Indian-European Water Partnership Workshop on RBM Planning and Governance, New Delhi 14-15 June, 2016

Data collection, sharing, processing and dissemination for RBM purposes

Peter Kristensen

EEA - Project Manager - Water

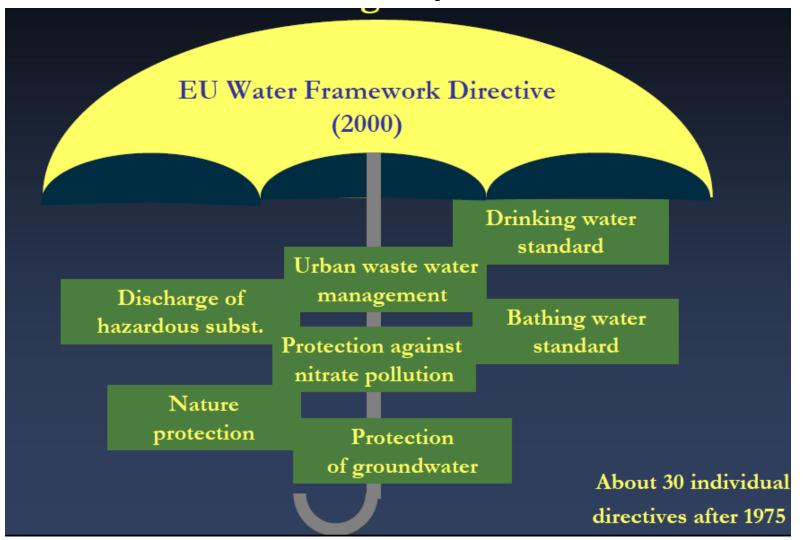
&

Bo N Jacobsen (presenter)

EEA - Project Manager emeritus - Water



EU water policies



Easy, free, public on-line access to updated EU water legislation



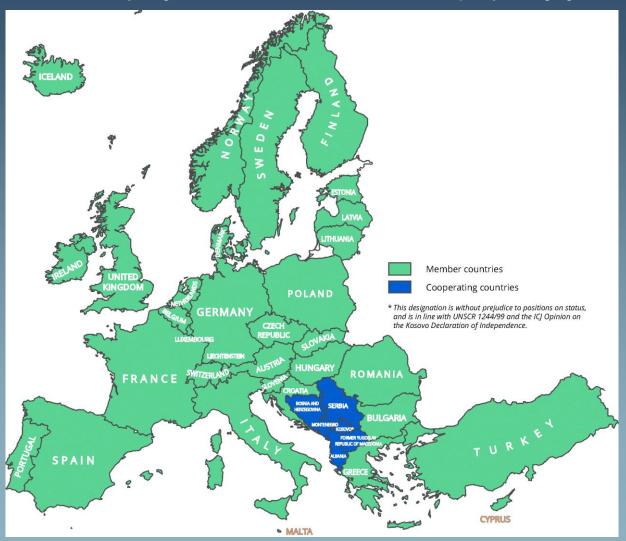
Link

- a part of WaterInformationSystem forEurope (WISE)

EEA member countries as per 2014

EEA Mission statement

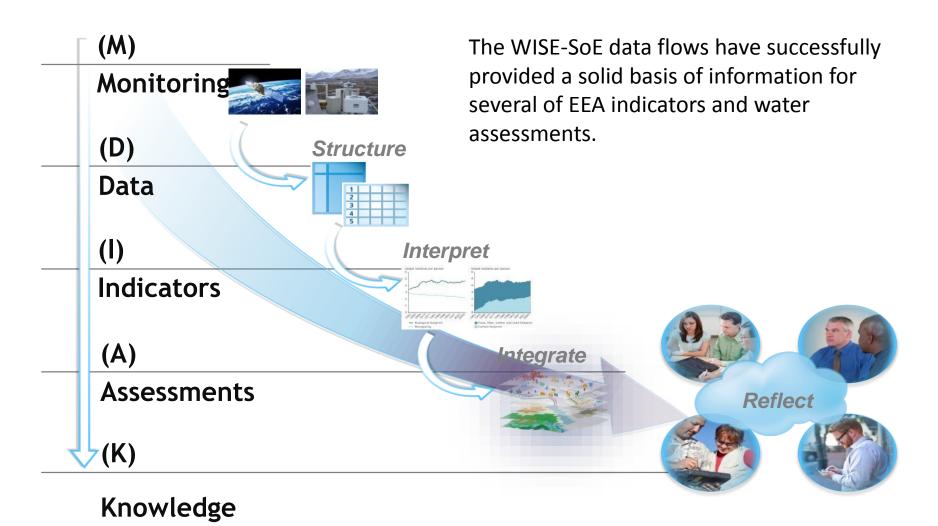
The European Environment Agency aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment through the provision of timely, targeted, relevant and reliable information to policymaking agents and the public.



