

Integrated Approach of Contaminated Sediments in Flanders

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Background/Objectives. In Flanders, the management of contaminated upland sites and the management of water are the responsibility of two separate governmental authorities. Sediment is a shared responsibility. The Public Waste Agency of Flanders (OVAM) is responsible for upland cleanup and soil. Sediment falls under the Soil Decree. The Flanders Environment Agency (VMM) is responsible for water management. Sediment is considered part of the aquatic system. Historically, each agency has adopted a different approach to sediment pollution. Increasing demand for use of the historically industrialized waterfront throughout Flanders has motivated an interest in a more coordinated approach in which investigation of contaminated upland sites would involve a collateral evaluation of the likelihood of potential sediment contamination. The Water Framework Directive states that a good status for all water bodies had to be achieved by the date of 2015. Belgium didn't achieve that goal and postponed it to 2027. Since contaminated sediments are an important source of water pollution, there is a need for a coordinated approach of sediment pollution.

Approach/Activities. Information about the location and the cause of potential contaminated sediments has to be spatially integrated in order to obtain a site-specific approach. A site-specific approach contains an integration of spatial data of sediments and sources of contaminated land. These data have various sources and are owned by different authorities and waterway owners. Bringing together spatial data related to the relevant aspects of the contamination of sediments and the analytical capacity in a Synergie Facilitating Sediment Knowledge System is a first important step for the prioritization of contaminated sediments. This computer-based system brings together data from several sources including data from OVAM, VMM, different Provinces, waterway owners and harbours. New sediment quality information will be acquired in suspect areas as part of the process.

Results/Lessons Learned. Coordinated effort to address sediment pollution and remediation is an essential aspect of sediment management, particularly in a highly urbanized region such as Flanders. An efficient process is necessary to prioritize the management of these problems. Mapping the hotspots of contaminated sediments starting from potential sources in the form of contaminated land has to support these processes. The process developed is both efficient and effective and perhaps most importantly, results in a clear path for those confronted with the task of contaminated sediment management in Flanders.