Data integration and accounting for sustainable water management in Europe - the Water Information System for Europe (WISE)

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Data integration in WISE - Water Information System for Europe

Air

Shared Environmental Information System

WISE –
Main entry point
for

Water information in Europe

www.water.europa.eu

Land

Water WISE

Econo mics

...

Legal data

- WFD
- UWWTD
- Bathing water

Voluntary data

- •State of env.
- Statistics
- accounting

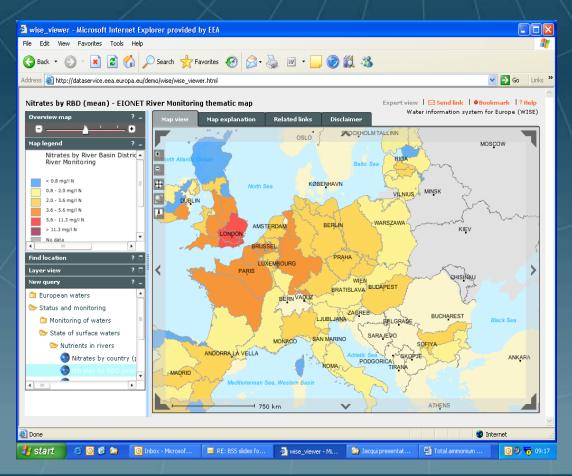
GIS layer

- Common rivers, lakes watersheds
- Monitoring+ gaugingstations



European Environment Agency

Excample Nitrate by river basin districts mean annual concentrations of nitrate measured at River monitoring stations, by river basin districts, during 2005



Data on:

- -Env. quality
- -Treatment
- -Availability
- -Water Use

Ready for **aggregation** into **Indicators**

Source: EC-JRC, 2007



Governance of water data in Europe

- Shared Environmental Information System
 - Institutional cooperation EU bodies and Member States
 - Collect once / use many times (agree on uses)
 - Ensure harmonised formats and clear meta data
- Cooperation from Local to National and Regional (European) scale - Transboundary River Basins
- Sectoral integration statistical, legal, environmental, agricultural, industrial data
- Support water accounts first for water quantity



Key messages

- Successful water management needs integration throughout sectors and monitoring systems; hydrology, environmental data and economics
- Link ALL water data, assessments and accounting to the relevant hydrological units - challenge for statistics
- Organisation in Shared Information Systems ensures transparent and efficient governance.
- Shared Systems leave data and information and basic QA/QC at source, but needs streamlining of definitions and assessment/accounting methodologies
- Statistical and in-situ data need integration with remote sensing, "near real-time" and global observatories