EEA has a network of more than 300 institutions in 39 countries



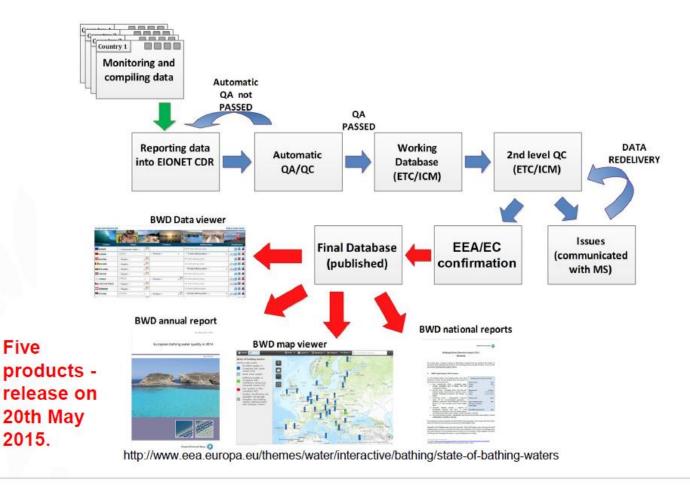
The MDIAK Information Chain



Visualisation of data flow

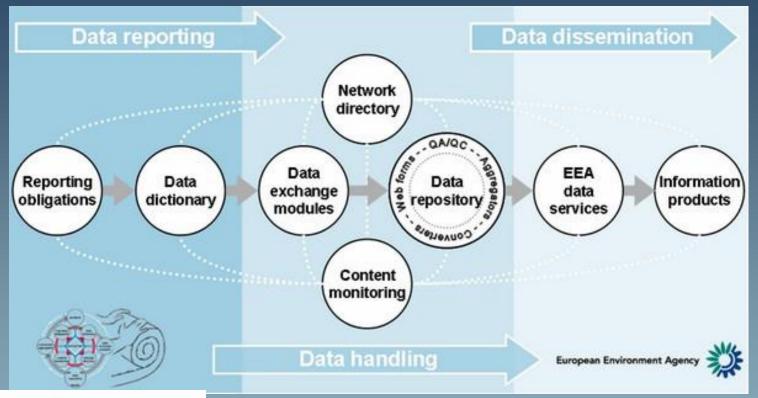
- example by EU Bathing Water Directive

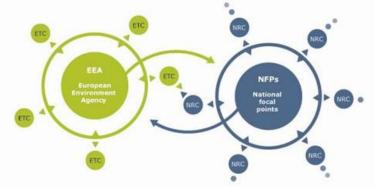
Data processing and publication



Five

Data reporting from countries to EEA Eionet State of the Environment (SoE) via Reportnet



