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# ACTIVITIES OF CIS WG GROUNDWATER

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Environment Agency Austria

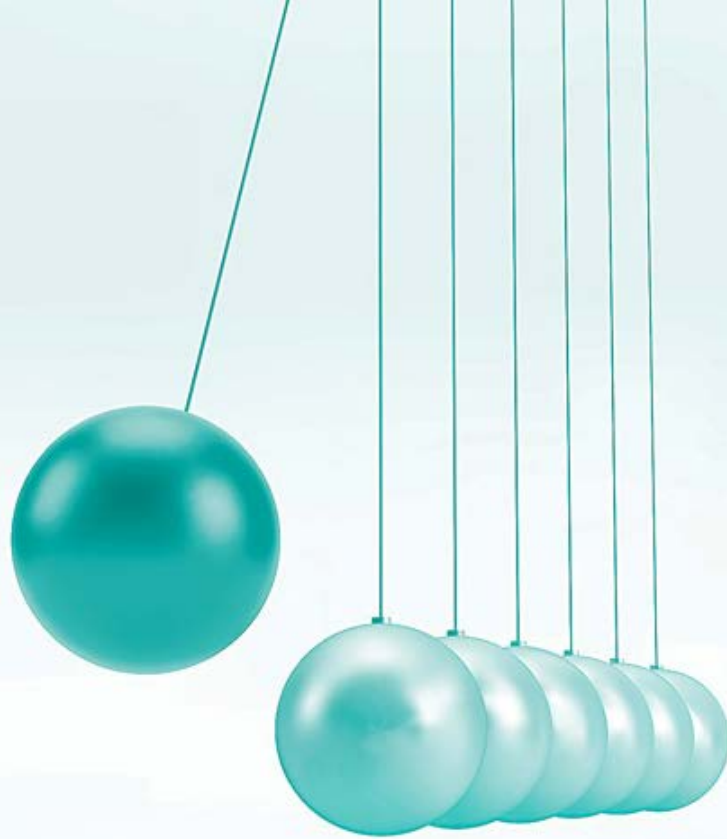


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# OVERVIEW

- Introduction
- Challenges for Groundwater Management
- CIS WG Groundwater
- Current Activities of CIS WG Groundwater

# ENVIRONMENT AGENCY AUSTRIA



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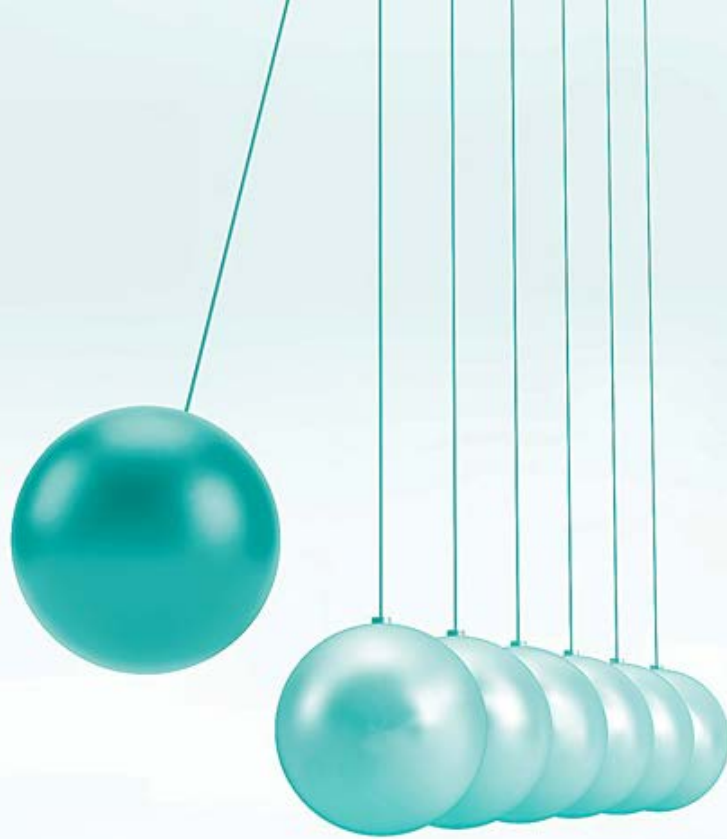
# ENVIRONMENT AGENCY AUSTRIA – FACTS & FIGURES

