

# Sediment discharge in the Scheldt estuary

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AWZ



# Content

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- Approach
- Data
- Conclusions



ANZ

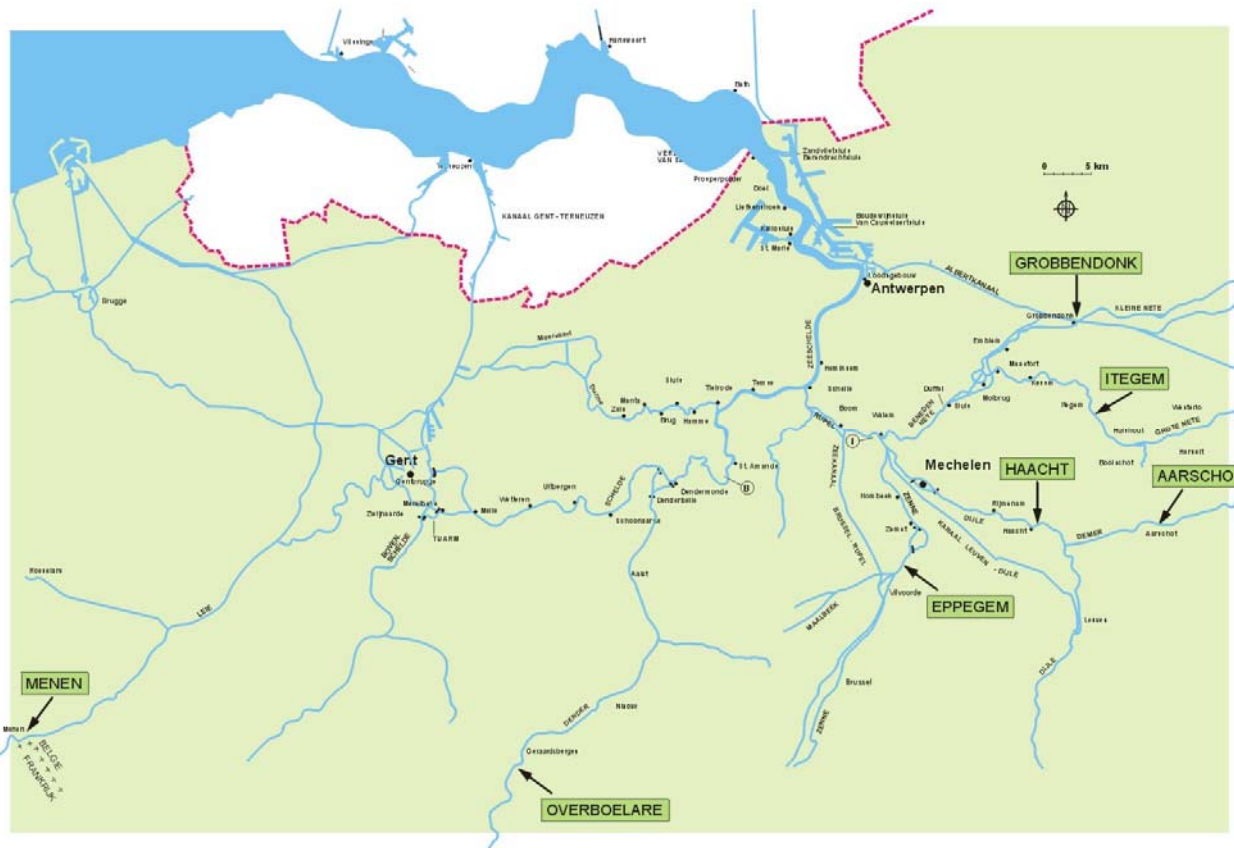
# 1. Goals

1. Evaluate effects of landmanagement practices
2. Determine the morphological effects of river enlargements measures
3. Estimate the quantities to be dredged
4. Fulfill the monitoring aspects of EU Water Framework Directive
5. Enlarge the knowledge of the watersystem
6. Provide basic information for treatment of dredged material

The logo consists of the letters 'AWZ' in a bold, blue, 3D-style font. The letters are slightly shadowed, giving them a three-dimensional appearance. They are positioned on a light blue, wavy background that resembles a water surface or a stylized landscape. The background has a darker blue line that oscillates across the bottom of the slide, with a series of small dots trailing off to the right.

