

## Summary

The paper presents the results of hydrochemical tests of water in two watercourses: one with a catchment situated wholly in the large city area and the other with the agricultural catchment situated in the source section but at the mouth of the urbanized one. In water samples collected from both watercourses at the measurement-control sections localized by the sources and in the lower course, the concentrations of the following ions were assessed:  $\text{NH}_4^+$ ,  $\text{NO}_2^-$ ,  $\text{NO}_3^-$ , and  $\text{PO}_4^{3-}$ ,  $\text{SO}_4^{2-}$ ,  $\text{Cl}^-$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{Mn}^{2+}$  and  $\text{Fe}^{2+/3+}$  also electroconductivity, dry residue and pH were evaluated. It was found that in the sections in the urbanized areas waters were characterized by considerably variable concentrations of most dissolved solids. In these sections waters of both watercourses revealed apparent signs of degradation in result of high concentrations of phosphates, ammonium and nitrite form of nitrogen and iron and manganese. In some sections these concentrations placed water in V water purity class, which confirmed strong effect of anthropogenic factors. At their present state the tested waters cannot be used for local needs and their storing would pose a hazard of the reservoir eutrophication.