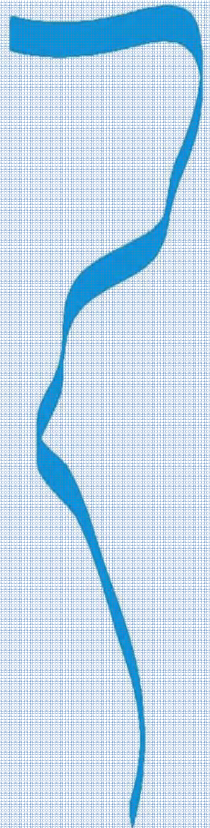


**Rur catchment area**



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# Rur Catchment

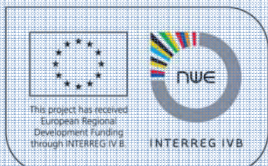
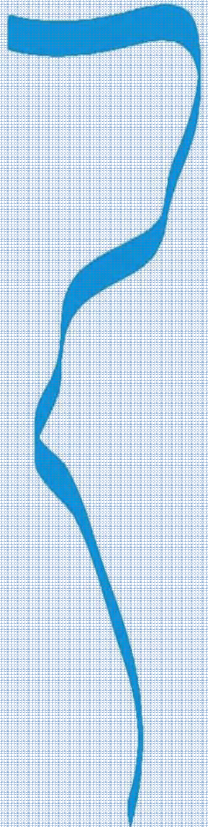
## Hydrology

- Catchment 2087 km<sup>2</sup>
- Flow length 2500 km (Rur: 165 km)
- North:  
lowlands (30 mNN)  
precipitation 600 mm/y
- South:  
hill land (620 mNN)  
precipitation 1300 mm/y





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# Rur Catchment

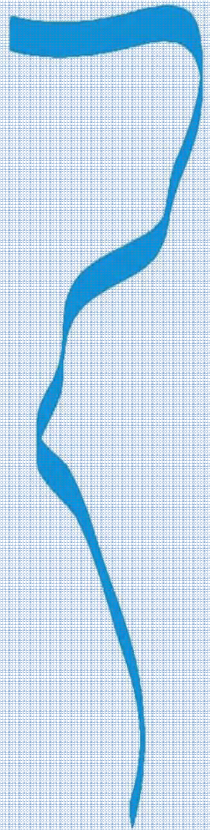
## Landuse

- Population 1.1 Mio.
- North:
  - agriculture
  - lignite mining
  - industry
  - demand for flood protection
  - water supply
- South:
  - forests
  - recreation area
  - nature protection





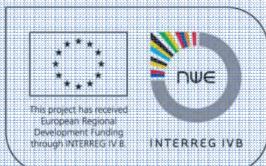
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# Rur Catchment

## The role of WVER (Water Board Eifel Rur)

- Flood control
- Water supply for public and industrial use
- Wastewater treatment
- Nature conservation and reconstruction of rivers



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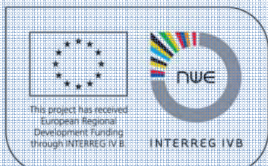




# Rur Catchment

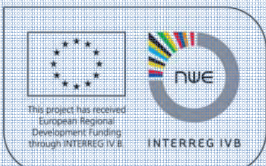
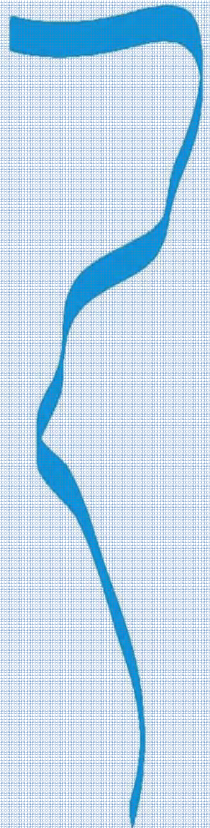
## Structure of WVER (Water Board Eifel Rur)

- Public body
- Members:
  - 43 Towns and Townships
  - 5 Districts
  - 35 Companies
- Supervisory Authority:
  - Ministry of Environment  
Federal State of NRW
- 530 employees
- Formation in 1993



