

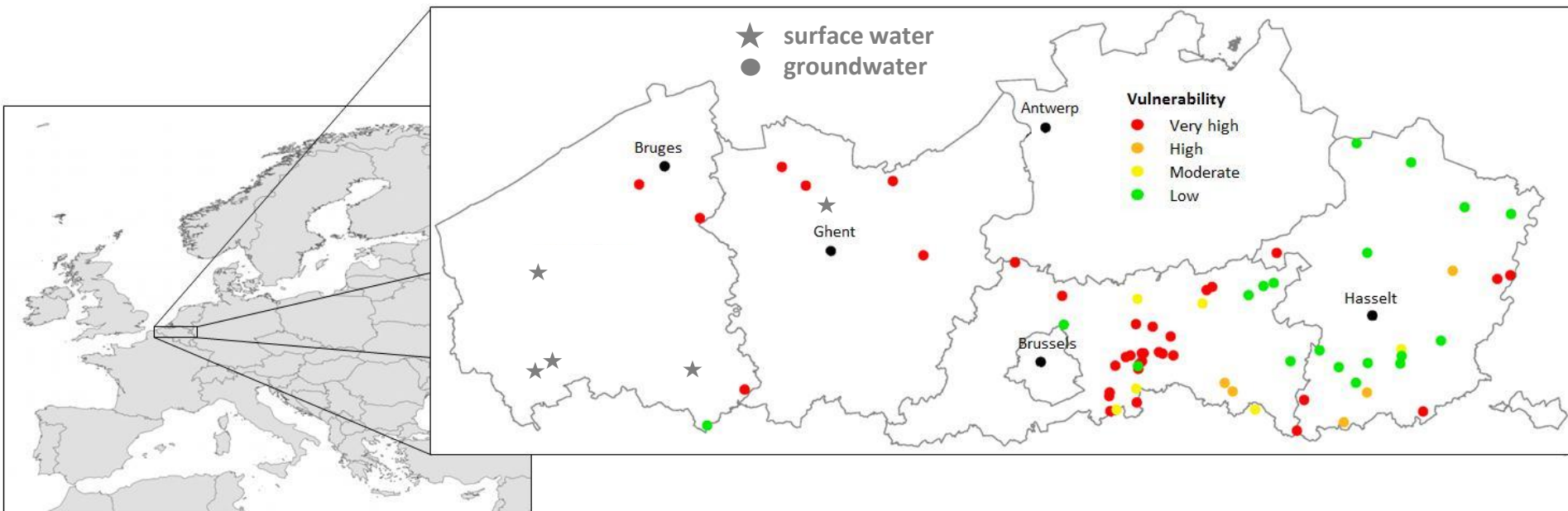
Intensive land use and protection of drinking water sources in Flanders



A bridge over troubled water

De Watergroep : The Flemish water company

- 153 M m³/yr drinking water for 2.9 M people
- 85 groundwater extraction and 5 surface water treatment plants