- **founded in 1985** under the **Environmental Control Act**
- since **1999** under the legal status of a **Limited Liability Company**
- more than **500 employees**
- more than **45 Mio.€ turnover**
- experience in more than **60 countries**
- partner in more than **200 networks**



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# CHALLENGES FOR GROUNDWATER MANAGEMENT

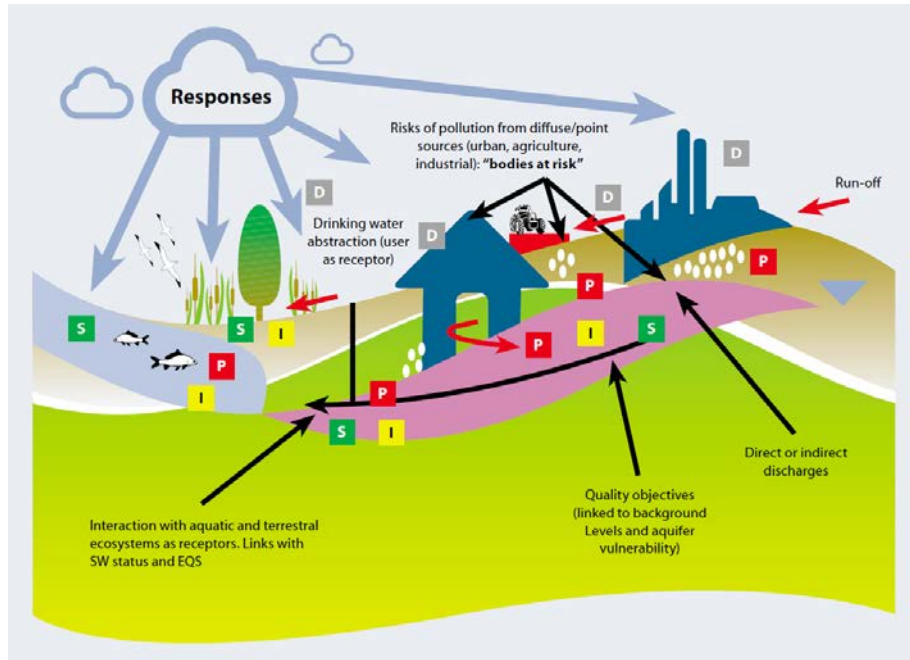


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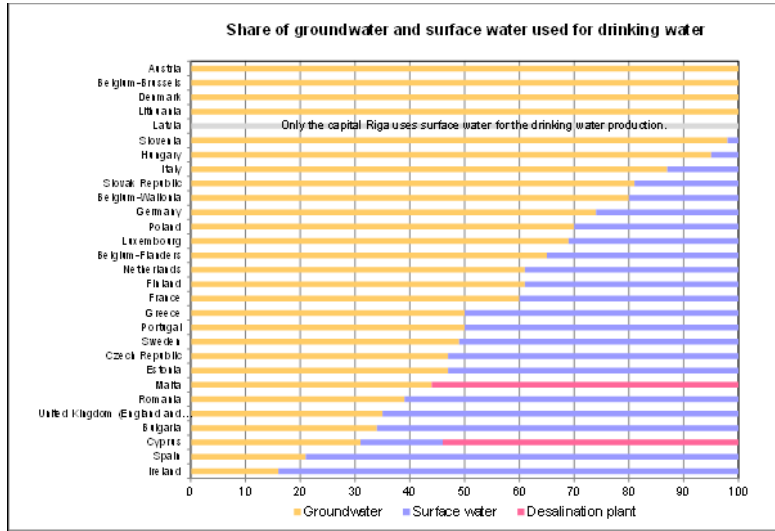
# DIVERSITY OF USES, PRESSURES AND IMPACTS



