

COMBINED SHIP-BASED AND STATIONARY MONITORING OF THE AMSTERDAM CANALS



Hans Korving
Witteveen+Bos



October 19, 2011

Outline

- The background
- The monitoring system
- The results so far
- The next steps



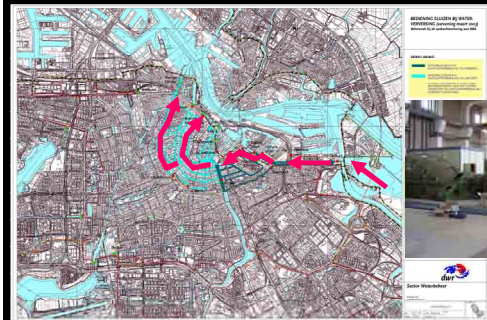
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The background



photo: Albert-Jan Perrier

Flushing of the canal system



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Our questions

- What is the impact of flushing on the oxygen balance?
- What is the impact of flushing on the light climate?
- What is the origin of the water at a specific location?



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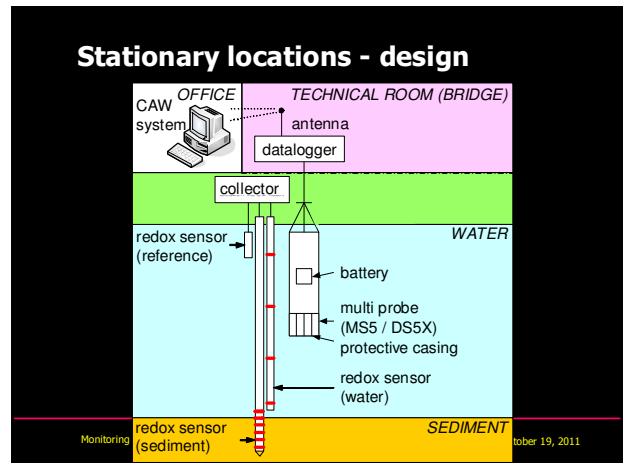
The monitoring system



System layout

● monitoring location
 system boundary

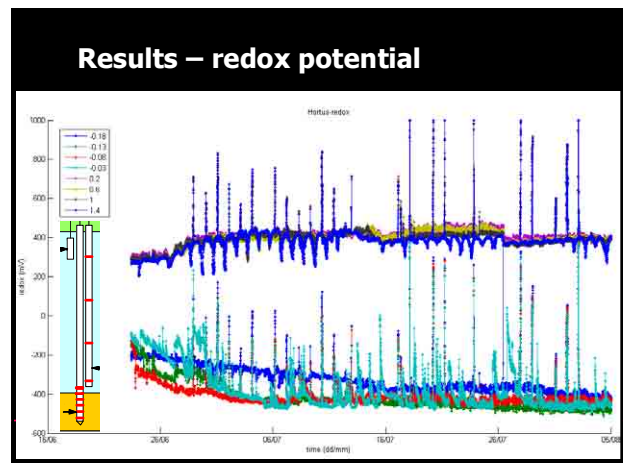
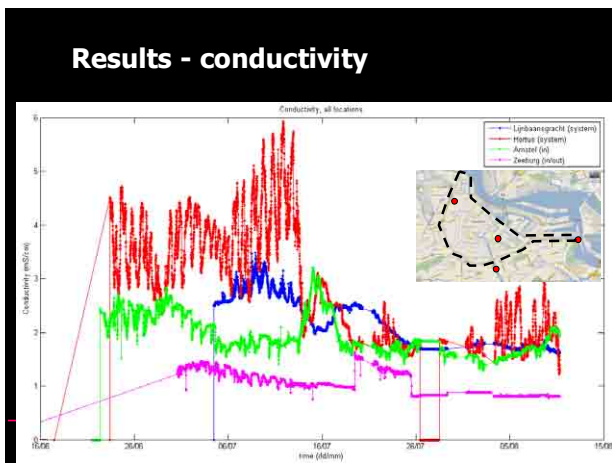
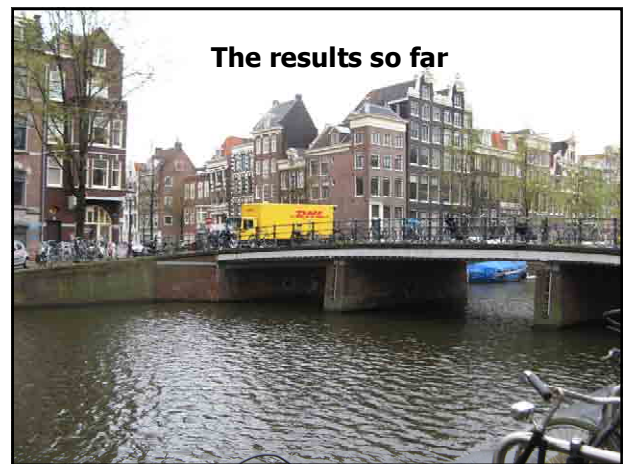
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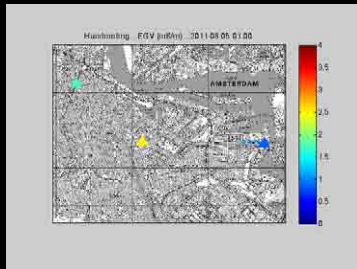
Stationary locations - sensors

- Multi probe
 - oxygen
 - temperature
 - conductivity
 - turbidity
- Redox sonde

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Results - sensor boat



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The next steps



Next steps

- Understand system behaviour based on data
- Combine monitoring results with flow model
- Extend or change layout of monitoring system

- Ultimate goal = "enable" swimming in canals



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Questions?



Witteveen Bos water net

j.korving@witteveenbos.nl