## 2. Approach

Network : 8 monitoring stations for continuous hourly monitoring



## 2. Approach

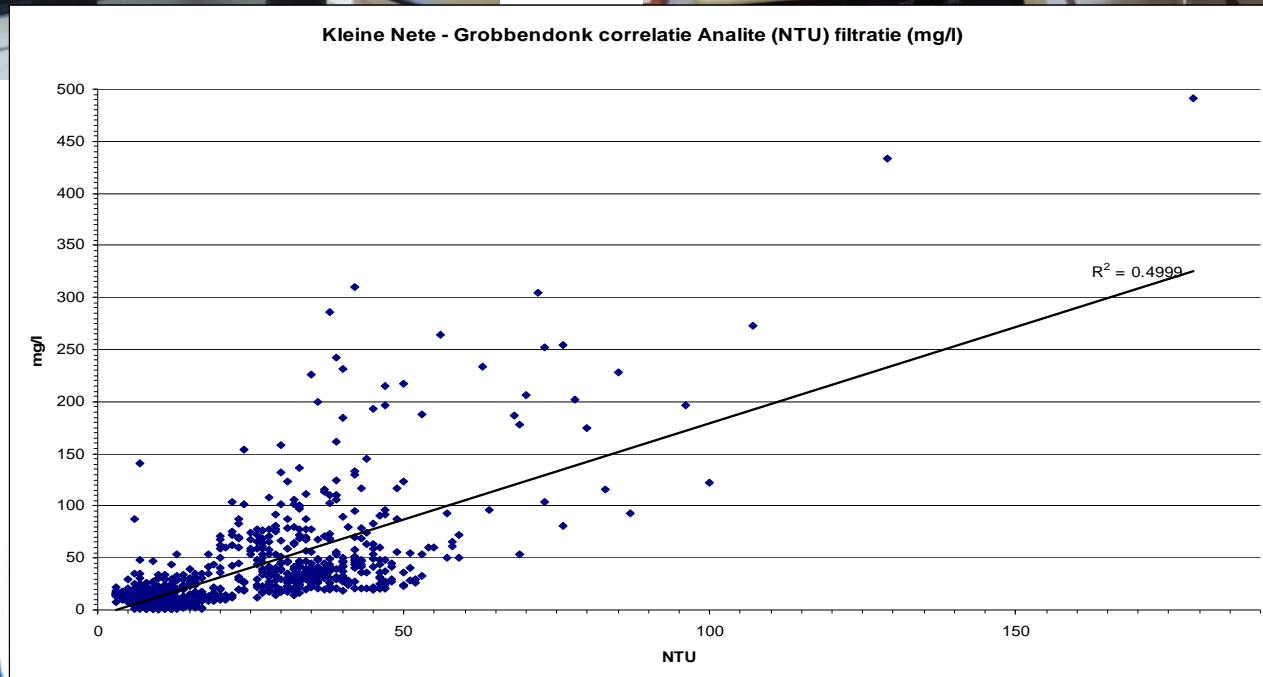
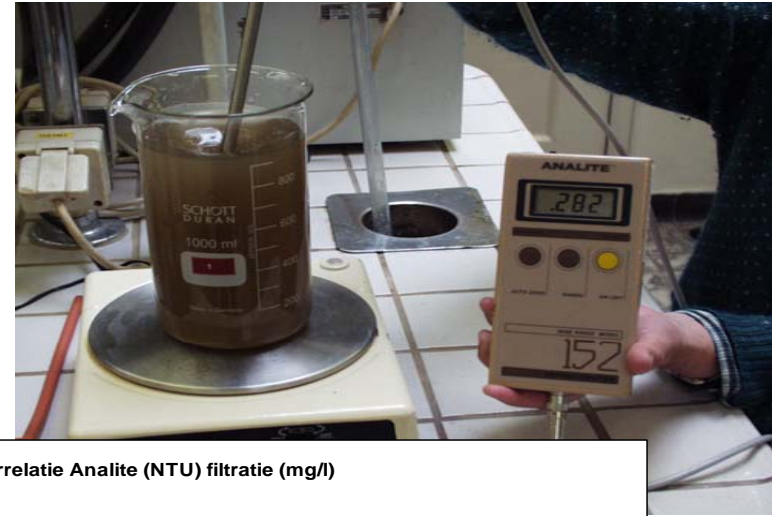
- Each station consists of
- (sampler)
  - turbidity probe
  - datalogger with monitor