Source: European Commission 2008:  
*Groundwater Protection in Europe*

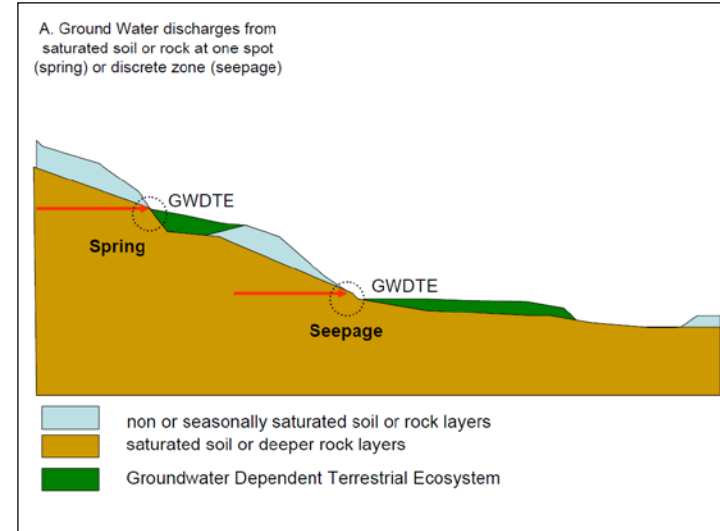
# SOME GROUNDWATER USES & RECEPTORS

In many EU Member States  
> 50% groundwater used for drinking water



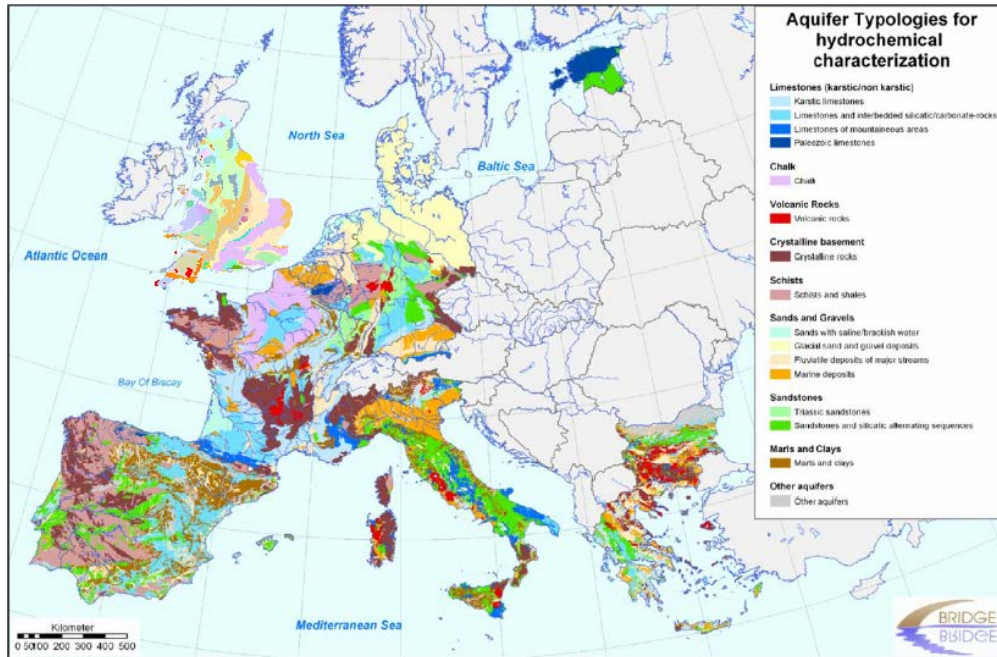
Source: 'Pressures and Measures study' - taken from EC SWD (2012) 379 final

Groundwater dependent terrestrial ecosystems



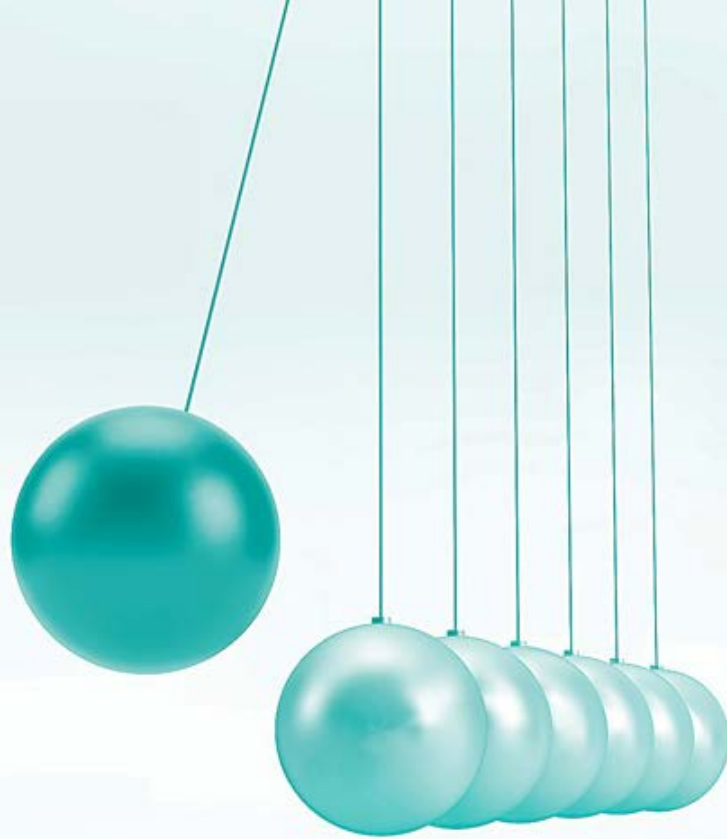
Source: CIS Technical Report No. 6 on Groundwater Dependent Terrestrial Ecosystems

