

WATER ABSTRACTIONS

In the context of climate change, the management of water resources could become a major concern. One of the objectives of this management is to maintain the good quantitative status of water bodies, in other words a sustainable balance between abstractions and available resources.

49 billion m³ used in 18 years

In 2013, Wallonia abstracted nearly 2,084 million m³ of water from its water courses and groundwater¹. Annual abstractions of surface water accounted for 1,705 million m³, 4.5 times more than the volumes extracted from aquifers. However, around 78% of the surface water abstractions were used for cooling power plants and returned to the water courses after use. Between 2000 and 2013, total abstractions decreased (-39%) mainly due to a 44% reduction in the quantities of water used by industry (including power stations)² (closed-loop operation, company closures, lower production by power plants, etc.).

Groundwater used for tap water

Between 1996 and 2013, groundwater abstractions averaged 384 million m³ per year, or about 9 to 22% of the volumes that were renewed annually by aquifer recharge³. Most of the abstractions (80%) were intended for the distribution of public drinking water in Wallonia. Only 60% of the abstractions were intended for Walloon consumers, while 40% of the volumes of water produced were exported to the Brussels and Flemish regions⁴.

Despite a groundwater abstraction density of 22,500 m³/(km².year), the water exploitation index⁵ of Wallonia in 2013 was estimated at 5%, a value below the European water stress threshold of 20%⁶.

Maintaining a balance

In the context of climate change, the management of water resources is becoming a major concern, the challenge being to match water needs and available resources sustainably. In this context, Directive 2000/60/EC⁷ obliges Member States to ensure that their groundwater bodies achieve good quantitative status, i.e. the balance between abstractions and recharge. Local problems of overexploitation or shortages may occur in certain years. In order to limit the effects of droughts on water resources and agricultural activities, a Drought Environment-Agriculture Plan is being prepared, in addition to the measures envisaged in the second River Basin Management Plans⁸ such as the finalisation and implementation of a Regional Water Resources Scheme (*Schéma régional des ressources en eau - SRRE*)⁹. This planning tool is designed to anticipate certain water supply problems and secure the population's access to drinking water.

[¹] → Map 11 | [²] → INDUS 3 | [³] Not taking into account the volumes necessary to maintain the ecological quality of water courses. | [⁴] → RES 3 | [⁵] WEI* = ratio between the total volumes abstracted (minus returned water volumes: leakage and cooling water) and total water resources (Faergemann, 2012) | [⁶] EEA, 2012; UNamur - Geology department, 2013 | [⁷] Directive 2000/60/EC establishing a framework for Community action in the field of water policy | [⁸] RBMPs 2016-2021 adopted by the Walloon Government on 28/04/2016; → WATER 21 | [⁹] SWDE, 2014; → WATER Focus 2

Fig. RES 2-1 Surface and groundwater abstractions in Wallonia

