Aggerverband = Bergisch-Rheinischer Wasserverband Erftverband = Emschergenossenschaft = Linksniederrheinische Entwässerungs-Genossenschaft = Lippeverband = Niersverband Wasserverband Eifel-Rur = Ruhrverband = Wupperverband



Arbeitsgemeinschaft der Wasserwirtschaftsverbände in Nordrhein-Westfalen

agw-Position Paper in Response to the Background paper: "Water Performance of Buildings – Stakeholder Consultation" and to the Questionnaire "Water Efficiency in Buildings" within the Consultation: "Blueprint to safeguard Europe's waters" issued by the EU Commission Directorate General for the Environment, November, 2011

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The Water Board Association (**agw**) in the German State of Northrhine Westfalia (NRW) comprises the regional water boards: Aggerverband, Bergisch-Rheinischer-Wasserverband, Emschergenossenschaft, Erftverband, LINEG, Lippeverband, Niersverband, Ruhrverband, Wasserverband Eifel-Rur and Wupperverband. We operate on the principle of 'open responsibility for public water management'. As members of the **agw**, we are responsible for water management in an area covering almost two thirds of the NRW region, in which we operate 310 water treatment plants to serve approximately 19 million inhabitants. We also manage 29 dams and a river network of 17,700 kilometres.

The **agw** welcomes the consultation process for "Water Performance of Buildings". Water conservation was the subject of intense debate during the 1970's and 80's in Germany. During the course of this discussion it became apparent that there is no effective alternative for conserving water than a scheme to ensure the protection of renewable resources and a comprehensive water management system.

In order to best evaluate the question of whether there is sufficient availability of water for consumer use, it is important to take the following factors into consideration:

A central system for water supply and sewage/waste water disposal stops widespread disease

During the course of industrialisation, the development of an effective sanitation system for drinking water supply and wastewater disposal was essential to achieving an improved standard of living and increased life expectancy. The guarantee of a high standard of quality for drinking water should take priority over all other considerations when introducing new water conservation measures.

Water is a renewable resource

Unlike other raw materials such as natural oil or coal, water is a renewable resource. It can be used without becoming depleted. Following household usage water can be treated and reintroduced into the water cycle without being lost. The EU Waste Water Directive is implemented nationwide in Germany and assures water resources. This does not apply to non-sustainable agricultural irrigation where water is generally left to evaporate and is therefore no longer directly available for local use.

Water management ensures groundwater resources

It generally applies that no more groundwater should be used than is able to naturally accumulate, for e.g. through percolation. In order to meet high demands for water it makes sense to employ measures to artificially replenish groundwater. The so-called artificial groundwater



recharging process has been employed for over 100 years in central Europe and ensures availability of groundwater resources. Furthermore, the practice of installing hydraulic barriers prevents salt water from infiltrating fresh water reserves. Such practice is common for e.g. in the Netherlands.

The following comments are in response to the summary of the Background Paper:

Background Paper:

"Europe continues to waste at least 20% of its water..."

agw-Position:

An average value of 20% to describe water wastage does not sufficiently reflect the reality of water management in Europe. Water consumption in central drinking water supply networks fluctuates between 6.8% in Germany to 50% in Bulgaria. This also applies to the average water consumption and connection to sewage and waste water treatment plants. Water consumption in Germany has reduced by almost 20% since the 1990s, which proves that economic prosperity and water consumption are decoupled: economic prosperity does not automatically lead to a higher consumption of resources.

Background Paper:

"In the EU, the public water supply represents 21% of the total water use..."

agw-Position:

The quoted value of 21%, leads us to question the EU Commission's approach, which concerns itself primarily with the matter of water performance in buildings, thereby effectively excluding the remaining approximate 80%, in particular water consumption for agricultural usage / irrigation.

21% also does not account for the amount of water which is renewed on an annual basis. Water supply management in Germany uses 2.9% (2004) of the annually renewed resources, amounting to a 15% proportion of the overall consumption. This means it is unrealistic to claim that a water shortage exists in Germany, or in many of the other European Member States for that matter.

Background Paper:

"In some regions, up to 30% of the volume of water consumed in buildings could be saved.".... "...reducing the residential use to about 140-150 L/person /day or is done in certain MS and could be extended across the EU."



agw-Position:

The statement is indeed true, but also confirms that the problem does not affect the entire EU zone. The daily water consumption is already less than 140litres per person in 11 Member States.

Background Paper:

"Barriers to reducing the use are linked to a low awareness of water quantity issues, with water considered an abundant good..."

agw-Position:

In many cases the issue does not concern a shortage of water per se, but a shortage in the availability of clean water. At this stage we would like to reiterate that water is a renewable source and its quantity does not change but remains constant as part of the natural, perpetual water cycle. It is therefore only possible to reference water's finite nature within the context of water quality and maintaining a sufficient standard of water quality. Agenda 21 also deals with this particular aspect with regard to the role of water.

Background Paper:

"...prices generally not reflecting its value."

agw-Position:

This statement generally raises objection. The European Water Framework Directive stipulates that EU Member States should aim to recover costs for providing water services (for example, water supply, agricultural sprinkler irrigation). Reimbursement for providing water services is managed very differently throughout the European Member States. In Germany, the cost of providing drinking water and disposing of sewage is subject to a remunerative pricing system, which also accounts for equipment servicing and maintenance, and renovation and refinancing of future facilities.

Background Paper:

"...but also using "alternative" water sources, such as rainwater or greywater."

agw-Position:

Where rainwater and grey water usage is concerned, it is worth taking into consideration that treatment plants require considerable resources and energy to install, operate and maintain. Depleting finite resources, such as raw materials and expending vast amounts of energy in order to conserve renewable resources such as water, conflicts with the basic concept of sustainability and contradicts the objectives of Agenda 21.



Conclusions:

From our perspective the EU Commission is taking the wrong approach for its consultation regarding water performance in buildings:

- a. Water management systems are so diverse throughout the European Union that it makes little sense to create one regulation for all Member States.
- b. Water usage in buildings, in other words, the supply of public drinking water, is considerably less significant in terms of consumption *quantity* when compared with other consumption, such as agriculture, generating electricity and industrial usage.
- c. It is important to acknowledge that most Member States have an efficient and widespread sanitation system, from which most citizens benefit, and therefore only a very small proportion of water is actually expended. Most water is reintroduced into the water cycle and is simply used and not depleted.
- d. Water is a renewable source and is best maintained for all users through a sustainable water management system to ensure protection of water quantity and maintenance of quality.
- e. The questionnaire for EU citizens is of little help in this context, as the potentially broad scope for efficient water management would be restricted to just management of water in buildings.
- f. Where new measures are introduced to conserve water it is important to prioritise the health related benefits of a safe water supply. This also applies to the repeated usage of waste water for irrigation purposes in agriculture. In every case, the health of the consumer should take top priority.
- g. The benefits of all potential new measures for conserving water should be measured against the loss of resources and excess consumption of energy and other resources used for implementing them.(Cost benefit analysis)

End of Comments