# DIVERSITY OF CHARACTERISTICS IN EUROPE



Source: BRIDGE research project

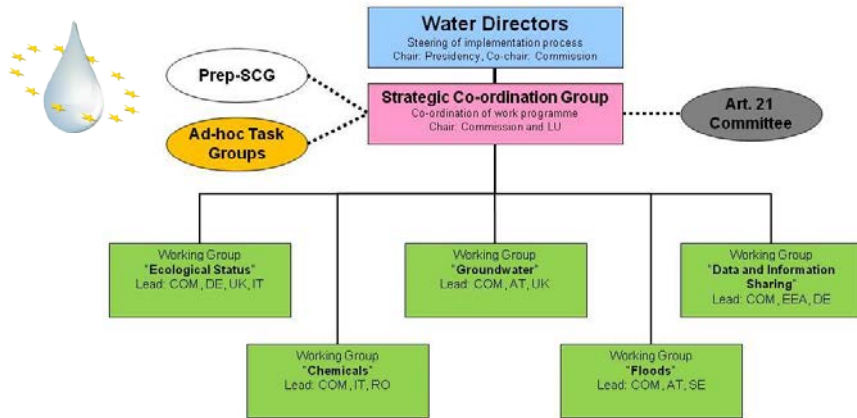
# CIS WG GROUNDWATER



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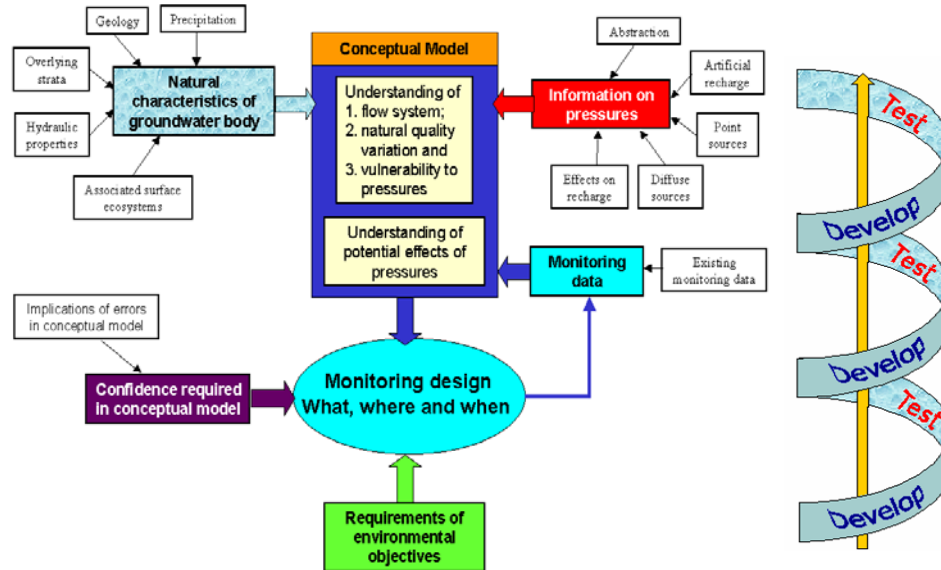
Source: CIS Work Programme 2016-2018, Nov. 2015