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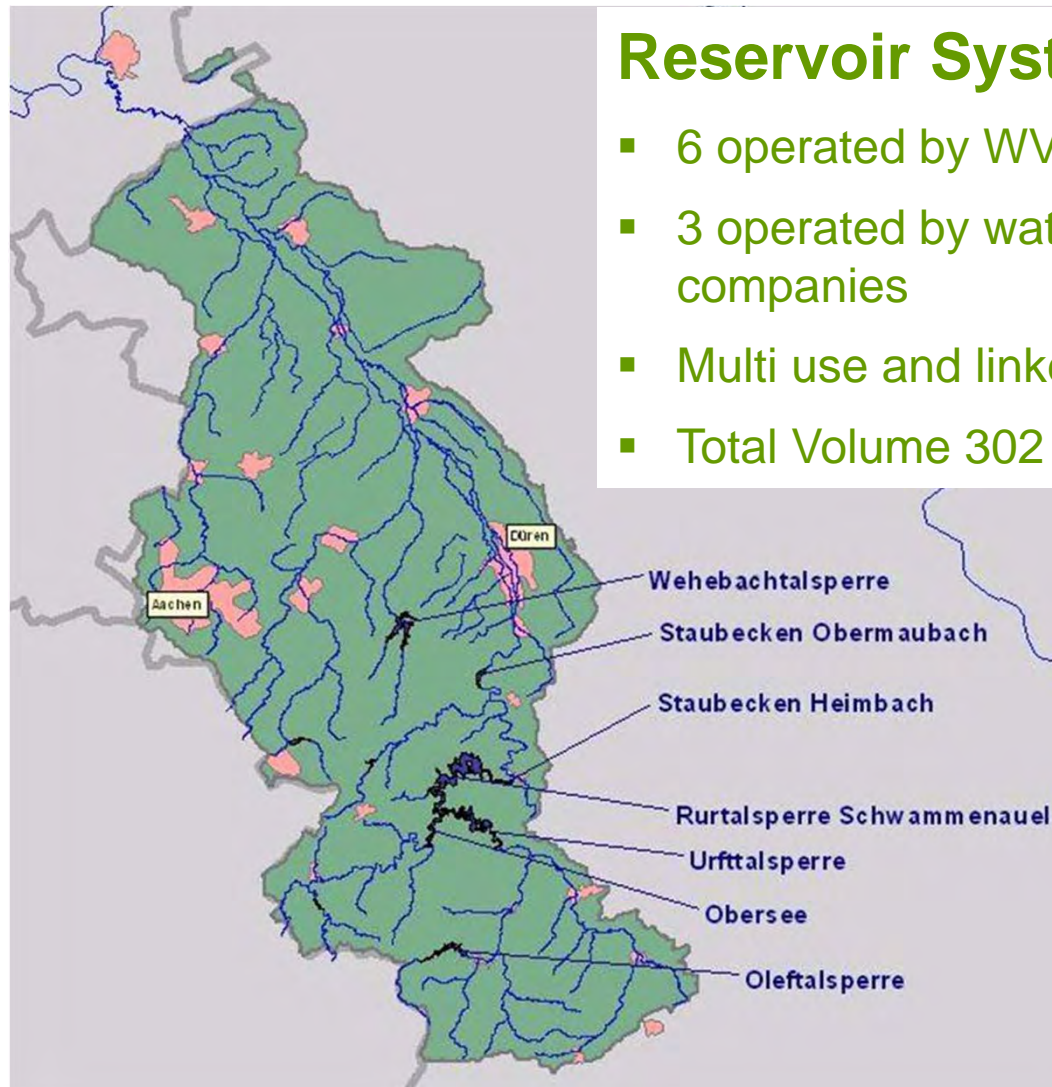
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# Rur Reservoirs

## Reservoir System

- 6 operated by WVER
- 3 operated by water supply companies
- Multi use and linked system
- Total Volume 302 Mio. m<sup>3</sup>





# Rur Reservoirs

## Protection against floods

- 70 Mio. m<sup>3</sup> storage volume
- Peak reduction from 300 to 60 m<sup>3</sup>/s

## Low-water enrichment

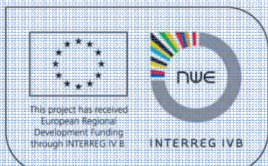
- NQ of 0,45 m<sup>3</sup>/s increased to 8,12 m<sup>3</sup>/s

## Provision of Water

- 80 Mio. m<sup>3</sup> for drinking water (600.000 inhabitants)
- 100 Mio. m<sup>3</sup> für industrial use

## Power generation

- 60 Mio. kW/h (minor role)
- Start in 1905 for refinancing of Urft dam (art nouveau power station)