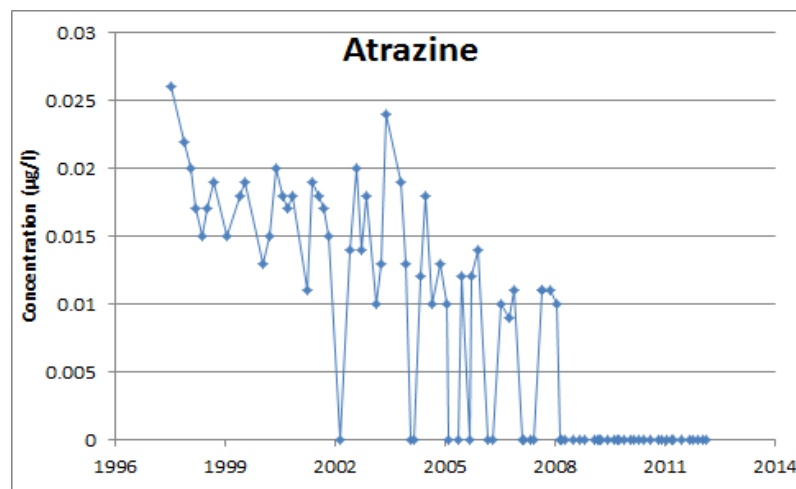
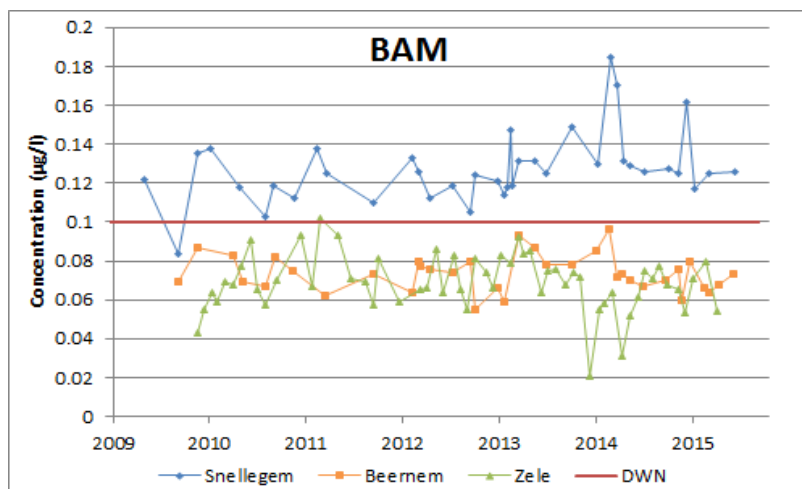
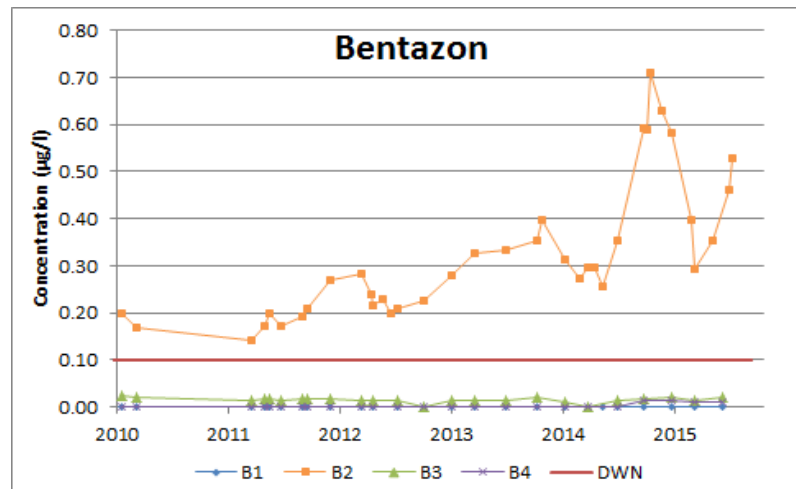
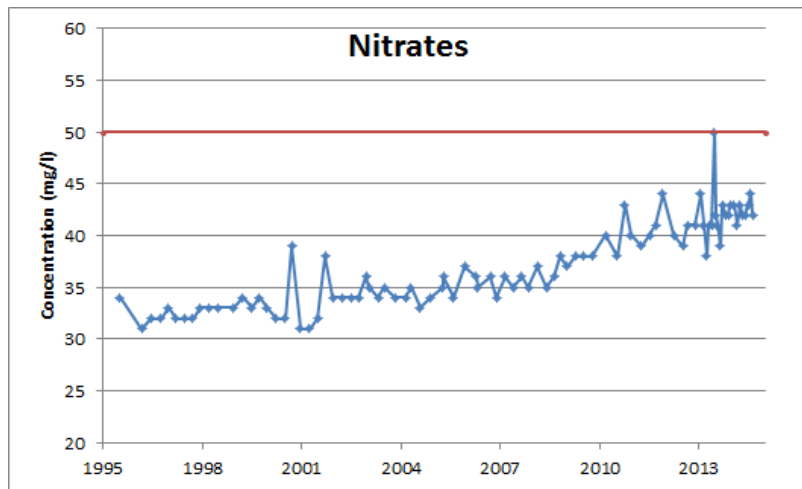
Our drinking water is excellent !