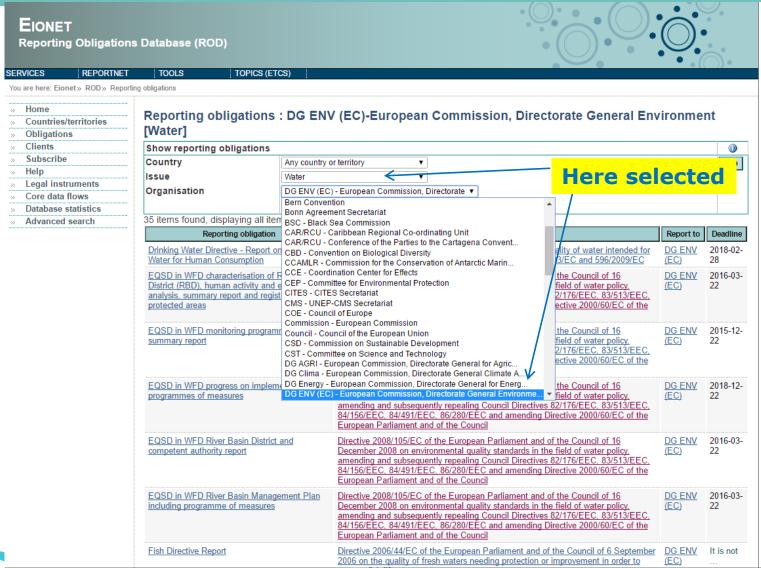


Similar data pathways apply for EU directives



Reporting Obligations Database (ROD) provides an interactive overview

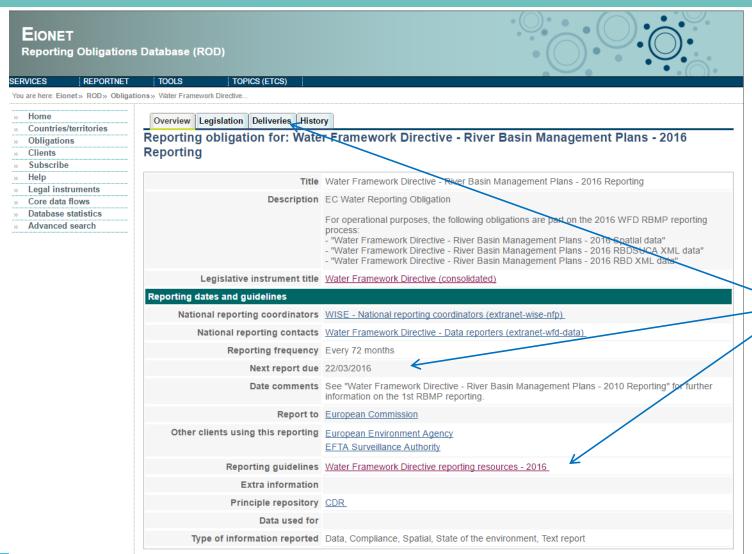








Access to guidelines (with data dictionaries), reporting deadlines and list of deliveries provided for each dataflow





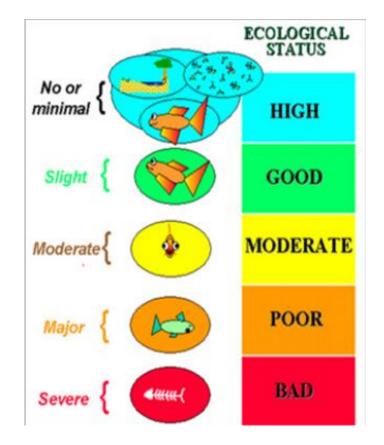


European Union: Water Framework Directive

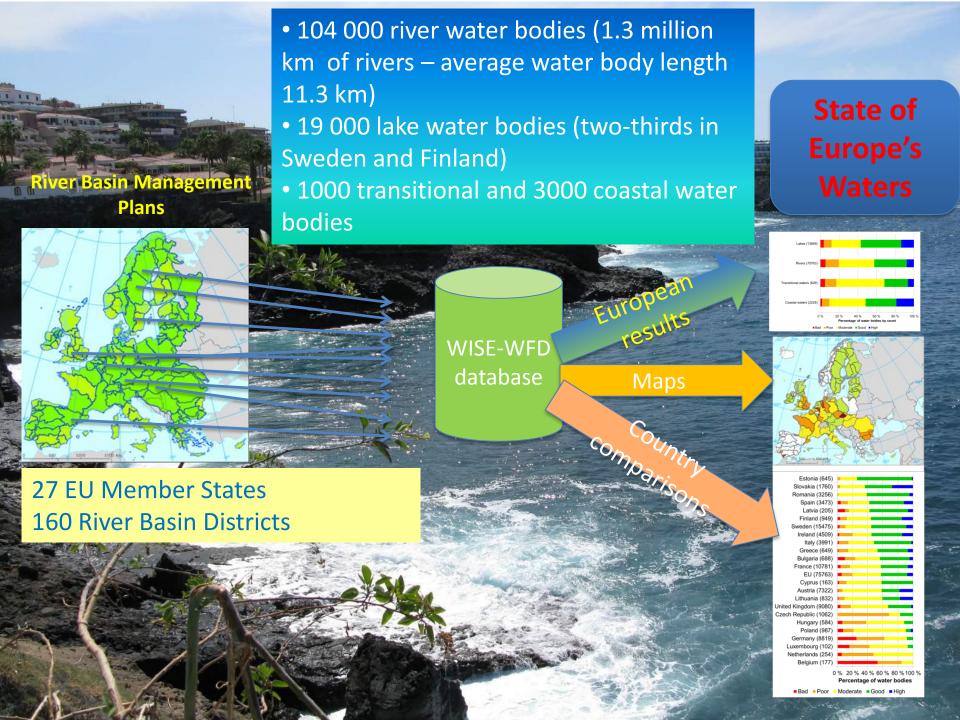
- Introducing the river basin approach
- Protecting all water bodies, including transitional waters and coastal waters
- Covering all impacts on waters



