# Protection of groundwater resources used or suitable to be used for drinking water abstraction



# EurEau

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## Introduction

- **1.** Groundwater is a major element of the water cycle, valuable resource and subject of protection per se.
- **2.** Groundwater is an important resource and crucial as a drinking water resource for the supply of safe, wholesome and clean drinking water according to the requirements set by the Drinking Water Directive, now and for future generations.
- **3.** Water suppliers must have access to adequate and reliable sources that are protected from contamination and other threats regarding the aquifer and therefore a sustainable protection of groundwater is essential.
- **4.** Water supply is a service of general interest. As such priority should be given to water supply when competition with other activities such as agriculture, mining or industry arises.
- **5.** EurEau members are capable to treat raw water in order to comply with the regulatory framework. However, the required treatment may cause high cost and environmental impact. Thus, the end-of-pipe treatment should remain the last option and treatment should be as simple as possible.
- **6.** Groundwater can be used only to the degree to which it can be renewed since overexploitation represents a threat not only to quantity but also to quality.
- 7. Therefore EurEau urges the European Commission and Member States to better protect groundwater used, or suitable to be used, for drinking water abstraction from adverse impacts. Efficient and effective legislation and environmental awareness are needed to prevent deterioration and improve the resource quality of groundwater, where needed.

## Protection rather than treatment

- **8.** The goal is to protect water resources against adverse impacts and to exclude potential hazards and minimize contamination.
- 9. Essential principles to achieve this goal are:

**a.** Apply "Precautionary principle":

A precautionary protection of groundwater resources must be based on prevention. Adequate measures in this are:

- i. to keep anthropogenic substances away from groundwater bodies.
- ii. to prevent emissions at the origin (source control approach)
- **iii.** that emissions according to possible dangerous effects should be judged broadly regarding the state of knowledge and technology
- iv. that no contamination of water should be tolerated that could endanger the use or suitable use for drinking water abstraction.
- **v.** Managing spatial developments (like shale gas, using soil for storage for various purposes like oil, nuclear waste etc.)
- **b.** Measures to halt and reverse negative trends in quality and quantity coupled with binding targets
- c. Apply "Polluter-pays principle"
  - vi. Who causes water pollution has to pay for the costs and follow-up costs (e. g. costs for treatment) In case of diffuse sources an appropriate allocator has to be found.

#### Groundwater protection and planning

- **10.** The intensive use of fertilisers, pesticides and other anthropogenic substances such as pharmaceuticals, biocides, industrial products, cosmetics as well as their metabolites and transformation products is increasingly having an impact on the quality of groundwater.
- **11.** Once released into the environment these substances may occur sooner or later in the water cycle and could reach drinking water resources. The producers of the substances need to assess their potential effect on drinking water.
- **12.** Due to the improvement of analytical methods a larger number of substances are detected in waters. Newly found substances need to be assessed and their impact on health and the environment understood.
- **13.** Due to the large array of activities which pose a threat to groundwater quality, spatial planning is essential. Environmental information relating to impact assessment should be available according to the INSPIRE-Directive.
- 14. With regards to the risk of pollution of existing drinking water abstractions and the possibility of increased water demand reserves should be established and protected.
- **15.** The use of groundwater resources should be prioritized with drinking water use being the top priority.
- **16.** Action plans with concrete measures should be established to reverse trends and to remediate existing groundwater pollution and limit future threats where it is sustainable to do so.

- **17.** Action plans should try to reach the objectives by voluntary agreements but legislation should provide the tools for acting if voluntary agreements fail to deliver the necessary results.
- **18.** Prerequisites for durable groundwater protection are the monitoring and control of the groundwater with respect to qualitative and quantitative aspects. The scope of the analysis needs to cover substances being relevant for drinking water. Member states and actors causing risk to groundwater should carry out risk based groundwater monitoring taking into consideration the long time periods until remedial measures can take effect and on-going long-term trends be reversed.

#### Water protection areas

- **19.** To protect water resources from pollution, water protection areas should be mandated as a part of all abstraction areas.
- **20.** Water protection areas may have different levels of protection zones to minimize the risk of drinking water contamination. Different levels of protection zones or adequate controls should be implemented to prevent contamination.
- **21.** In water protection areas all spatial planning shall take into account the risk of pollution. The protection of drinking water should be of the highest priority.
- **22.** Where necessary and sustainable to do so, activities which are potentially harmful to groundwater should be placed outside these areas and where effects can be foreseen and existing groundwater threatening activities should if possible be moved or reduced.

#### About EurEau

EurEau is the voice of Europe's water sector. With a direct employment of around 500,000 people, the European water sector makes a significant contribution to the European economy.

EurEau represents drinking water and waste water service providers from 27 countries in Europe, from both the private and the public sector. Our members are the national associations of water services in Europe.

At EurEau we bring national water professionals together to agree European water industry positions regarding the management of water quality, resource efficiency and access to water for Europe's citizens and businesses.



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