ENV

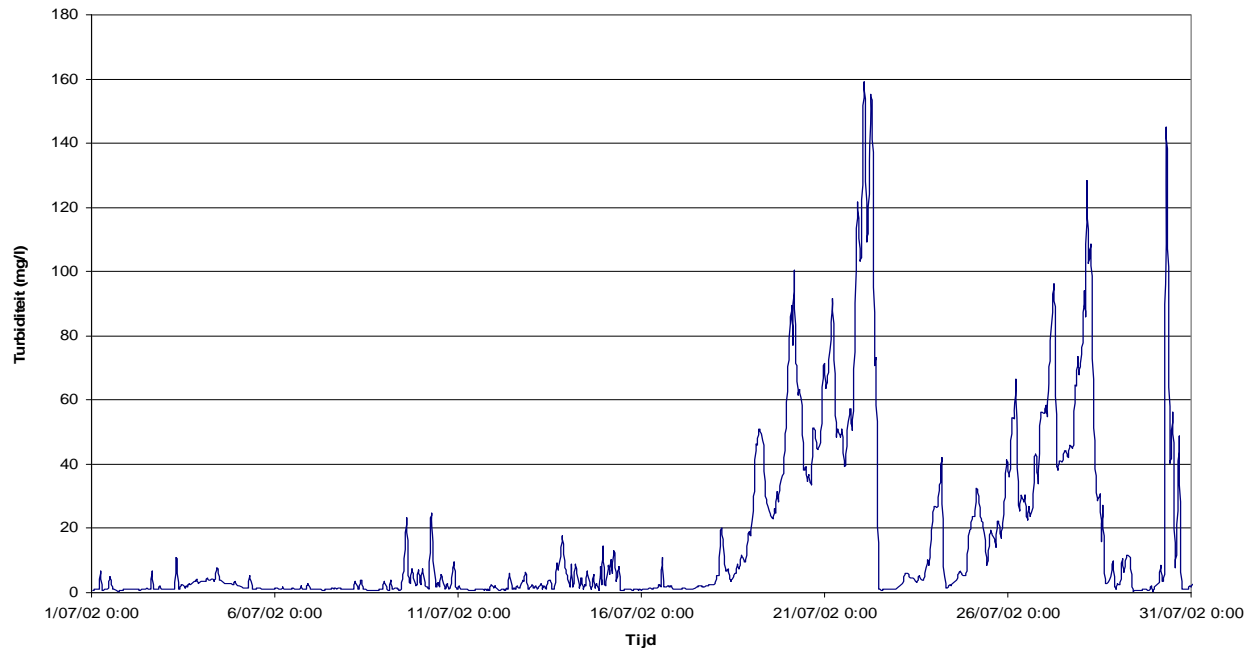
# 2. Approach

Calibration of the turbidity probe : correlation NTU - mg/l