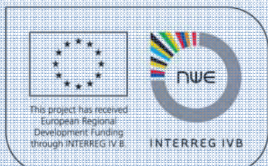


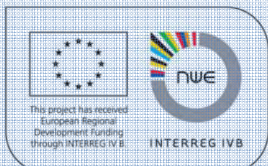
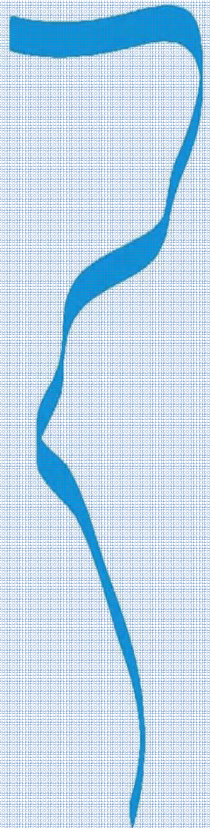


# Rur Reservoirs and AMICE

## Tasks

- Will climate change lead to higher risks in the water management of the Rur catchment (low flows and floods)?
- How high will be the risks (Euro, affected people, etc.)?
- Where are the main areas of damage and impacts, where are the weak points?
- Is the today's reservoir management sufficient for compensating the effects of climate change?
- Can the reservoir management be adapted to reduce the cc-induced risks at the Rur and the Meuse?





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# Rur Reservoirs and AMICE

## Work Packages:

WP 1 (several AP's)  
WP 3 (AP 23 and 24)

## Partner:

IWW RWTH Aachen  
LFI RWTH Aachen  
WVER

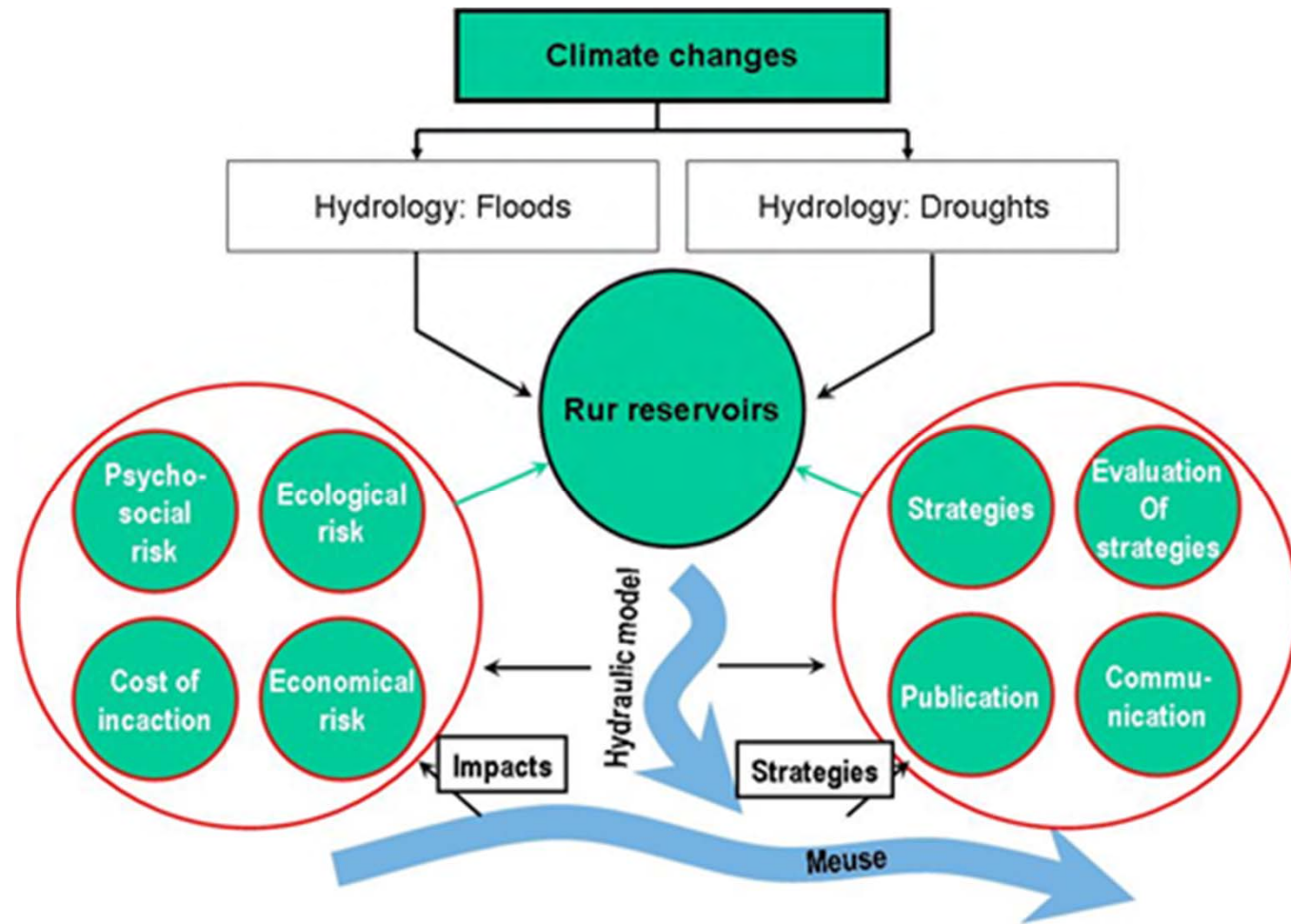
## Co-financing:

