

TEKNIK OG MILJØ
Aarhus Kommune



Aarhus River Project - RCA global summit on 4th May

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AGENDA

- 1.** The history of River Aarhus
- 2.** Aarhus River Project
- 3.** Benefits
- 4.** Add on - climate adaptation of the city
- 5.** Economy



The history of River Aarhus



Aarhus

Urban area: 91 km²

Population: 0,35 mio.

Population density: 3.850/km²

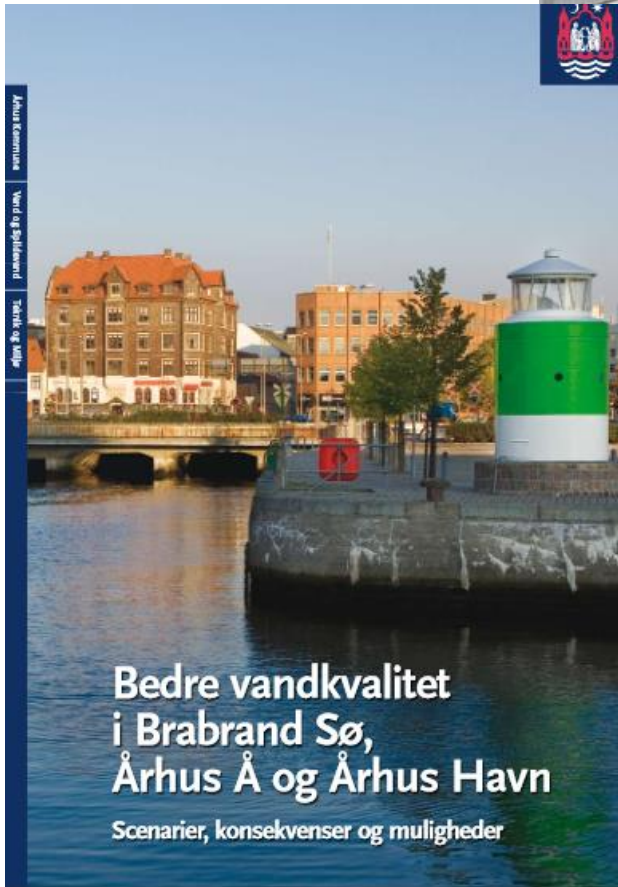
Aarhus River is 40 kilometer long and flows through the large river valley "Aarhus Adal".



The river was hidden 1930-1980



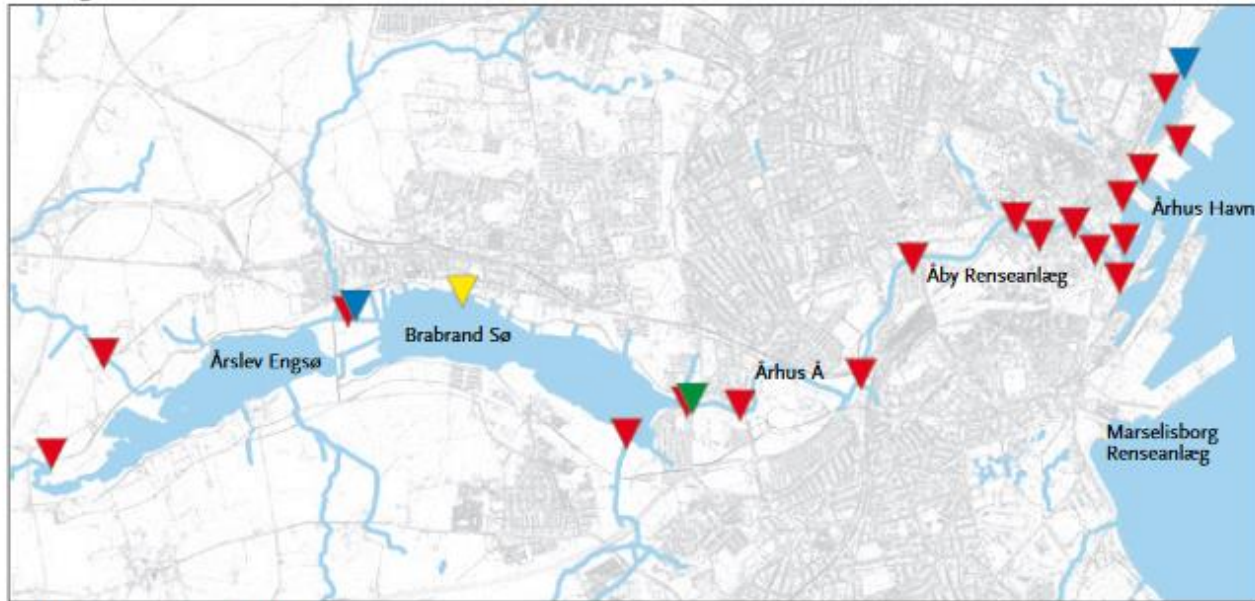
Aarhus River Project – decided 1989 (one person wanted to canoe 😊)



Purpose

- Improve the hygienic water quality
- Improve nature quality
- Recreation and livability / watersports
- Development of river side and harbor areas

Poor hygienic Water quality



Målestedernes vandkvalitet:

- ▼ Udmærket
- ▼ God
- ▼ Tilfredsstillende
- ▼ Ringe

Mapping sources for pollution

- Viby og Åby STP
- 75 overflows from sewer systems
- 58 drainage/rainwater outlets
- discharge from properties in rural areas
- drainage on the countryside
- The measurements carried out have focused on E-coli and fecal streptococci, which expresses the hygienic water quality.



