



*WFD innovation project*  
**Wetterlannen**

Sybrén Gerbens  
Location: Waternet  
24 april 2009

- Municipality Tietsjerkstradiel
- Wetterskip Fryslân
- Tauw
- Vitens
- Wetsus
- Van Hall



## Content

1. Definition of the problem
2. Goals of project Wetterlannen
3. Location of the project
4. Why Burgum?
5. Possible solutions

## Definition of the Problem

The water quality has improved in the Netherlands, but is not yet good enough!!

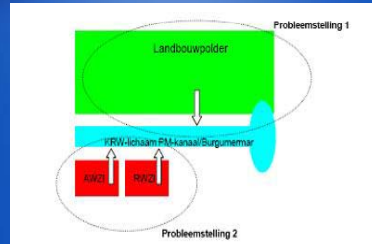
New European Waterframework Directive (WFD)

- Good Ecological surface water quality
- N and P are problem compounds, but also micropollutants

There are many polluting sources (industrial, municipal and agricultural)

In Fryslân :

- Agriculture = 90% N and 60% P
- WWTP = 10% N and 40% P



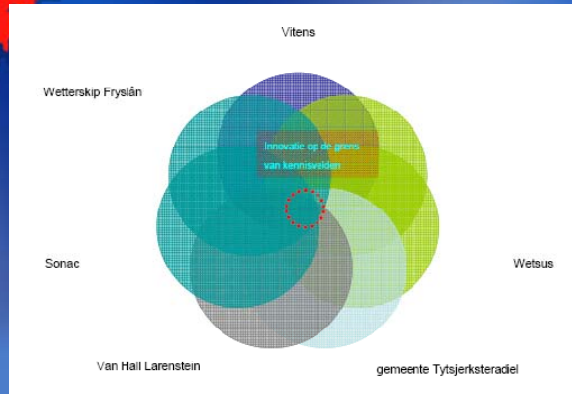
## Goals project Wetterlannen

1. Determine cost effective methods for:

- N and P removal from agricultural sources
- N, P, pathogens and micropollutants removal from municipal and industrial WWTPs

2. Developing knowledge and knowledge exchange of effective WFD-proof technologies

# Knowledge exchange



Symposium in 2010 / 2011



# Project location

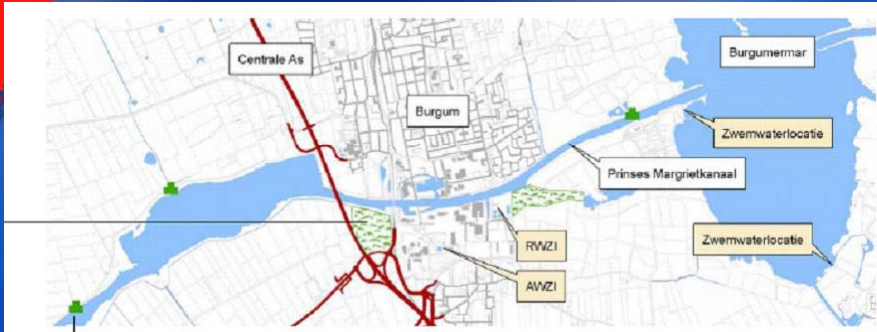


# Why Burgum?

Burgummermeer has many functions

- Recreation
- Bathing water locations
- In future source for drinking water

But also many pollution sources present !!



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# Possible solutions

1. Purifying pumping station
2. Waterharmonica

Helofytenveld AWZI Sonac  
Zuivering nutriëntrijk water  
Realisatie EHS  
Piasdras zones



Zuiverend gemaal  
Zuivering nutriëntrijk landbouwwater  
Realisatie EHS



Helofytenveld RWZI Sumar  
Zuivering nutriëntrijk water  
Realisatie EHS  
Natuureducatie

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**QUESTIONS??**



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