State North Rhine - Westphalia  
(NRW)

## Adjoint expert group:

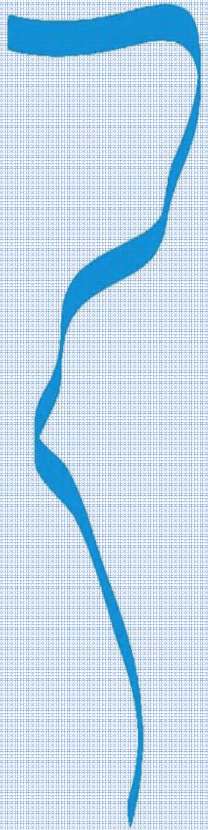
State and district government NRW  
Niersverband  
Watershap Roer en Overmaas  
Province Limburg

# Actions within AMICE





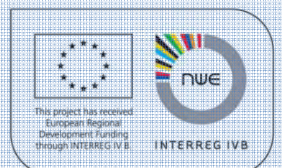
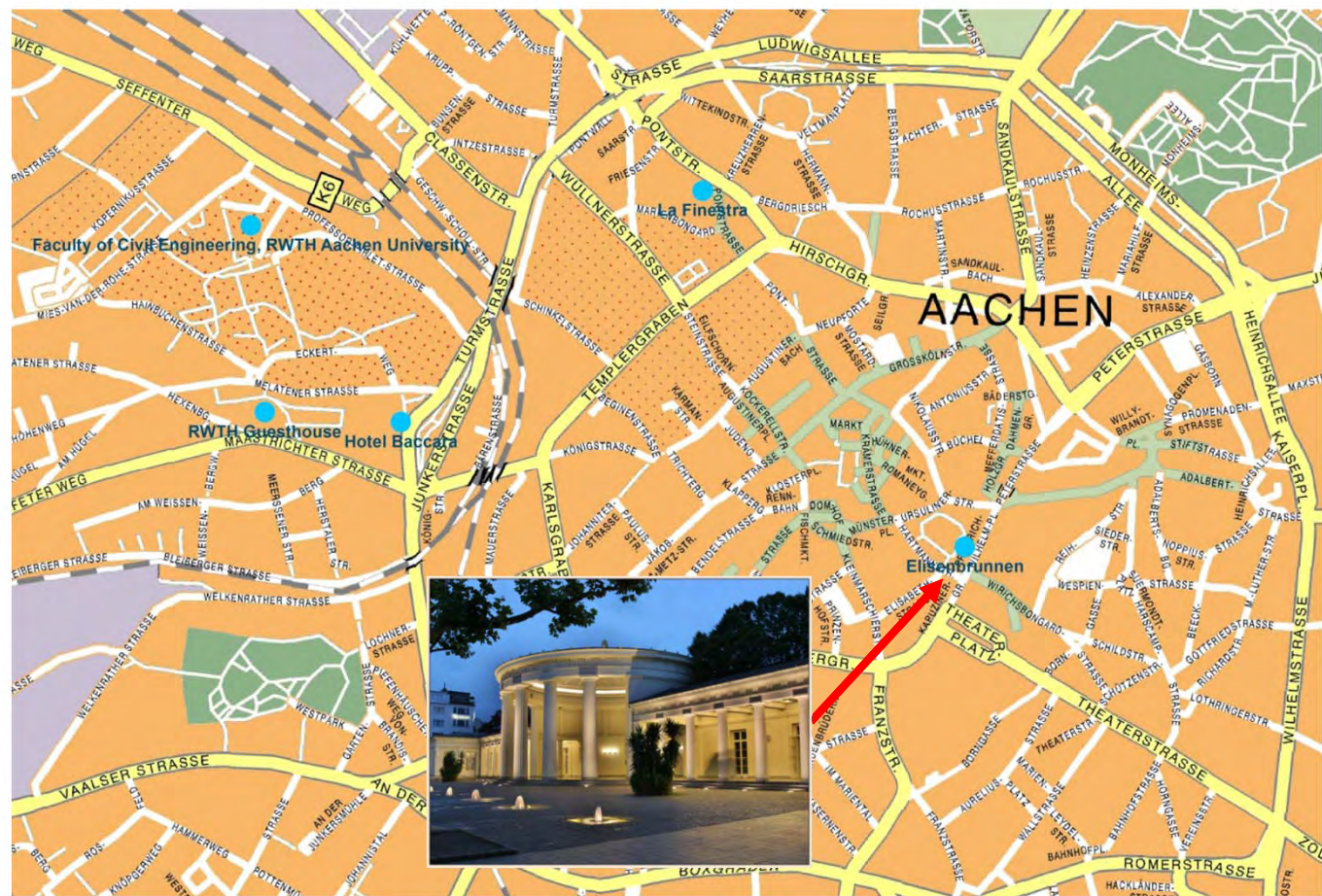
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# Evening Program

