

Abstract

There are presumptions about a loss of contaminated water from the river Křinice to the turonian aquifer in the Kyjovské valley which is located in the National Park České Švýcarsko. Drinking water is being taken from this potentially contaminated channel on both Czech and German sides.

The goal was to confirm and specify places of loss of this contaminated water on the river Křinice and find out whether this water flows into the quaternary or turonian aquifer. Because there aren't any hydrologic bore holes in this area to monitor cetraceous collecting channels, we cannot simply measure the potential contamination. Indirect methods such as hydrological (PPP), thermometric measuring, hydrodynamic (soaking) tests and geomorphology of the area had to be done.

We found out that the river Křinice has an outflow section located at the beginning of the Kyjovské valley. Water from this section flows into the quaternary collecting channel as well as the cetraceous (turonian) aquifer.