-  Guidance No 15 - Groundwater Monitoring (WG C)
-  Guidance No 16 - Groundwater in Drinking Water Protected Areas (WG C)
-  Guidance No 17 - Direct and indirect inputs in the light of the 2006/118/EC Directive
-  Guidance No 18 - Groundwater Status and Trend Assessment (WG C)
-  Guidance No 22 - Updated WISE GIS guidance (Nov'2008)
-  Technical Report N°1 on Groundwater Trends
-  Technical Report N°2 on Groundwater Characterisation
-  Technical Report N°3 on Groundwater Monitoring
-  Technical Report N°4 on Groundwater Risk Assessment
-  Technical Report N°5 on Groundwater Management in the Mediterranean
-  Technical Report N°6 GWDTEs

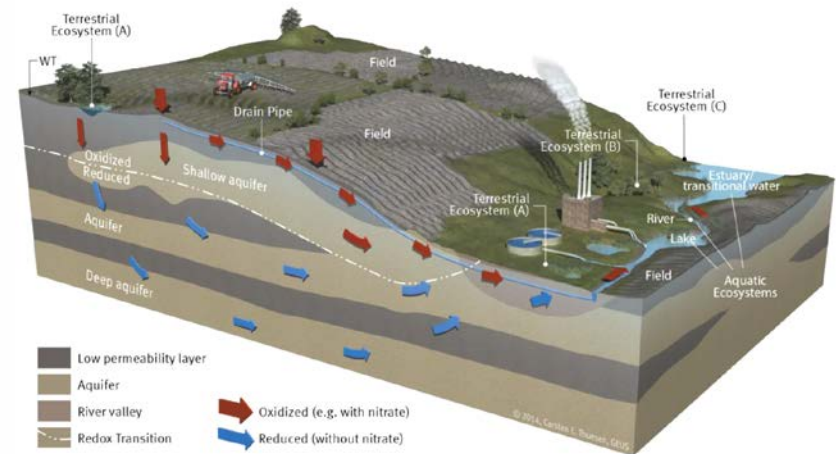
# WFD COMMON IMPLEMENTATION STRATEGY

- develop a common understanding and approaches
- elaborate technical guidance including best practice examples
- share experiences and resources
- avoid duplication of efforts
- limit the risk of bad application
- involve stakeholders & candidate countries

# CONCEPTUAL MODEL / UNDERSTANDING



Source: CIS Guidance Document No. 7 on monitoring under the Water Framework Directive



Source: CIS Technical Report No. 6 on groundwater associated aquatic ecosystems, modified Hinsby et al., 2008, 2012