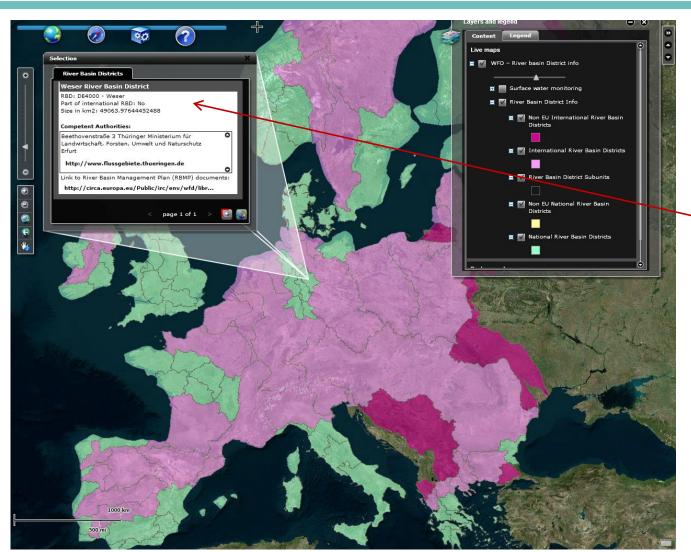
Achievement of good status in all water bodies and no deterioration of status







Interactive map viewer on basic RBD info



Link

Pop-up windows give basic information on each River Basin District (RBD), the competent authority and link to River Basin Management Plan (RBMP) documents

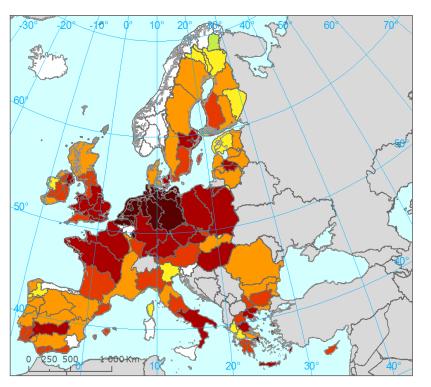




European overview of ecological status of rivers and lakes

- based on 1st WFD River Basin Management Plans reported 2010

% Water Bodies in less than good ecological status



- More than half the surface water bodies in Europe are reported to be in less than good ecological status or potential.
- The <u>worst areas</u> of Europe concerning ecological status and pressures in freshwater are reported from Central Europe.
- Only few River Basin Districts are close to the aim of WFD of achieving at least good status

% of classified water bodies in less than good ecological status or potential (left map: rivers and lakes, right map: transitional and coastal waters)