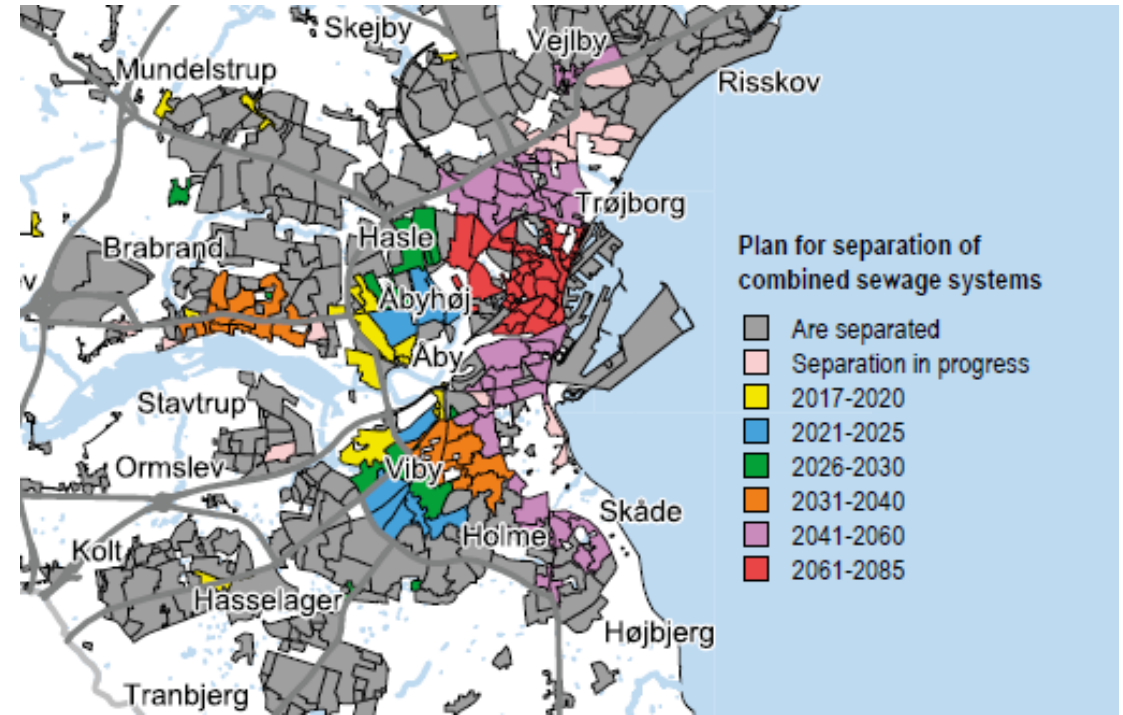
Implemented actions

- 43.000 m³ subsurface detention basins
- Disinfection of treated wastewater from Viby and Åby STP (stopped again – not a good business-case)
- Warning system / prediction of overflow of untreated wastewater
- Steering / automatization of wastewater system – added value, increased capacity in existing infrastructure



More actions

- Separating combined sewer systems (finished 2085!)
- Sewerage of rural households
- Re-opening of the last part of Aarhus River



Benefits



**Good hygienic water quality,
NBS and “time and space
for water”**



- Recreation and livability / watersports
- Biodiversity / improved nature
- Improved environment in the city
- shops, cafés and growing tourism along the river side
- Increasing house prices

Climate adaptation



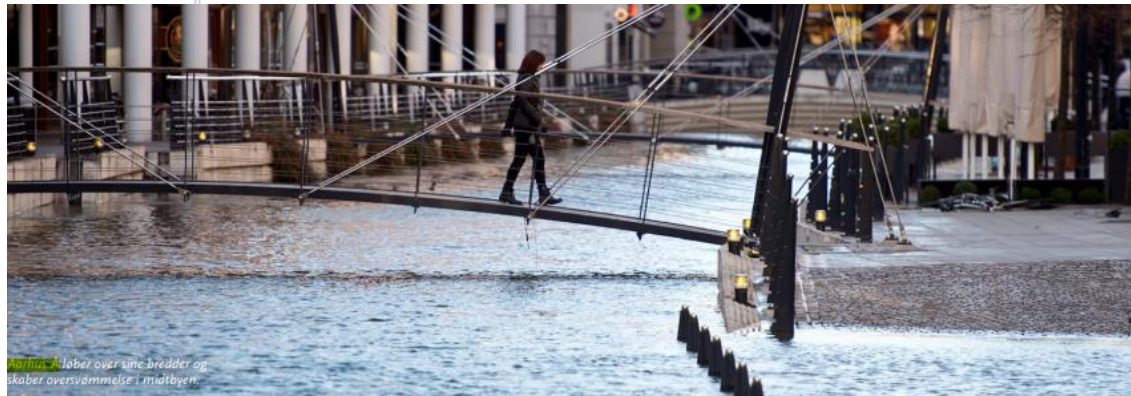
The Lock:

- Protects the city from flooding
- Closes automatically when the water level is 1.4 m above normal water level.
- 6 Pumps / capacity 18 m³/s
- Aarhus Bay can rise 2.5 meters without causing flooding in the city. The highest water level ever measured in the bay is 1.8 meters above daily water level.

Economy

Good comprehensive planning and innovative solutions pays off !

- Aarhus River Project: 340 million DKK / 340 crores INR
- The project has entailed a significant economic gain within for example increasing house prices and cafés, shops and tourism along the river side, beside of the nature and environmental benefits for the city.
- The lock: DKK 46 million / 46 crores INR. In comparison, a traditional solution with subsurface detention basins, would have cost more than DKK 500 million / 500 crores INR



Arhus: A løber over sine bredder og skaber oversvømmelse i midtbyen.

Thank You for your attention!

