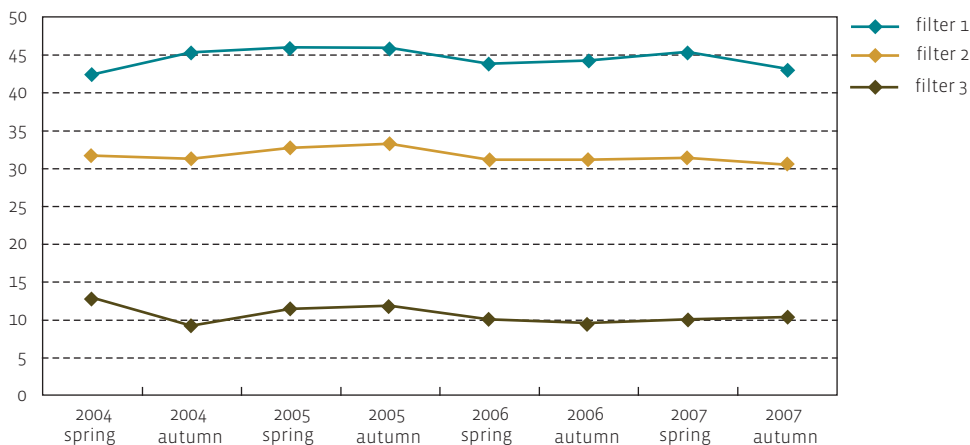




concentration (mg NO<sub>3</sub>/l)



Source: VMM

### No clear trend

The quality of the freatic groundwater has been monitored by VMM since 2004 in the MAP groundwater monitoring network, which consists of approximately 2 000 measurement points. The European Nitrate Directive stipulates that the concentration anywhere in groundwater must not be higher than 50 mg nitrate/l. Furthermore an effort must be made to achieve a maximum value at each measurement point of 25 mg nitrate/l. According to the MINA plan 3+ (2008-2010), in 2010 there can be no more exceedances of the 50 mg/l standard.

At the measurement points the nitrate concentration is generally determined at three different depths ('filters'), where filter 1 is always at the shallowest depth. A weighted average is made from the measurement results for the whole of Flanders for each filter level. A weighting is applied to account for the agricultural area within the zone in which the measurement point is located. At the shallowest depth there was a slight improvement of the weighted average nitrate concentrations in the autumn of 2007. It is too soon to question whether there is a clear trend.

### Standard exceedances

The standard of 50 mg nitrate/l was exceeded at 38 % of the measurement points in autumn 2007. In 48 % of the points it reached an exceedance of the target value of 25 mg nitrate/l. There is no pronounced trend.

The measurement results show that the exceedances are not evenly distributed across Flanders. In addition to, among other things, the local manure, the vulnerability of the shallow aquifers shape the results.

	2004 spring	2004 autumn	2005 spring	2005 autumn	2006 spring	2006 autumn	2007 spring	2007 autumn
points sampled	1 925	1 728	2 026	2 004	2 045	2 035	2 047	2 031
% >50 mg NO <sub>3</sub> /l	35.7	35.7	39.5	37.7	37.9	37.4	38.6	38.2
% >25 mg NO <sub>3</sub> /l	47.5	45.4	51.0	48.0	48.8	47.8	50.0	48.1