## 2. Approach

- Correlation local turbidity and cross section turbidity

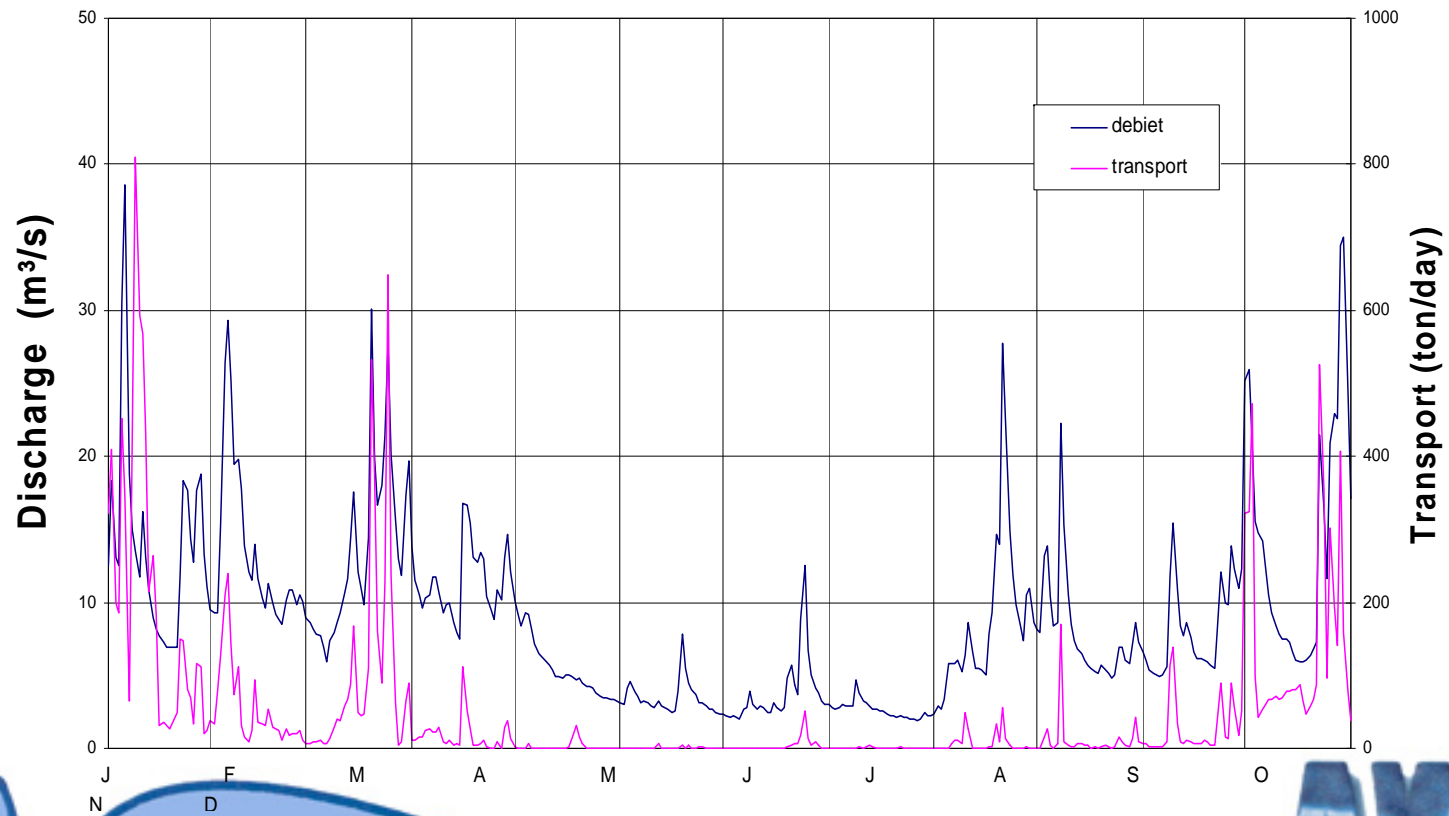


- Mass transport (mg/s) = discharge \* turbidity