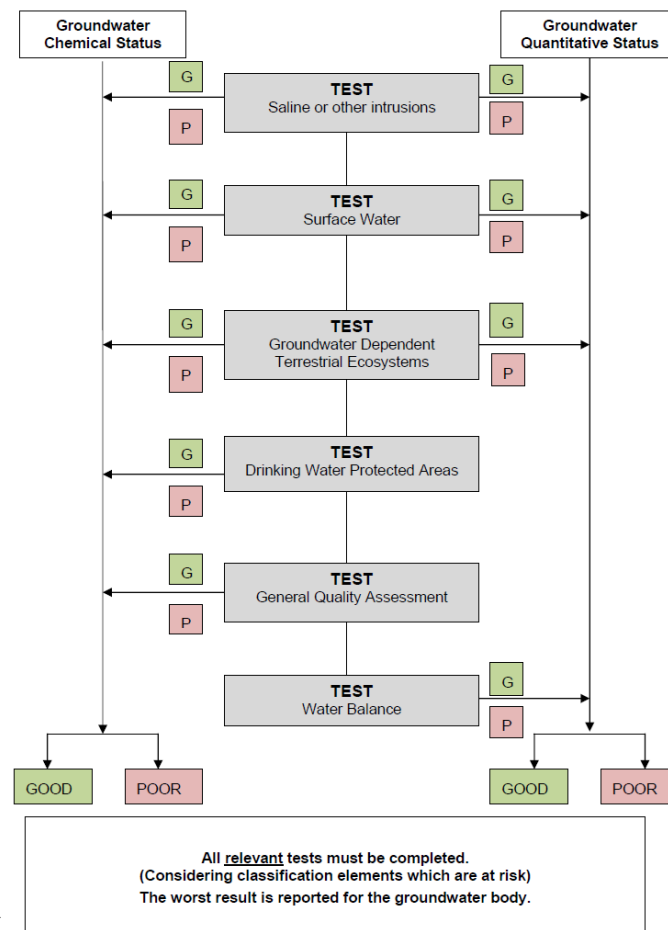
# STATUS ASSESSMENT ENVIRONMENTAL OBJECTIVES

## Quantity

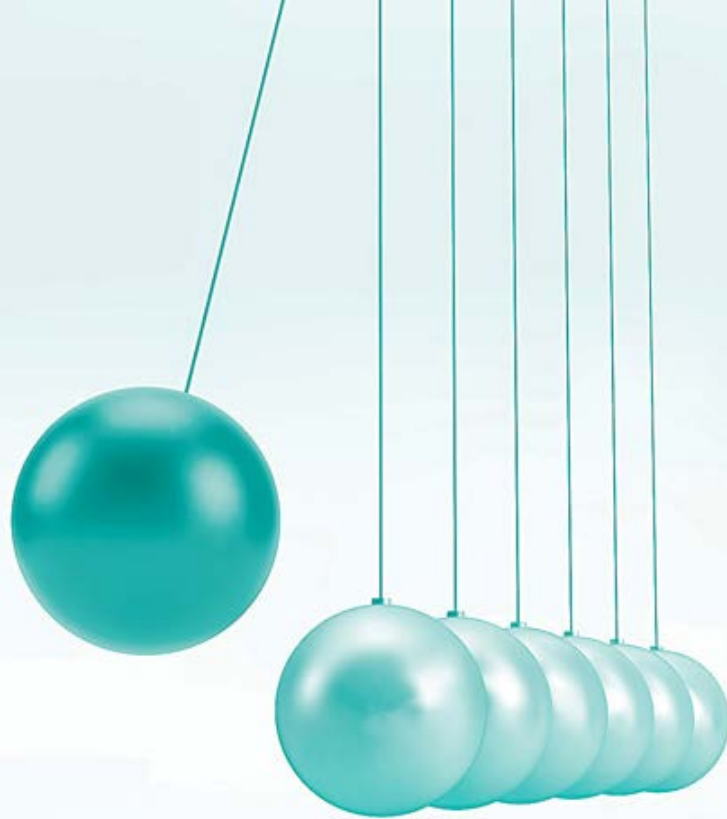
- Balance between natural recharge and abstractions

## Chemistry

- No saline or other intrusion
- Compliance with numerical **quality standards** (EU-wide and national)
- No diminution of associated aquatic ecosystems
- No deterioration of dependent terrestrial ecosystems



# CURRENT ACTIVITIES OF CIS WG GROUNDWATER



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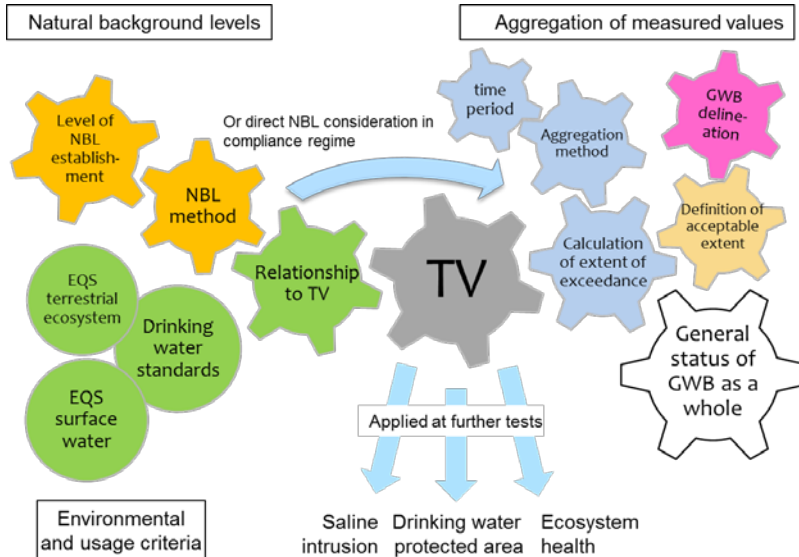
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# WG GW – CURRENT ACTIVITIES

- Methodologies for threshold values establishment
- Voluntary Groundwater Watch List
- Continuation of cooperation between DWD committee and CIS Working Groups GW and Chemical.

# VARIABILITY OF THRESHOLD VALUES



Source: Scheidleder (2012)

## Background

- huge differences in the ranges of TV's values across Europe were identified
- due to different consideration of requirements, characteristics and behaviours of pollutants and differences in background levels.

