

additional investments in sampling and analysis campaigns.

Screening of waste water effluent samples indicated that inefficient treatment in WWTPs across the basin is among the main sources of DRB chemical pollution. EBM tools have been used for measurements of toxicity effects of mixtures of chemicals and effectiveness of their use was demonstrated for waste water and more polluted surface water samples. Waste water monitoring methodology, as proposed by the NORMAN Association and Water Europe, was tested with the JDS4 data and used as an important input in the ongoing discussion on the revision of the Urban Waste Water Treatment Directive (UWWTD; 91/271/EEC). JDS4 provided a possibility to test at a large geographical scale how the revised EU UWWTD might work in practice.

Passive sampling results have shown that the spatial variability of investigated hydrophobic priority substances in surface water of the Danube is low and that the technique should be considered in the EU regulatory monitoring framework. Similarly, pollutants in ground water bodies, connected to the surface water via bank filtration, did not exceed regulatory toxicity threshold values.

It has been concluded that novel monitoring techniques are vastly superior compared to traditional target monitoring of a few legacy substances and provide both 'early-warning' and 'safety net' signals needed for a holistic chemicals management in support to the EU 'zero-pollution policy'. The traditional monitoring applied in compliance with the current environmental legislation does not sufficiently protect the Danube ecosystem.

## News and reports from the Expert Groups

### Macrophytes

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One of the Expert Groups of IAD is EGM, the group working on 'Aquatic Macrophytes', which are vascular plants, also called 'Higher Plants', in contrast to e.g. mosses or algae. Its scope regards, i.a., the composition of aquatic plants in different aquatic environments.

The main activities were focused on a survey of macrophytes in Lake Neusiedl, known as a 'Shallow Lake' (max depth of 1,5m in some parts, in the past). It is located in the steppe regions of the 'Little Hungarian Plain', shared between Austria and Hungary. EGM-Partners surveyed the macrophytes in three important regions of the lake which, in the end, will be compared with historical data. At present much detail has been worked on, but final presentation will

Interlinking chemical screening and EBM data with results of biological monitoring, and especially eDNA remains a challenge. This is directly related to a need for accounting toxicity of chemical mixtures and improved prioritisation of RBSPs. A capacity building of Danube laboratories responsible for regulatory monitoring is needed to be able to carry out NTS and EBM on a routine basis.

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be in the next year. To finalise our work on development of the lake's aquatic plants, surveys had been performed from 1998 to 2020, of course with intervals.

Upcoming activities of EGM will be based on older studies on aquatic plants in different water bodies, which had been studied in the past. That may help to prepare a basis for future investigations. The topic is focused on floodplain water bodies e.g. on the Lainsitz River in its Austrian section at Gmünd, close to the Czech border. Two earlier surveys had shown the dynamics of the oxbow lakes, but dryer climatic conditions had adverse effects, e.g. excessive progress of common reed against the water plants. Work on other floodplain water bodies may follow in the future.