# 3. Data

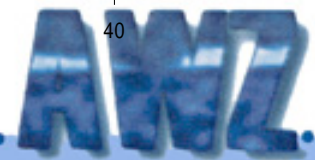
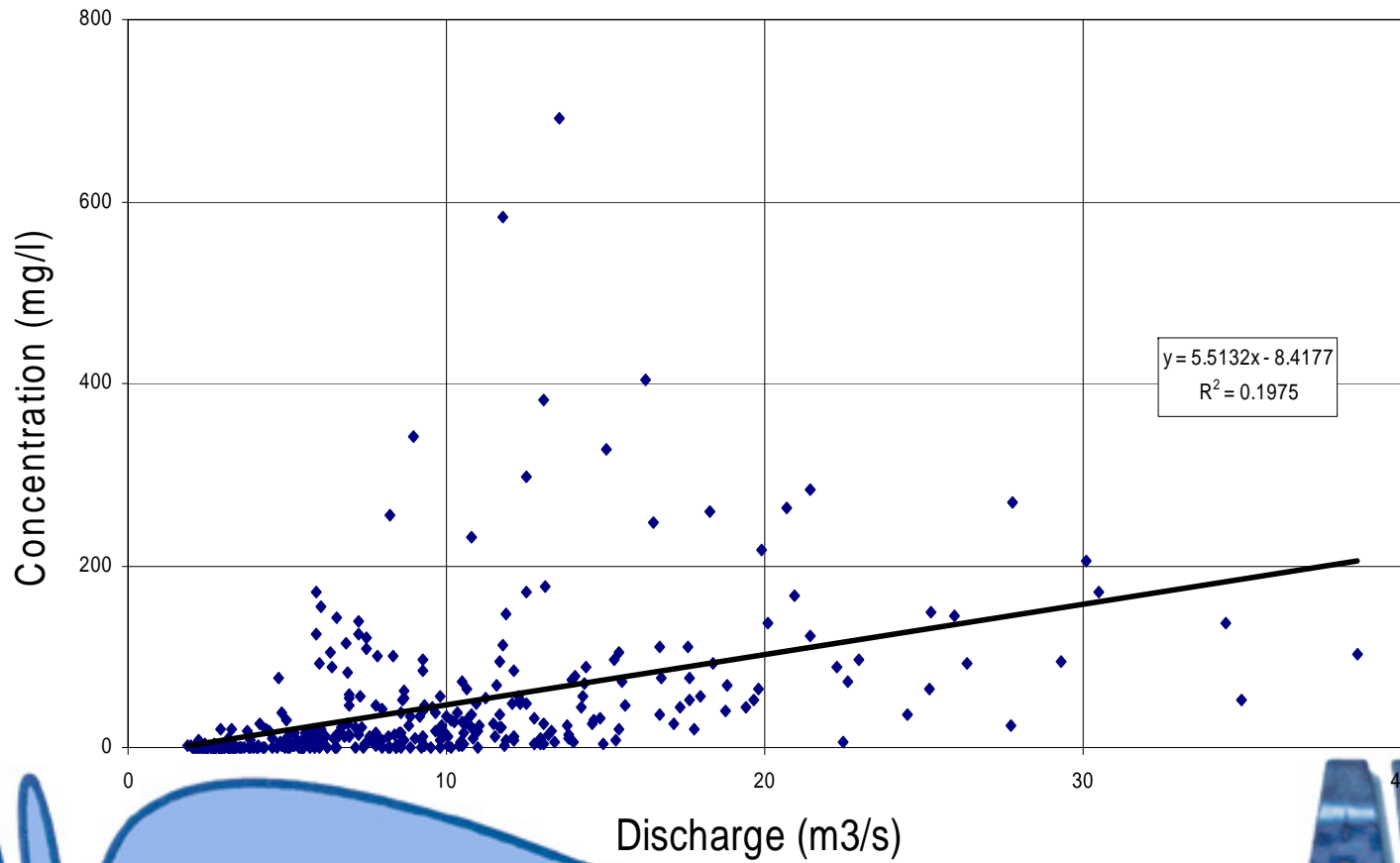
## Kleine Nete - Grobbendonk 2001