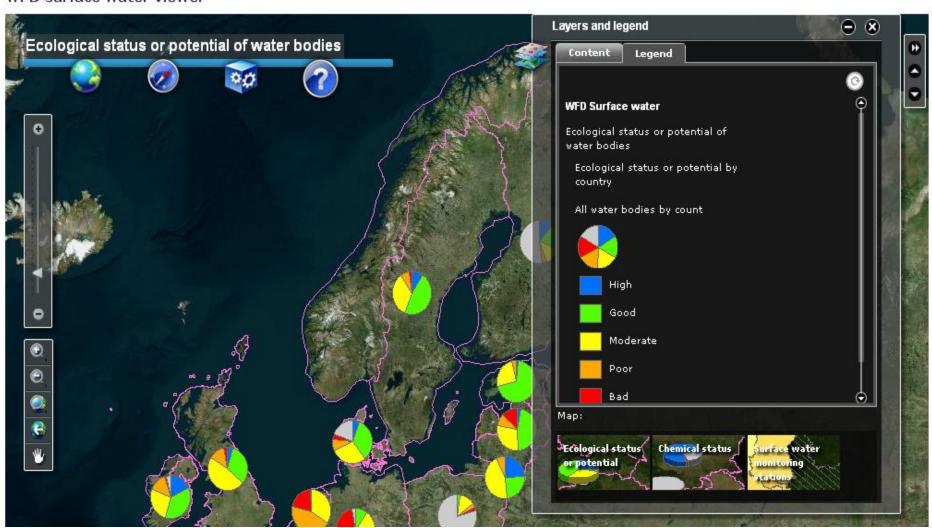
_____ no data reported _____ <10 % _____ 10-30 % _____ 30-50 % _____ 50-70 % _____ 70-90 % _____ >=90 %



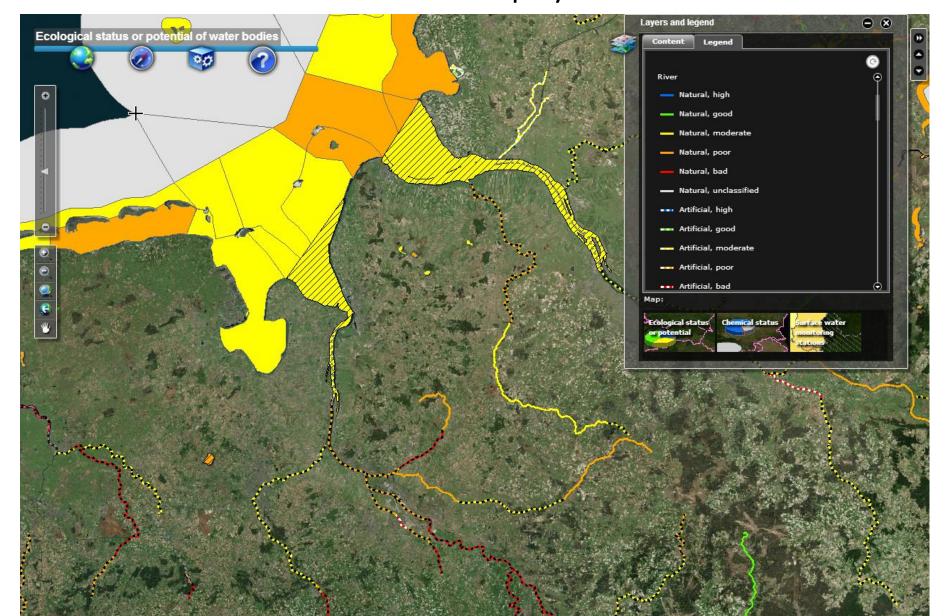


WFD: Surface Water Viewer

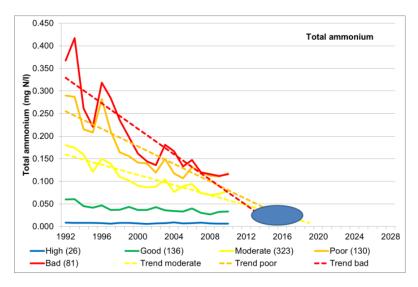
WFD surface water viewer

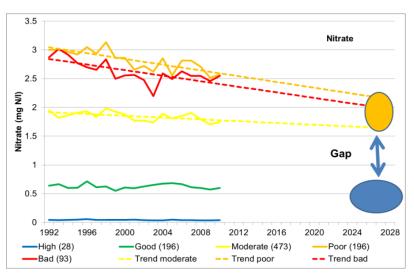


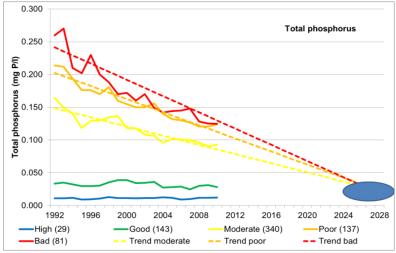
By zooming, the status of main rivers, lakes and coastal water bodies is displayed Link