19:00 - 20:30 Gurgling waters - guided fountain tour

Meeting point: Tourist Info Elisenbrunnen, Friedrich-Wilhelm-Platz, 52062 Aachen  
phone: +49 / 241 / 180 29 60



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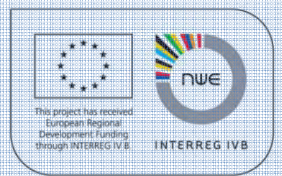
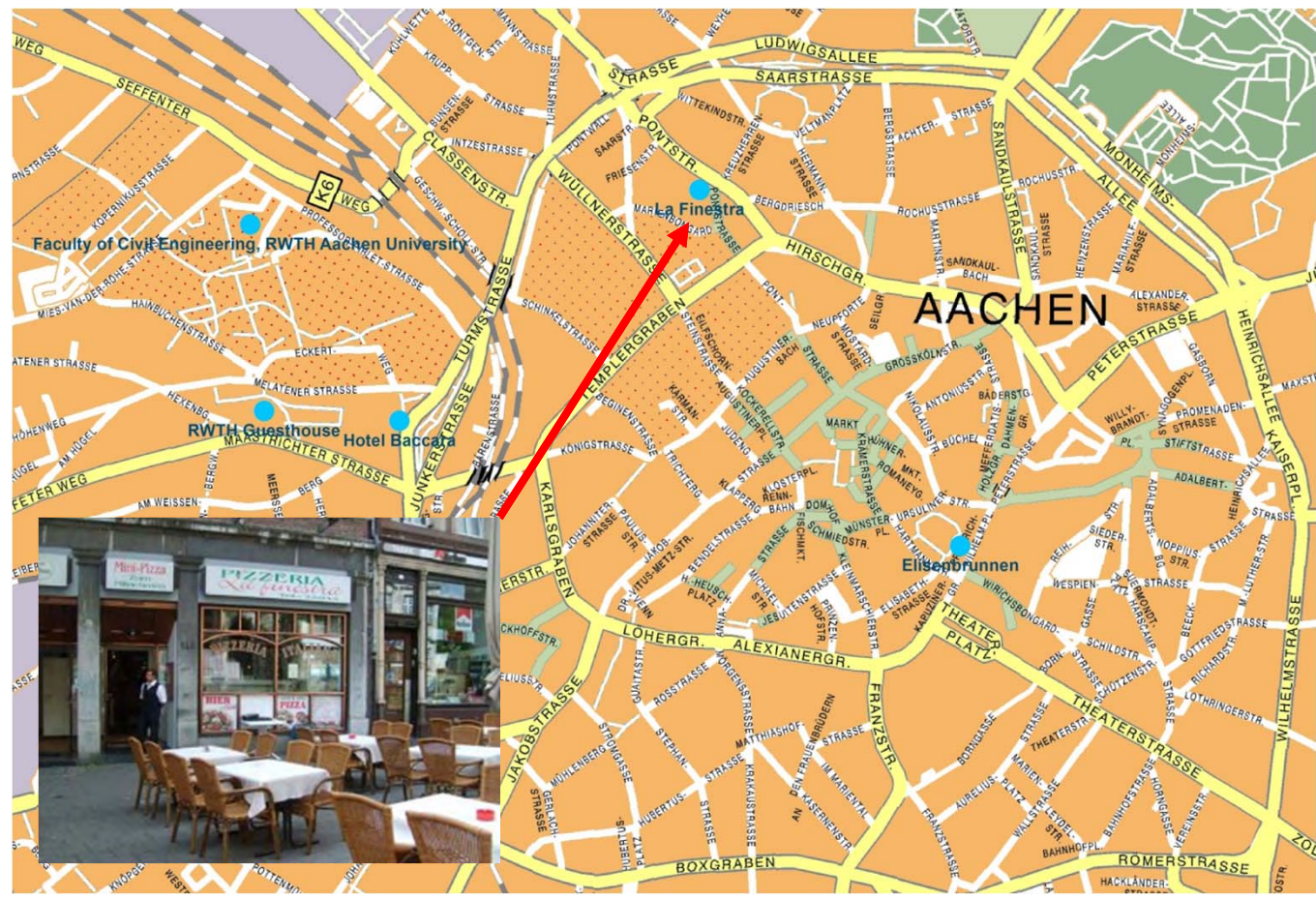