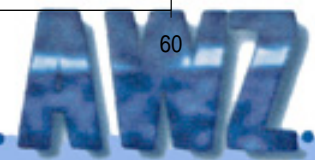
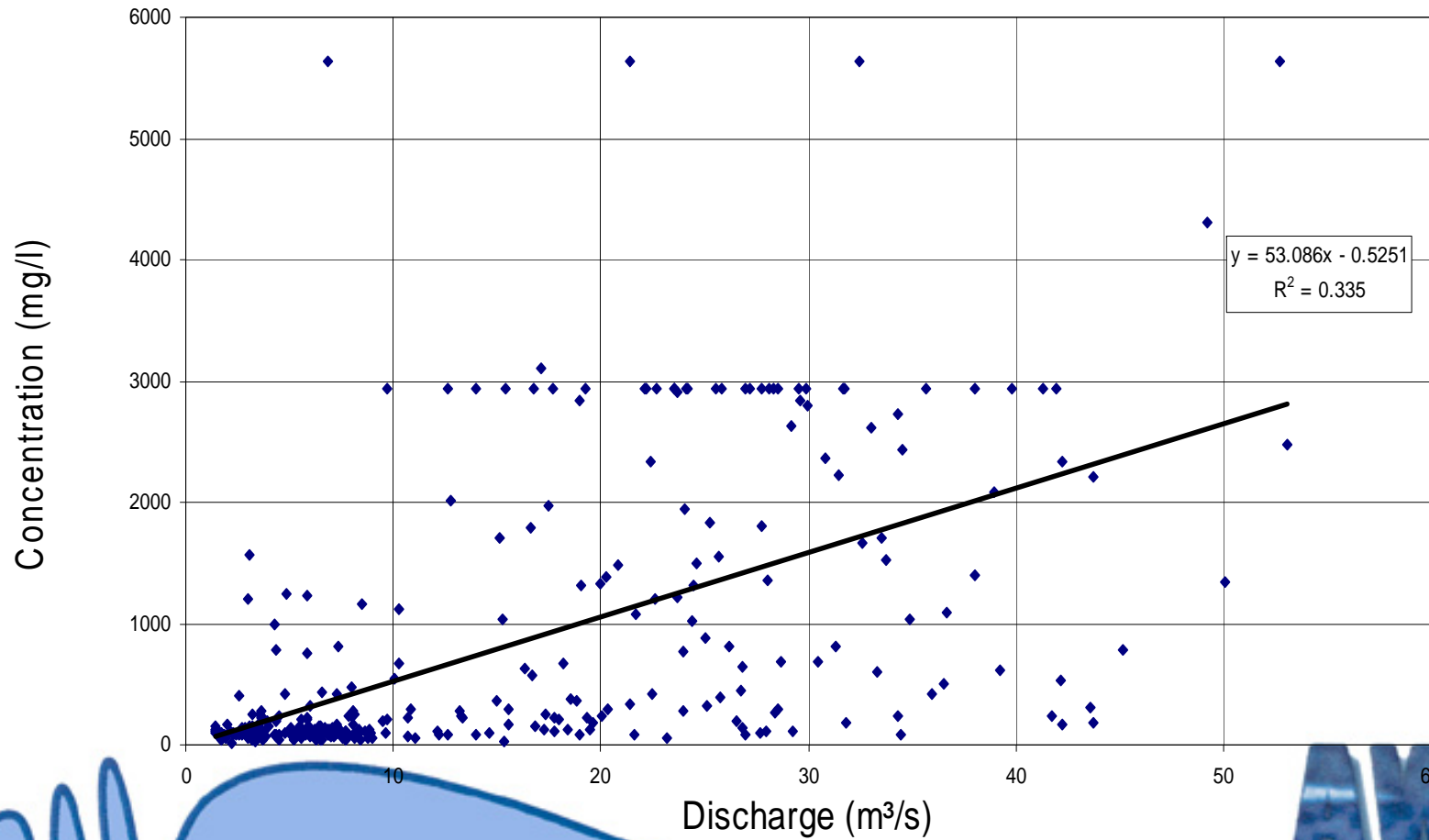
# 3. Data

