



## Eawag Info Day 2022 in Lausanne

September 20, 2022 | Claudia Carle

Topics: Drinking Water | Wastewater | Ecosystems | Pollutants | Society | Climate Change & Energy

**Around 140 participants from public administration, private engineering firms and research took advantage of the Eawag Info Day in Lausanne to learn about and exchange information on new possibilities for collecting and using water data.**

The Eawag Info Day on 15 September was held at the SwissTech Convention Center on the EPFL campus, making it the second time Eawag has been a guest in Lausanne. In her welcome address, Eawag Director Janet Hering emphasised how important cooperation with EPFL is to Eawag and referred to joint projects such as the LÉXPLORE research platform, the Ecotox Centre and Covid-19 monitoring in wastewater, which were presented in more detail later in the lectures.

EPFL President Martin Vetterli and Claudia Binder, Dean of the Faculty ENAC at EPFL, also acknowledged the close and long-standing relationship between EPFL and Eawag in their welcoming addresses.

Janet Hering also emphasised how important it is for Eawag to exchange information with people in practice, especially in French-speaking Switzerland. After a three-year break due to the pandemic, the Eawag Info Day finally provided a platform for this again. This opportunity was actively used – in the discussions in the hall, during the breaks and at the stands of a small exhibition in the foyer with illustrative material on the Info Day topics.

### New insights into a complex and dynamic medium

The theme of the Info Day 2022 “Dynamics of water: New tools, new opportunities” was introduced by

Damien Bouffard, Group Leader in the Surface Waters Department at Eawag. The new technologies and tools presented at the Info Day are believed to offer the possibility to better understand water bodies as complex and dynamic environmental systems and to develop sustainable solutions to problems.

New insights are provided in particular by measurements in high temporal resolution, such as those collected on the LÉXPLORE research platform on Lake Geneva, with the mobile, fully automated MS2field water laboratory or as part of Covid-19 monitoring in wastewater, which were presented at the Info Day.

Such measurement data can also be used for simulation models. One presentation demonstrated this using the example of wastewater management, which can be optimised using a digital twin.

In addition to data measured in situ, remote sensing also provides new possibilities for the collection of water body parameters. During the Info Day, it was explained how surveillance cameras as well as videos distributed via social media, drone images and satellite observations can be used for this purpose.

Another thematic block of the Info Day was provided by two innovative approaches to water monitoring from the field of toxicology. Tests based on fish cells to determine the toxicity of chemicals or environmental samples that replace experiments with fish were presented, as well as a strategy for assessing sediment quality that lays the foundation for the nationwide monitoring of pollutants in Swiss sediments.

### **The abundance of data calls for cooperation and communication**

The wealth of water data can be brought together on the “Datalakes” platform, which Damien Bouffard introduced at the end of the Info Day. Data from a wide range of sources is publicly accessible on the platform and can be combined, visualised and extracted. This makes it possible to bring together the knowledge of a broad array of specialists in order to better understand the complexity of water bodies.

If the new possibilities for collecting data are to be used optimally, however, communication also plays a central and partly neglected role in addition to such open-science platforms as Datalakes, as the questions and discussion sessions during the Info Day made clear. Communication between all players from research, practice and authorities is needed to ensure that the data is collected that is actually needed and that potential users are even aware of the existence of the data and can also interpret it. The Eawag Info Day made an important contribution to this end.

The next Info Day in September 2023 will be dedicated to the topic “Sustainable Development Goals (SDGs)”.

## Related Links

The 2022 Info Day website with all presentations

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