(The Commission's report C(2010) 1096 final )

- in-depth assessment was conducted in 2012
- Further investigation in 2015

## Objective

- elaboration of a technical report summarising the findings, and showing options for improving comparability of threshold values

# VOLUNTARY WATCH LIST GROUNDWATER

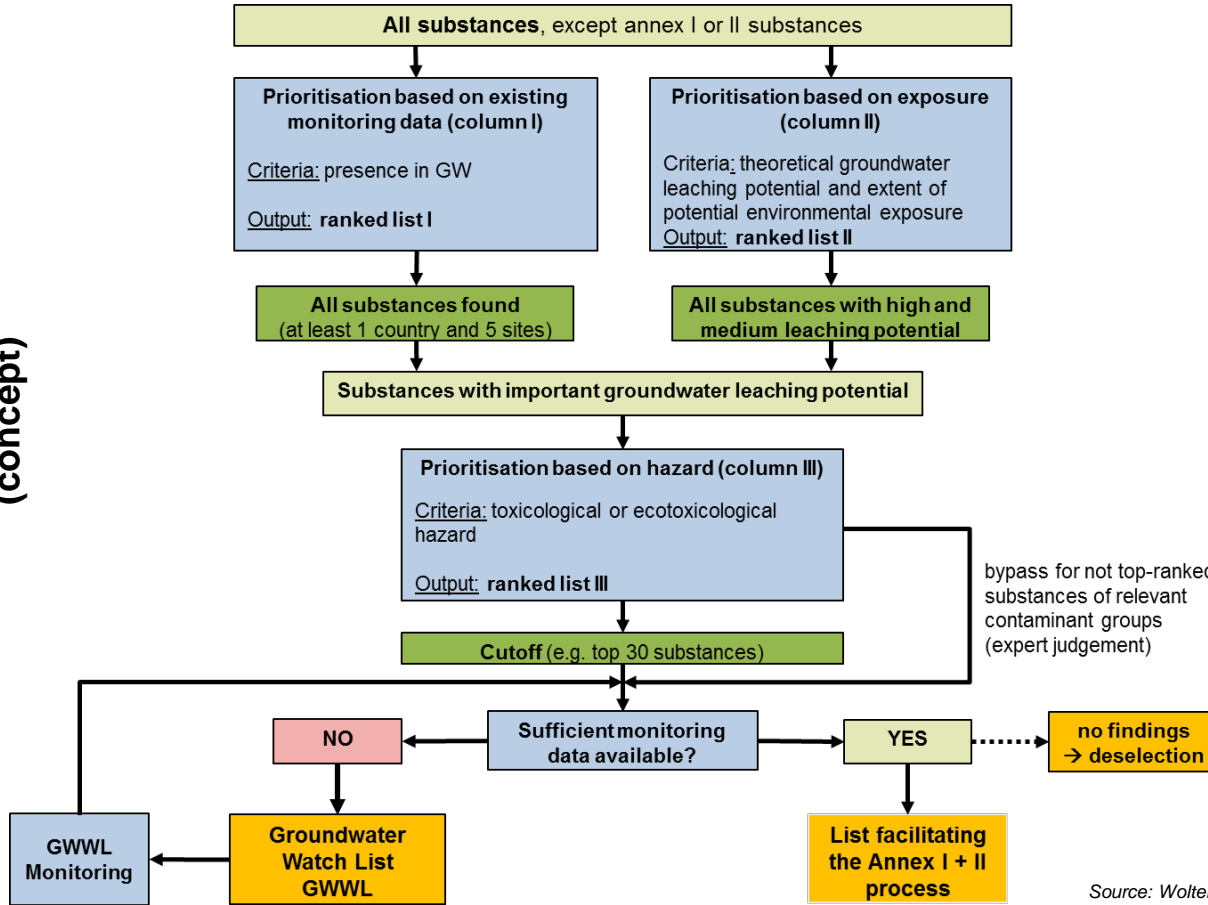
## Background

- GWD Art.10 requires periodic review of Annexes I and II – performed in 2012/13
- Introduction Recital 4 of the new directive identifies “the need to obtain and respond to new information on other substances posing a potential risk”

## Purpose and scope of voluntary groundwater watch list

- Identify new/emerging substances which have the potential to cause a failure of a WFD objective, based on new information;
- Assist MS in selecting substances to improve groundwater monitoring programs;
- Provide information to support future European Commission review of Annexes I and II of the GWD.