Ecological status and nutrients - trends













From EEA's State-of-the-Environment Report SOER 2015: Cross-country comparisons

Freshwater quality — nutrients in rivers



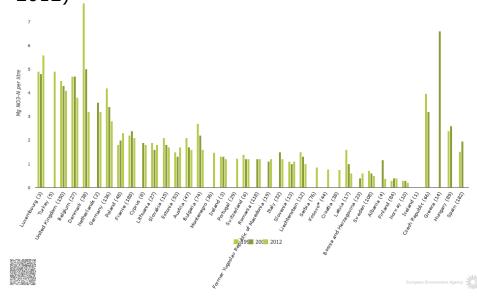
© Katarzyna Dąbrowska/EEA

Nutrient enrichment of Europe's freshwaters is a concern, with pollution from agriculture a cause of poor water quality.

Average nitrate concentrations in European rivers reduced by over 20% between 1992 and 2012, whilst orthophosphate concentrations more than halved.

Enhanced integration of water policy objectives into other policy areas, especially agriculture, is essential to ensure that a sufficient quantity of good quality water is available for people's needs and the environment.

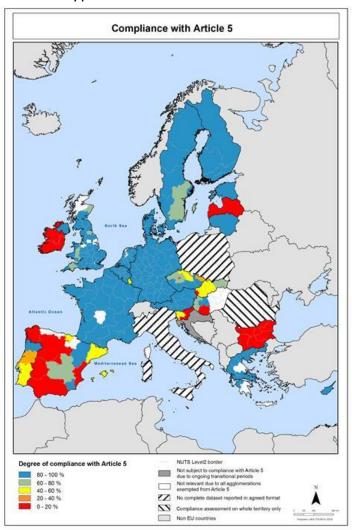
Average concentration of nitrate-nitrogen in rivers in 38 European countries (1992, 2000 and 2012)



