MANAGEMENT OF SEDIMENTS REMOVED FROM NAVIGABLE WATERWAYS

WASTE 9

The accumulation of sediments at the bottom of waterways can interfere with navigation (insufficient draught, reduced accessibility to wharves, etc.) and increase the risk of flooding. Dredging is one way to remedy this. It requires management methods that take into account the presence of pollutants in extracted materials.

Exceptional dredging from 2010 to 2014

Since the early 1990s, the management of sediments in navigable waterways has been delayed due to a lack of financial resources, a strengthening of legislation[1] and a lack of technical facilities[2] complying with legal requirements. The lack of maintenance dredging (deposit estimated at 600,000 m³/year) ended up becoming a "passive" deposit of 6 million m³ that would have to be dredged to bring the navigable network (450 km) back to its original size[3]. Over the period 2010 - 2014, thanks to an exceptional financing plan (€64 million of Sowafinal funding in addition to the basic annual allocation, i.e. €100 million in total), major dredging works[4] were carried out to extract and manage 1,200,000 m³ of sediments in 5 years. The capacities for the treatment and valorisation of Category A materials (not or slightly polluted) and Category B (polluted) have been increased to 100,000 m³/year and 235,000 m³/year through the construction of grouping centres and the use of private companies. These works have made it possible to remove the barriers to navigation across the network[5].

Low margin of safety

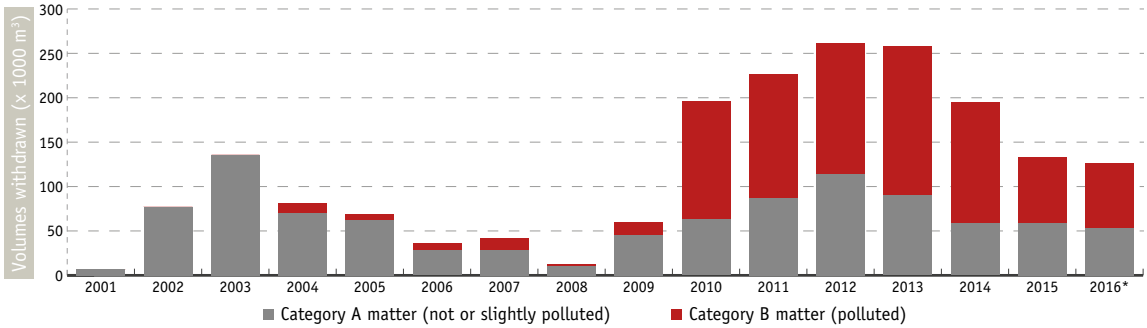
The planned funding for the period 2017-2020 (basic allocation of €16.7 million/year over 4 years) will allow dredging of approximately 150,000 m³/year. The resources will be allocated to the minimum dredging required to guarantee navigability, which means frequent interventions for thin layers. This strategy entails higher sludge management costs, particularly due to transport costs, which account for about 30% of dredging costs (excluding management costs)[6]. This could lead to temporary and local limits of full load navigation. However, good maintenance of navigable waterways is essential to enhance the value of investments aimed at upgrading the network and promoting transport on inland waterways (e.g., the upgrading of 9,000 t of the Meuse downstream from Namur and 2,000 t of the western network on the Seine-Scheldt link, multimodal platforms)[7].

Cleaning up pollution and developing sustainable management systems

In some areas, the resuspension of historically polluted sediments from the bottom of the waterway results in their displacement and/or mixing with new sediments. This diffuse pollution phenomenon can increase management costs. Cleaning up certain sectors would make it possible to remedy this[8] but the available budgets do not currently allow it. As regards the management of dredged materials, research has been carried out in Wallonia to develop and test sustainable management systems[9]. The development of these sectors at the industrial level must be continued. Currently, Category A material is valorised in accordance with the Walloon Government Decree of 14/06/2001[10], while around 90% of Category B material is deposited in technical landfill sites.

[1] "Waste" legislation and Walloon Government Decree of 30/11/1995 imposing a differentiated management of Category A materials (not or slightly polluted) and Category B materials (polluted). This decree should be revised (harmonisation with "waste" and "soil" legislation). | [2] First grouping centre built in 2001. In 2016, there were 7 in operation and 1 waiting for a permit. | [3] MET, 2004, 2006. These estimates need to be updated. As an indication, approximately 525,000 m³/year of sediments reach the Walloon surface water by soil water erosion; → WATER 11. Some of these inputs reach navigable waterways. Other sources can be added (endogenous sediments, discharges, etc.). | [4] On strategic waterways (European links) or at risk of high flooding | [5] Except on the Pommeroeul-Condé canal where dredging and lock-crossing are planned (Voies navigables de France, contract 2016-2020) | [6] DGO2 estimate | [7] → TRANS 2 | [8] → WATER 12 | [9] → WASTE Focus 1 | [10] Foundations, sub-foundations, remediation of polluted sites, development or remediation of technical landfill sites (CET), development of river beds and banks outside areas of biological interest

Fig. WASTE 9-1 Volumes of sediments removed from navigable waterways in Wallonia



** Provisional figures, probably underestimated*

SOERW 2017 – Source: SPW - DGO2 - DEAG