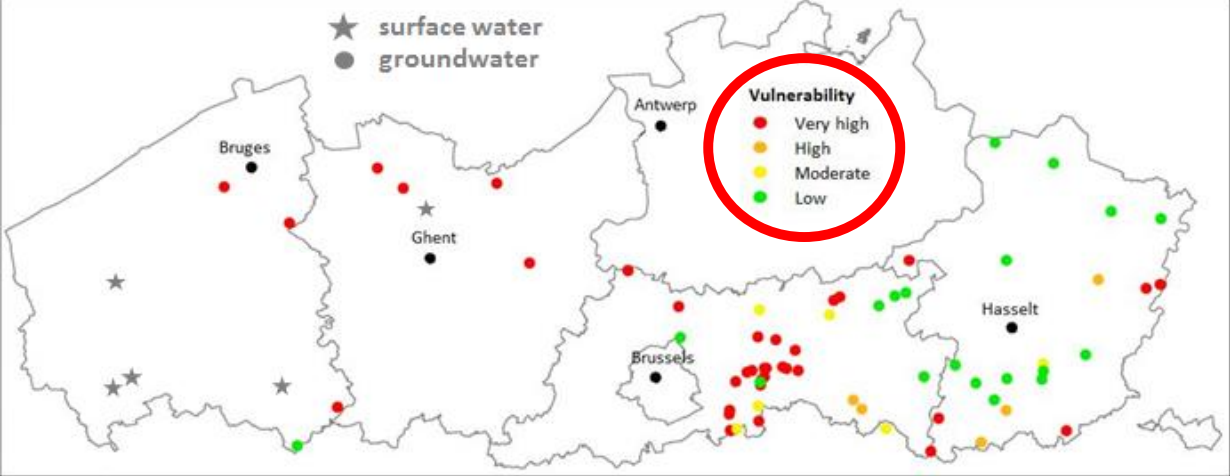


But



Some trends



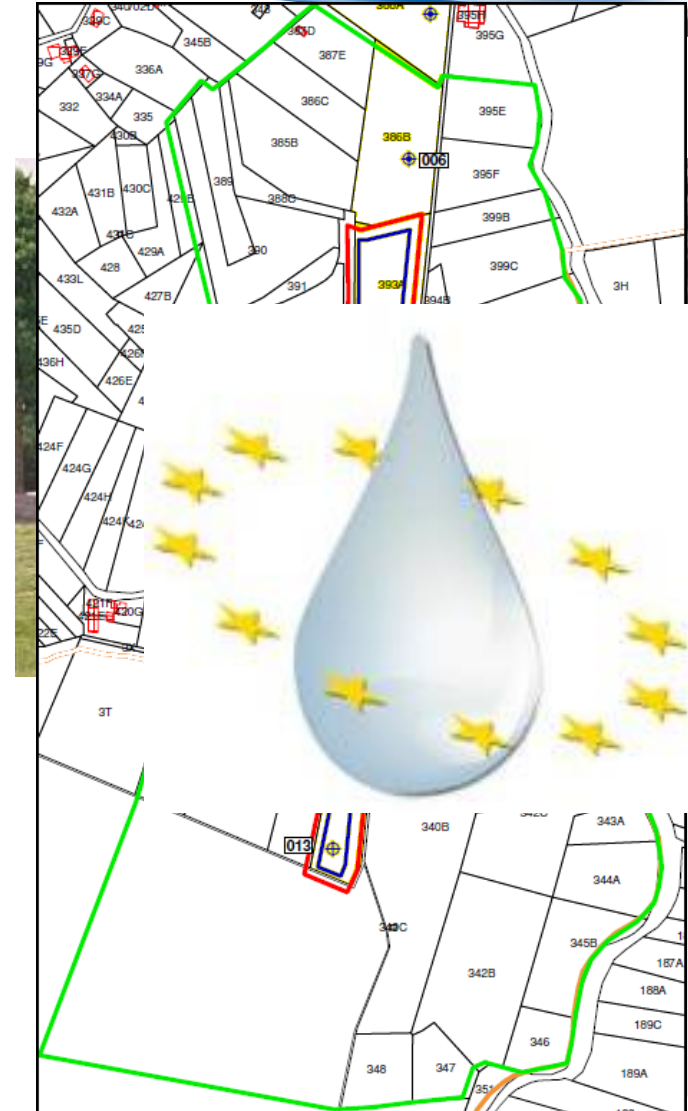


Solution?



