Four more years for successful platforms

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The protection of Swiss water bodies is a demanding task with an ever increasing number of new challenges. The two “Water Quality” and “Process Engineering Micropollutants” platforms, which are supported by Eawag, FOEN and VSA, assist the actors in practice as a hub for the development and exchange of knowledge. Now their mandate has been extended for another four years.

Swiss bodies of water are under pressure from climate change and the inputs of nutrients and pollutants. Policymakers are taking various measures to counteract this. However, practical implementation is a demanding task for the federal government, cantons and communes, as well as for planning offices and industry. The two Water Quality and Process Engineering Micropollutants platforms support the various actors by serving as knowledge and exchange platforms between authorities, research and practitioners. They are operated jointly by the aquatic research institute Eawag, the Swiss Wastewater and Water Protection Experts (VSA) and FOEN.

Knowledge for optimised wastewater treatment

The Process Engineering Micropollutants platform was founded in 2012 to support the expansion of wastewater treatments plants (WWTPs) with an additional treatment stage for the removal of micropollutants. This expansion was initiated at the beginning of 2016 with the amendment of the Water Protection Act. In collaboration with experts from authorities, engineering offices, WWTPs and research, the platform coordinated the development and exchange of knowledge on the methods for the elimination of micropollutants, which were not yet standard practice initially. In the last few years, it then collected and analysed the first practical experiences from the already expanded WWTPs. “These days, policymakers are demanding more far-reaching measures so that no substance-specific threshold limits are exceeded in the bodies of water as a result of discharges from WWTPs,” explains platform

head Pascal Wunderlin. “This will also affect small WWTPs, which currently lack experience with purification processes regarding micropollutants. This is knowledge that we will build up over the next few years.”

Another topic that the platform will deal with in the coming years is the improved elimination of nitrogen from wastewater, which is explicitly being called for by policymakers. In addition, it will continue to focus intensively on the issue of substance inputs into bodies of water from industry and commerce.

Assessing water quality

The Water Quality platform was founded in 2015 and is concerned with the biological and chemical assessment of water quality. For example, it uses monitoring data to investigate whether the measures adopted by the federal government to reduce the risk of pesticides have been effective.

Besides pesticides, there are many other chemicals used in Switzerland that can enter the water cycle. “But not all of them are problematic,” explains platform head Irene Wittmer. “We support the federal government and the cantons in identifying problematic chemicals, which are then investigated during regular monitoring by the federal government and the cantons.” This work is performed in close collaboration with Eawag and the Ecotox Centre.

Another focus is the impact of climate change on living organisms in bodies of water. Rising water temperatures in summer, more frequent dry periods and increasingly heavy rainfall are changing these biotic communities. The difficulty here is to distinguish the influence of climate change from other factors, such as the influence of river engineering or water quality on aquatic life. To this end, the platform identifies research fields in close cooperation with all players, which are then addressed by Eawag and others. The knowledge gained is then incorporated into the Swiss collection of methods for the assessment of surface waters (Modular stepwise procedure), which the platform manages together with FOEN.

Related Links

VSA Platform Process Engineering Micropollutants

VSA Plattform Wasserqualität

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