Setting the scene

Urban waste water treatment

Art. 5: type of treatment in sensitive areas



Source; DG ENV, 2016 link

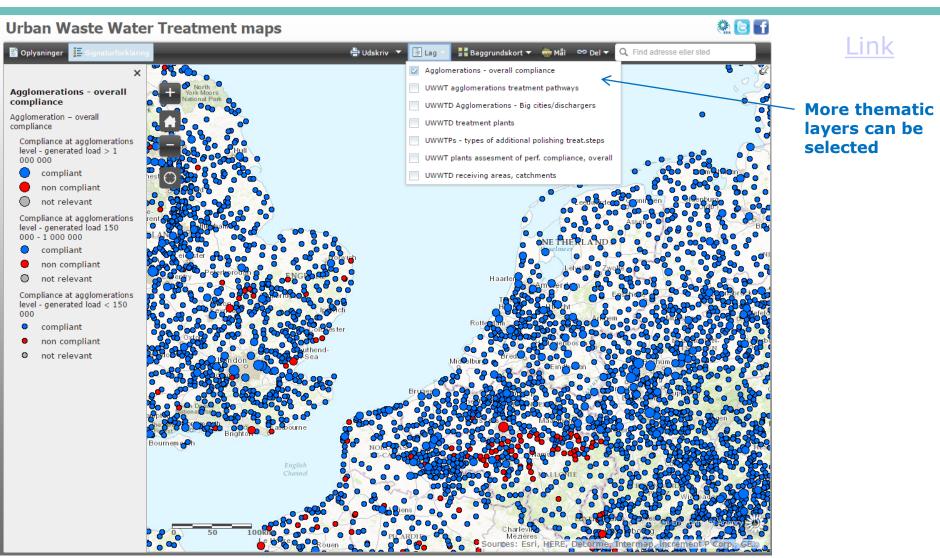








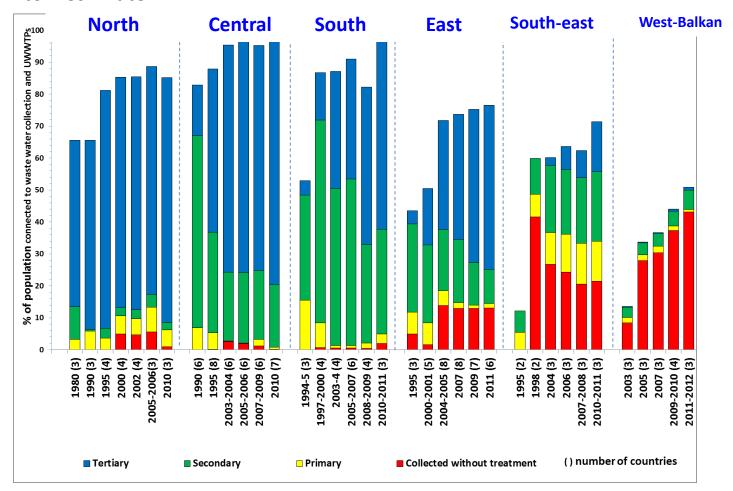
UWWTD: compliance status for each agglomeration displayed in interactive mapviewer





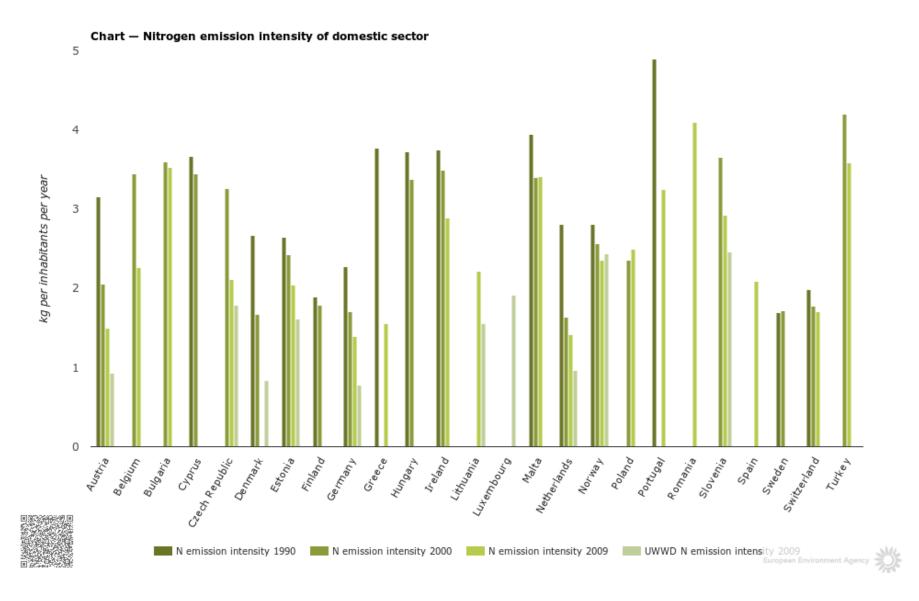
Improved urban waste water treatment

 Implementation of the UWWTD has led to improvements in wastewater treatment and a reduced discharge of nutrients and organic pollution to freshwater.



Data reported to European institutions can be used across data flows (SEIS principle)

- here combining data from Eurostat with DG ENV (UWWTD) into an EEA indicator



European Bathing Water Quality in 2015

EEA Report | No 9/2016

European bathing water quality in 2015

Annual reporting of Bathing Water quality
(EN, DE and FR)

- 30 National reports
- Map viewers

Our assessment shows that bathing water quality has improved remarkably over the years. More and more bathing waters have not only reached the minimum requirements, but have improved to excellent standards. In some cities, people can even enjoy swimming in public harbour baths.