Policy actions in the past

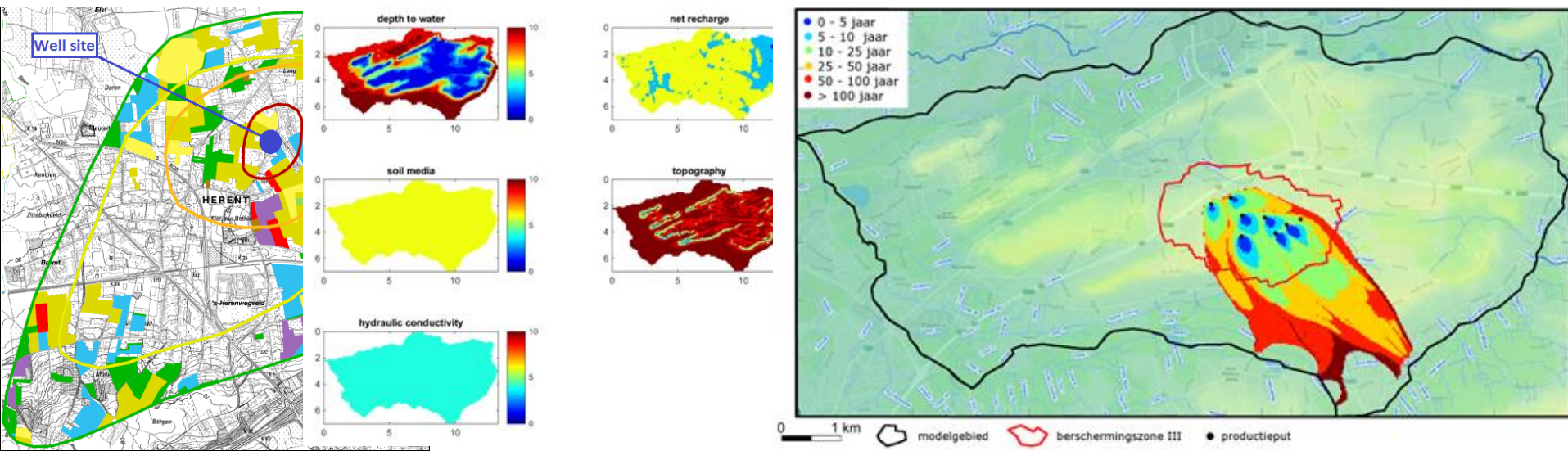
- 1984 : Delineation of protection areas
- 1991 : Manure Reduction Decree
- 1991 : Vlarem
- 2000 : Water Framework Directive
- 2009 : Sustainable use of pesticides in groundwater protection areas
- 2015 : Restriction of pesticides on properties of public services



How to tackle the problem?

• The Watergroep

- Site specific : WSP's with risk based approach
 - Information, analyses, modelling, ...
 - General and site specific actions and measures
 - Stakeholder identification



How to tackle the problem?

- **Policy : more ambitious**

- Stricter legislation
- Proactive
- Invest in protection and remediation

- **Stakeholders**

- Build bridges



Conclusion

- Little improvement, despite legislation
- Drinking water companies as active partner
- More protection, less treatment
- Important :
 - Site specific approach → WSP's as usefull tool
 - Proactive
 - Stakeholder approach



De Watergroep
WATER. VANDAAG EN MORGEN.



EPA 841-N-12-004

Did You Know?

Maintaining the integrity of natural biological and physical systems provides economic benefits through ecosystem service provision.

Degradation of riparian ecosystems can cause negative economic impacts far from the altered site.

Protecting healthy

The Economic Benefits of Protecting Healthy Watersheds

April 2012

Protecting our nation's healthy watersheds makes economic sense

Healthy intact watersheds provide many ecosystem services that are necessary for our social and economic well-being. These services include water filtration and storage, air filtration, carbon storage, nutrient cycling, soil formation, recreation, food and timber. Many of these services have not been monetized and therefore the economic contributions of healthy intact ecosystems are often under-valued when making land use decisions. Ecosystem services provided by healthy watersheds are difficult to replace and most often very expensive to engineer (see chart). An engineered ecosystem service replacement may only provide a fraction of the services provided by highly functioning natural systems.

Preventing impairments in healthy watersheds protects valuable ecosystem services that provide

www.epa.gov/healthywatersheds