## Kleine Nete - Grobbendonk 2001



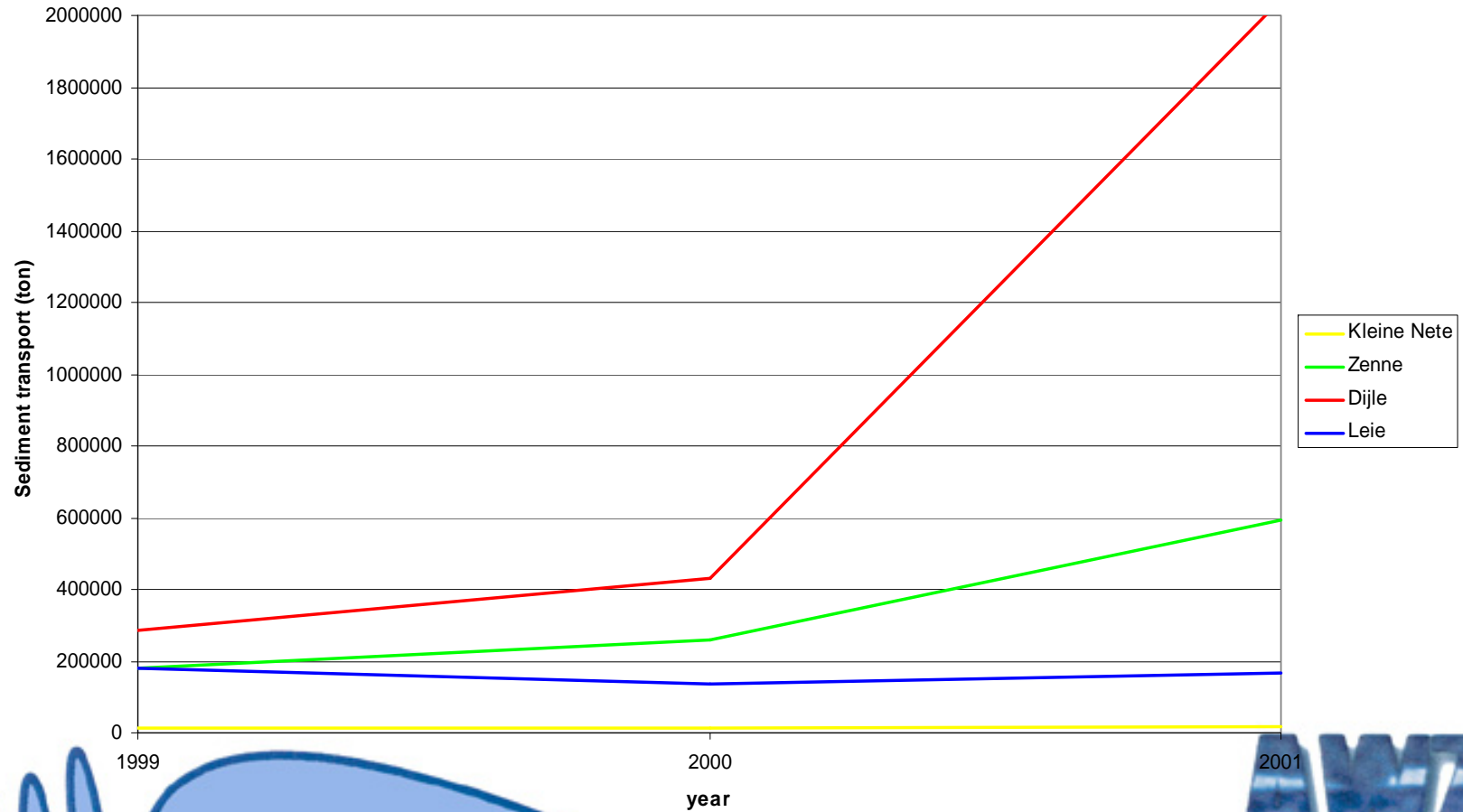
# 3. Data

## Zenne - Eppegem 2001



# 3. Data

## Sediment transport (ton)



## 4. Conclusions

- Data since 1999 : short time series
- Correlation discharge - concentration ?
- Continuous monitoring
- Sediment transport = f (basin characteristics)
- Zenne : sediment transport - urban waste water ?