# Evening Program

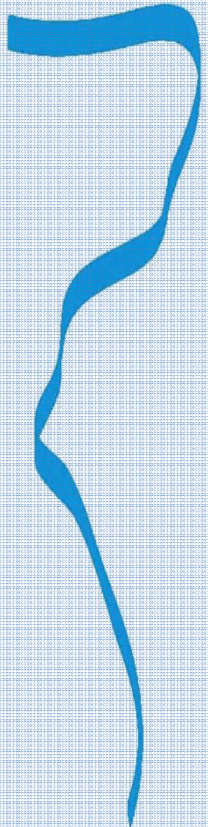
20:45

Dinner at „La Finestra“

Pontstraße 123, 52062 Aachen, phone: +49 / 241 / 25 845

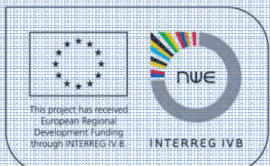


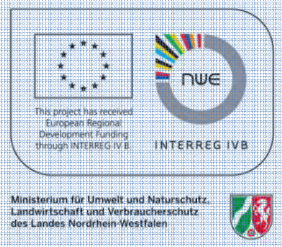
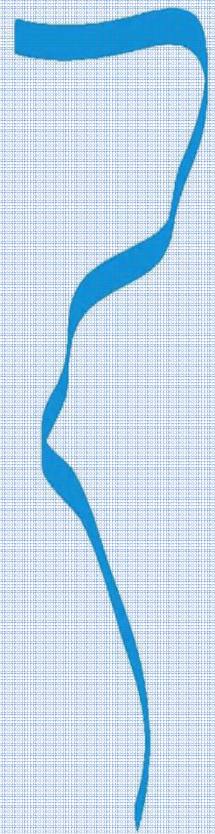
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# Program Site Visit

- 07:45 Meeting at RWTH Guesthouse
- 08:00 - 09:00 Bus travel to Obermaubach-Reservoir
- 09:00 - 10:00 Visit of Obermaubach-Dam and new Fish Path
- 10:00 - 11:00 Bus travel to National Park Gate Rurberg
- 11:00 - 12:00 Visit of the exhibition at National Park Gate, snack and coffee break
- 12:00 - 12:15 Walk over Eiserbach-Dam and Paulushof-Dam to landing stage "Rurberg-Obersee"
- 12:15 - 12:45 Boat travel to landing stage "Urft-Dam"
- 12:45 - 13:00 Walk to the crest of Urft-Dam
- 13:00 - 14:00 Visit of Urft-Dam, walk through the inspection corridor
- 14:00 - 15:00 Lunch at kiosk Urft-Dam
- 15:00 - 16:30 Bus travel back to Aachen  
RWTH Guesthouse, stopover at Aachen Main Station possible





# Adaptation of the Meuse to the Impacts of Climate Evolutions

Thanks and enjoy your stay in Aachen!

