

Subsequent release of substances from aquatic sediments

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Introduction:

Aquatic sediments in the Netherlands are still polluted in certain places. Some of the pollutants in the sediments may subsequently be released into surface waters. It is not sufficiently clear which substances are involved and in what circumstances subsequent release might occur. To meet the requirements for chemicals in the Water Framework Directive, information on the subsequent release of substances from sediment is therefore needed. Such information is needed to monitor the ecological status of the area (WFD, Natura 2000 and EMS).

Methods: After all, if problem substances from the sediment end up in the water, there is a possibility that they will enter the food chain and accumulate in animals. This project has been launched with this in mind, taking account of the functions in the area. The quality of an area where fish-eating birds forage, for example, has to meet entirely different ecological standards than an area that is a nursery for shrimps. The project might also help reduce clean-up and management costs.

Results: In the past, water management agencies would take a decision to clean up on the basis of a worst-case scenario, which assumed that all pollutants in the sediment would eventually end up in the water. The results of this project will allow much more balanced and realistic decisions to be taken.

References: [1] Lange de H.J., Harmsen J., Koelmans A.A., (2006) Nalevering van verontreinigende stoffen uit waterbodems, Alterra 1405