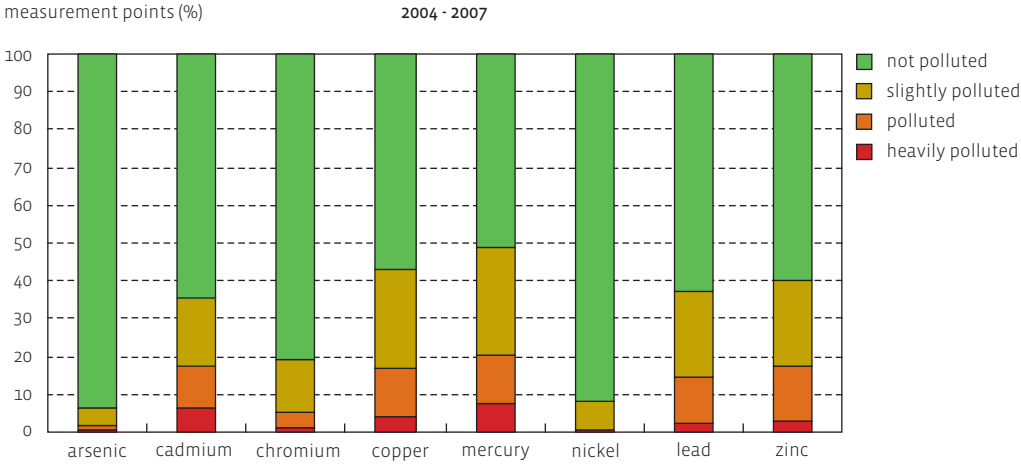
😐 Heavy metals in watercourse sediments

DPSIR



Source: VMM

Heavy metals can remain in watercourse sediments for a long time

Heavy metals have to a certain degree the inclination to adsorb to particulate matter and soil material. They can remain present in the watercourse sediments for a long time. Part of the watercourse sediment heavy metal pollution can therefore be ascribed to historical pollution.

The VMM's watercourse sediment monitoring network consists of 600 locations, 150 of which are sampled each year. The presence of heavy metals, among other things, is investigated. The division into classes is based on the deviation compared to a reference value.

Arsenic and nickel were hardly found in the period 2004-2007 in concentrations deviating from the reference value. Mercury was the most often found in deviating concentrations. This is explained by the strong tendency of mercury to adsorb particulate matter and soil material.

The situation for arsenic, copper, lead and zinc in the period 2004-2007 remained mainly unchanged compared to the period 2000-2003. The situation for cadmium deteriorated because more measurement points went backwards than forwards. For mercury, chromium and nickel the situation improved. The shift is especially striking for mercury.

Changes in heavy metals in watercourse sediments (Flanders, 2004-2007 versus 2000-2003)

measurement points (%)	arsenic	cadmium	chromium	copper	mercury	nickel	lead	zinc
worse	2.6	19.3	4.9	14.3	12.2	3.8	11.1	11.7
the same	94.8	72.1	76.0	70.0	40.8	83.4	73.2	76.5
better	2.6	8.5	19.2	15.7	47.0	12.7	15.7	11.8