

Information regarding to human rights to safe drinking water and sanitation in relation to health of aquatic ecosystems in the Czech Republic

Protecting aquatic ecosystems and promoting their sustainable use is crucial for maintaining biodiversity, ensuring the availability of freshwater resources, and supporting a variety of ecosystem services. There is long tradition of water protection and water management in the Czech Republic but strong industrialisation, relatively high density of population and contemporary lifestyle have resulted in new demands and respective responses at the national level as well as at the EU level.

Public in our country generally perceives the linkages between the human rights to safe drinking water and the health of aquatic ecosystems. Aquatic ecosystems play a crucial role in maintaining water quality by providing natural treatment processes. Protecting and maintaining the health of these ecosystems is essential for ensuring that water resources are safe and suitable for the abstraction of water intended for human consumption. The human right to health environment (including water) is a part of our legal system by Charter of Fundamental Rights and Freedoms together with Constitution of the Czech Republic. The complex legislation system relies on state administration including bodies of the executive power on the one side and independent judicial power on the other side. Our national legislation is harmonized with the European Union law. Czech Republic, like other EU member states, abides by European directives, such as the Water Framework Directive, Urban Wastewater Treatment Directive, Drinking Water Directive etc., which form an interconnected and complementary system. National laws provide for a system of obligations and mechanisms to protect aquatic ecosystems as safe drinking water sources. Strategies for protecting water quality may include reducing pollution from point sources (e.g., factories, wastewater treatment plants) and non-point sources (e.g., agricultural runoff, storm water runoff), managing wastewater and sewage, and reducing nutrient pollution (e.g., through better agricultural practices). There is a clear linkage between the health of aquatic ecosystems and safe drinking water. Water bodies used for the abstraction of water intended for human consumption are identified and monitored. When necessary, measures to avoid deterioration in their quality are taken in order to reduce the level of purification treatment required in the production of safe drinking water.

In 2021, 10.076 million inhabitants in the Czech Republic were supplied from public water supply systems, i.e., 96.0% of the total population, and 9.174 million inhabitants lived in houses connected to the sewerage system, which is 87.4% of the total population. A total of 451.8 million m³ of wastewater was discharge into the sewerage systems (excluding rainwater invoiced). Out of this quantity, 97.5 % of wastewaters (excluding rainwater) were treated, which amounts to 440.7 million m³.

Despite relatively high connection rates, there are still people living without connection to the public water supply systems and/or without connection to the centralized sewerage system. There are various reasons for that, household income or social vulnerability are not the determining factor. Citizens without public water supply usually use individual wells as the source of drinking water. Czech Republic is making efforts to ensure that even the population living in the peripheral parts of cities, villages, and small villages to be able to connect to the water supply system. Financial assistance is provided to villages that extend their water supply networks to the peripheral parts of their municipalities in accordance with the water supply and sewerage development plan for the area. There are also geographical reasons. In such cases, the development is fragmented, individual houses are very far apart (sometimes they are isolated) and it is not economically viable to build a sewerage or water supply system for public use in such an area. Houses without connection to the public sanitation system use small wastewater treatment plans or septic tanks.

EU's Water Framework Directive has been implemented into Czech legal code by the Waters Act 2000/60 col. The Waters Act ensures that aquatic ecosystems are protected from overexploitation and pollution. The chemical and ecological status of surface water bodies/chemical and quantitative status of groundwater bodies is monitored yearly. Results are used to evaluate the status of waters, identify relevant pressures and develop measures to improve the quality of waters and aquatic ecosystems. Summaries of all planned measures are published in River Basin Management Plans with a six-year frequency.

Data on the status of water bodies can be accessed online freely. Proposed River Basin Management Plans are also published online before completion and the public is able to submit comments. After adoption by the government, River Basin Management Plans are published online, including an overview of all planned projects. Ministry of Agriculture and Ministry of the Environment which share responsibility for water management, regularly discuss key issues with relevant stakeholders including local administrations and NGOs in the framework of Water Planning Committees.

The Waters Act also Defines „Protected zones of water resources“ to protect yield, quality and wholesomeness of groundwater and surface water resources used for drinking water supply with an average withdrawal of more than 10 000 m³ per year. Two degrees of protected zones exist, with the stricter one excluding all human activities. Protected zones are established individually for each site.

So far, water supply in Czech Republic has been plentiful. It is predicted that increased periods of water scarcity caused by climate change could result in local shortages during drought periods. To address this possibility in time, the Waters Act has been amended to enable decision making about fair and equitable water allocation. The legislation allows the declaration of state of drought, during which committees (including local and regional officials and important water users) will come together to ensure water will be allocated firstly to the most needed subjects, such as households, hospitals and schools.

The Drinking Water Directive sets the parameters for safe drinking water. The national legislation is fully in line with the requirements of the directive. A new system is being introduced, which is based not only on monitoring of the quality of the drinking water, but on a complete risk-based approach to water safety, covering the whole supply chain from the catchment area, abstraction, treatment, storage and distribution to the point of compliance.