

Looking back at the National Dialogue on Water 2023

After a four-year break caused by the covid pandemic, the National Dialogue on Water took place on 25–26th October 2023, this time in the Skalský Dvůr hotel in Vysočina. The event was organized by the T. G. Masaryk Water Research Institute, p. r. i. (hereinafter TGM WRI) in cooperation with the Czech Scientific and Technological Water Management Company (Česká vědeckotechnická vodohospodářská společnost, z. s.) The main theme of the event was a comprehensive approach to the protection of drinking water sources. This topic was addressed by a large number of experts from the field of water management (118 participants), whether it was representatives of the Ministry of the Environment (MoE), Ministry of Agriculture (MoA), Ministry of Health, state-owned River Basin State Enterprises, the Czech Hydrometeorological Institute (CHMI), water authorities, operators of water supply and sewerage systems (VaK), mayors, private companies, hydrogeologists, and others.

This time the event was more focused on the discussion between the panelists, the moderator, and the participants. The event was divided into four blocks. The first block dealt with the issue of protecting water resources in the catchment area. The moderator was the director of TGM WRI, Ing. Tomáš Fojtík, who warmly welcomed everyone and created a relaxed and friendly atmosphere. Each block started with a short ten-minute presentation. The first block was introduced by Mgr. Lucie Jašíková, Ph.D., from TGM WRI. It mainly focused on the issue of risk analysis of the catchment areas, which represents a new challenge in meeting the requirements of EU Directive 2020/2184 on the quality of drinking water. Since this analysis will be processed by River Basin State Enterprises, the panel included two of their representatives: Ing. Lenka Bartošová from the Ohře Basin State Enterprise, and Mgr. Lenka Procházková from the Morava Basin State Enterprise. Other panellists included Ing. Radka Hušková, representing the Water Supply and Sewerage Association of the Czech Republic (SOVAK ČR), and Mgr. Ladislav Faigl from the MoA. The following conclusions were made:

1. The reference year for identifying raw water abstractions will be 2023 or 2024.
2. It will be necessary to add information about the groundwater body from which raw water is abstracted to the Raw Water Database (administered by CHMI).
3. It is necessary to appeal to VaK operators to properly comply with the legislative requirements of Decree 428/2001 Coll. in the valid wording, and added information on the sampling and quality of raw water to the Raw Water database (administered by the CHMI). Operators who are members of SOVAK ČR will be notified via SOVAK ČR, other VaK operators will be notified via MoA.
4. It is desirable that the catchment areas should consist of one layer processed by one entity based on one methodology, for the entire Czech Republic.
5. On behalf of SOVAK ČR, it was confirmed that VaK operators will monitor relevant indicators of raw water based on recommendations resulting from the risk analysis of the catchment areas.
6. In the subsequent evening discussion, it was proposed that TGM WRI and CHMI should assist the River Basin State Enterprises with risk analysis of the catchment areas for groundwater abstraction.

The second block was moderated and introduced by RNDr. Josef Vojtěch Datel, Ph.D., from TGM WRI. He presented the topic of water resource protection zones (OPVZ), their current legislative framework and records. Among the speakers were experts from state administration (Dr. Ing. Marcela Burešová, MPA, from the Regional Office of the Central Bohemian Region, and Mgr. Martin Pták from the Department of Water Protection of the MoE), representatives of the River Basin State Enterprises (Mgr. Petr Ferbar from Labe Basin State Enterprise, RNDr. Jindřich Duras, Ph.D., and Prof. Ing. Tomáš Kvítek, CSc., both from Vltava Basin State Enterprise), as well as representatives of hydrogeologists from private companies (Ing. Jakub Průša from Severočeské vodovody a kanalizace, a. s., and RNDr. Svatopluk Šeda from FINGEO, s. r. o.).

The main conclusions were:

1. It is necessary to continue to maintain the OPVZ institution, but also to significantly modify (modernize) it.
2. As the current options for even partial revisions of the OPVZ are limited, it is necessary to achieve "flexible updateability" of measures (based on risk analysis results).
3. It is necessary to change control mechanisms and tools of a motivational and restrictive nature.
4. Comprehensive protection of water quality and quantity must always be functionally linked.
5. Appropriate methodological tools must be provided to address the previous points. However, the issues of protection of groundwater and surface water resources must be dealt with separately.
6. An effective comprehensive solution means reducing and slowing down surface and subsurface runoff, as well as increased emphasis on water infiltration in an anthropogenically unburdened environment and protection of the area where infiltration occurs. The measures combine semi-natural processes and technical elements linked into a functional unit (both in the countryside and in urbanized sites).
7. The combined approach to water reservoirs should also include the possibility of water supply use of reservoirs that do not fulfil a water supply function.
8. It is necessary to establish an interdisciplinary working group to develop the above-mentioned theses.

The third block started with a presentation by doc. RNDr. Zbyněk Hrkal, CSc., from TGM WRI. His topic was drinking water quality with a focus on "emerging substances" such as pharmaceuticals, pesticides, per- and polyfluoroalkyl substances (PFAS), and others. The discussion was led by Mgr. Vít Kodeš, Ph.D., from CHMI. The panellists included MUDr. František Kožíšek, CSc., from the National Institute of Public Health, Mgr. Milan Koželuh from the Vltava Basin State Enterprise, Mgr. Marek Skalický from Káraný Waterworks, and Ing. Radka Hušková from SOVAK ČR.



Photo: T. Pojeta

The conclusions were as follows:

1. Legislation for drinking water currently sufficiently treats the occurrence of substances that are not specifically listed in the legislation.
2. Analytics is done according to substances of which we are aware of – the selection of monitored representatives of individual groups of substances is decided according to the amount and frequency of use (medicine), known pollutants are monitored depending on the industry, specific pollutants according to risk of occurrence.
3. PFAS – monitoring of their occurrence in drinking water and monitoring of their sources is ongoing; so far it does not appear to be a widespread problem. It is necessary to address measures at the source of their occurrence, including restrictions on their use.
4. In the case of pharmaceuticals, the question is how to grasp the "polluter pays principle", whether it is possible and meaningful to address measures at the source. We know very little about the cycle of pharmaceuticals in the aquatic environment. We are concerned with their concentration, but not with balance. It is desirable to direct research to deepening knowledge.
5. With regard to the economic impacts of the desired removal of drugs and other micropollutants, a new approach to pricing is necessary. A call was formulated for the MoA and the MoE to set up a working group to deal with this issue.

The last summarizing block was moderated by Ing. Karel Drbal, Ph.D., from TGM WRI. Both the panellists and the participants discussed the main

conclusions from the first to third blocks (Ing. Tomáš Fojtík from TGM WRI, Mgr. Jiří Paul, MBA, from VaK Beroun, a. s., RNDr. Pavel Punčochář, CSc., from MoA, Mgr. Mark Rieder from CHMI, Dr. Ing. A. Tůma from Morava Basin State Enterprise, and M.Sc. Lukáš Záruba from MoA). All the National Dialogue participants agreed that the protection of water and above all water resources is key and that it should be a priority for all citizens of the Czech Republic. However, this protection must be comprehensive and the legislative, economic, and educational topics must be optimized. Simultaneously, it is very important that the general public is much more aware of this issue. However, the basis for this protection should be long-term concepts and visions upon which experts from all fields of water management could rely. The National Dialogue on Water 2023 tried to outline some of these visions.

It is possible to download the main conclusions from the National Dialogue here [1].

References

[1] https://www.vuv.cz/wp-content/uploads/2023/10/Seminar_NDoV_IV_20231027.pdf

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