WISE Bathing Water interactive map viewer

Overview at country level



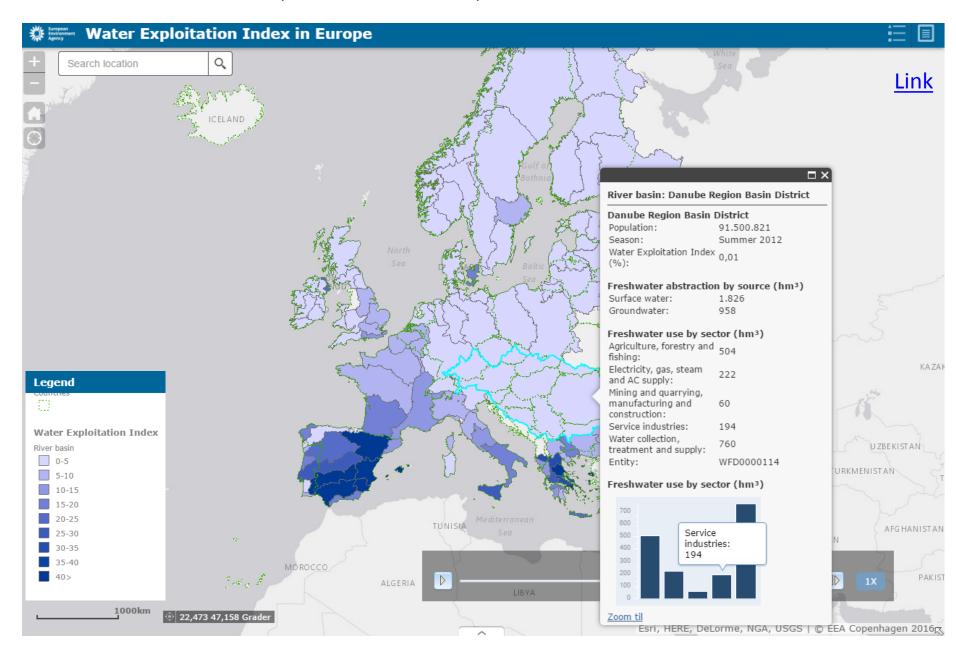
WISE Bathing Water interactive map viewer

- More detailed zoom level display individual beaches and link to national profiles



Water quantity: Indicator for water exploitation per RBD

WEI+ = (Abstractions - Returns)/Renewable Water Resources





Q Search Europe's environment... Search

Advanced search A-Z Glossary

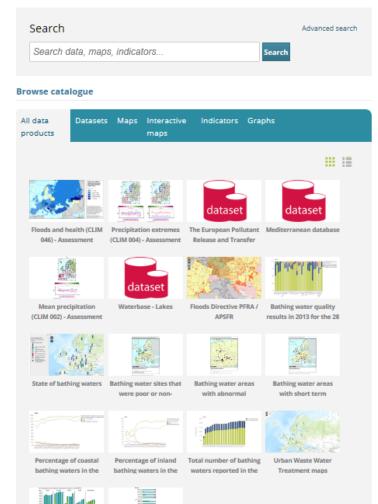
About EEA

ppics Data and maps Indicators Publications

You are here: Home / Environmental topics / Water / Data centre overview

Data centre overview

The Water Data Centre provides the European entry point for water related data as part of the Water Information System for Europe (WISE). You can browse the catalogue of European datasets, interactive maps and indicators.





WISE products
available from
Water Data Centre
at EEA

<u>link</u>



Wrap-up (1/2)

- All reporting to EU directives (DG ENV), State-of-the-Environment (EEA) and water statistics (Eurostat) takes place electronically
 - Reporting to EU directives and data processing takes place via EEA (Reportnet)
 - EU directives compliance assessment conducted by DG ENV
- The level of aggregation differs, but in general, the data policy allows for public access to the reported data
- The transparent and open data policy allows for sharing of data across data flows and development of dissemination products both targetted for the expert user and the public at large
- The open data policy giving public access to datasets, indicators and other dissemination products has several advantadges, e.g.;
 - saves a lot of time by stakeholder self-service to access and use data
 - Builds up trust and confidence
 - Qualifies the public debate and dissemination via the media
 - Raises environmental awareness and acknowledges progress





Wrap-up (2/2)

- There is always a risk for "misuse" of data out of their context and significance – however, such risk is minimised, e.g.
 - by publishing assessments on status, trends and
 - balanced highlights of important aspects
 - Telling the stories in indicator assessments directly useable by the media
- The buildup of reporting systems at European level has taken place over > 2 decades
 - Has required considerable resources both at the European and national levels
 - It only works when environmental legislation, monitoring programmes, planning and coordination is in place
- Continous technical development takes place in cooperation with Member States to
 - further improve QA/QC routines (data quality)
 - accellerate and facilitate the reporting by direct linking with national datasets (timeliness)

Hopefully, this presentation can give inspiration for Indian authorities for buildup of environmental systems for Ganges / India





Thank you for your attention

More information



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water.europa.eu

