

New strategy for assessing sediment quality

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The Ecotox Centre presents a new strategy to assess the quality of sediments. Sediments are of great significance in water protection.

Sediments play a crucial role in the quality of water bodies as habitats. The Swiss Water Protection Ordinance therefore stipulates that sediments must not contain any persistent substances and substances that have a harmful effect on living organisms. However, investigations by the Ecotox Centre and the aquatic research institute Eawag have found several pesticide active substances in the sediments of streams in concentrations that can have a toxic effect.

New assessment strategy

To date, cantons have lacked a consistent strategy for monitoring sediment quality. Over the past six years, the Ecotox Centre has devised the new strategy on behalf of the Federal Office for the Environment together with Eawag and the Swiss Water Association (VSA).

In their assessment strategy, the experts answer the following questions: How should a monitoring campaign be planned? Which procedure is recommended for sample collection and processing? Which substances should be analysed? And how exactly can the sediment quality be assessed?

Consistent recommendations

They recommend 20 substances or groups of substances that are particularly relevant for sediment monitoring. These include substances that have long been known as sediment pollutants, such as polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs) and metals, but also



pesticides, medicines and personal care products.

For all substances, the Ecotox Centre has determined sediment quality criteria, i.e. threshold values for a possible toxic effect. By comparing the concentrations from the chemical analysis with the sediment quality criteria, the sediment quality can be divided into five classes and thus be assessed.

Watch the video on Youtube.

Cover picture: Eawag, Andri Bryner

Cooperations

Ecotox Centre Swiss Water Association (VSA) Federal Office for the Environment (FOEN) Waters protection agencies of the cantons

Related Links

Read the detailed article (in German or French) on this topic in the News of the Ecotox Centre

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