# Groundwater Watch list process (concept)



Source: Wolter R. & Kozel R. (2017)

# INFORMATION EXCHANGE WFD – DWD I

## Background

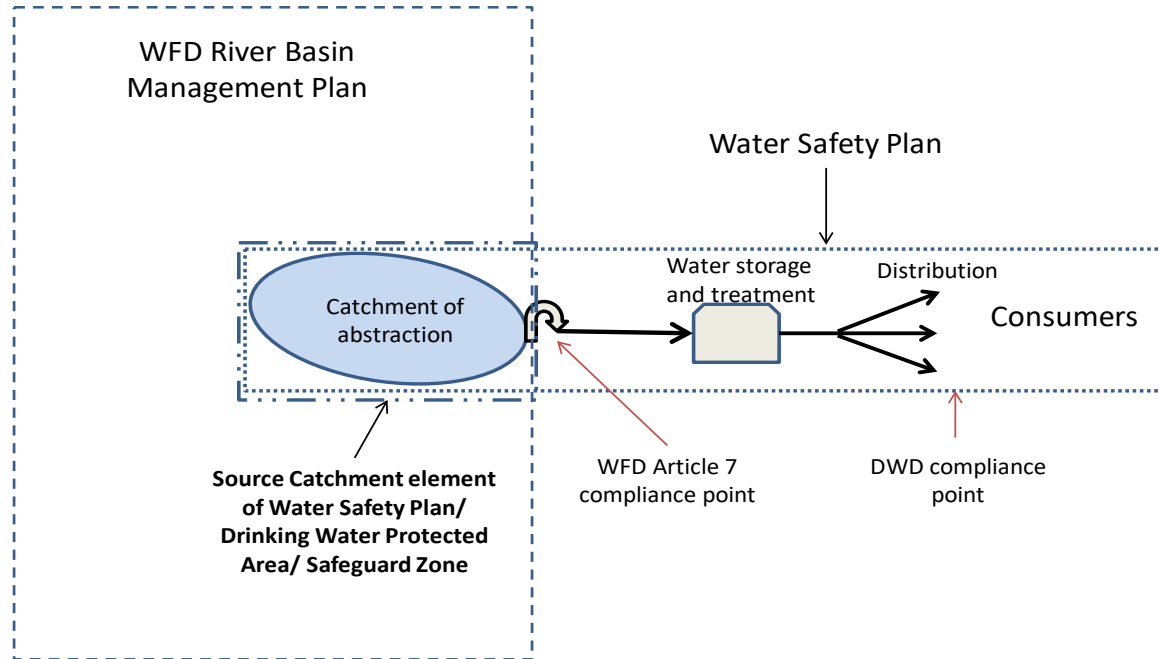
CIS Working Group Groundwater idea to bring together the water experts working on the implementation of the European water legislation, at the top under the Drinking Water Directive and at catchment level under the Water Framework Directive

- to increase mutual understanding
- to identify synergies of the implementation of those Directives
- to improve and allow for more uniform integration of drinking water aspects in the RBMPS and involvement of stakeholders.

## Objectives

- identify synergies and differences between the DWD/WSP and WFD regimes,
- identify what is good practice in terms of integration when implementing the Directives;
- identify potential need for additional/updated guidance, opportunities for sharing experiences etc.

**Figure 1 : Relative scope of WFD and DWD/Water Safety plans**



Source: Tony Marsland (2014) Background paper of the Workshop

# INFORMATION EXCHANGE WFD – DWD II

## Activities so far

- Two joint workshops held – WG Groundwater, WG Chemicals, Drinking Water Committee, Stakeholder
  - 2014 Rome
  - 2016 Brussels
- WG GW - Circulation of questionnaire
  - Approaches for delineation of Drinking Water Protected Areas (DWPA) and Safeguard Zones (SZ);
  - Identification of **types of measures** (mandatory/voluntary) applied and link to other legislation (Common Agricultural Policy, Nitrate Action Plan, Pesticide Directive,...);
  - Identification of the main **stakeholders**, their responsibilities and their relationships
- Current Work
  - Planning for next joint workshop – aiming to be held mid 2018

# CONTACT & INFORMATION

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Co-Chair WG Groundwater

nominated by BMNT

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