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Drinking water quality under changing climate conditions

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Abstract Ljubljana field gravel sandy aquifer is one of the most important alluvial aquifers in Slovenia and is a source of drinking water for almost 300 000 inhabitants. More than 75% of the aquifer lies beneath urbanised and agricultural areas. The water field Jarski prod is situated on the left bank of the Sava River. The groundwater is recharged by more than 50% from the Sava River and about 40% from precipitation. Heavy and intense rainstorms in the past have affected groundwater quality in the water field Jarski prod. In one of the wells, VD Jarski prod, *E. coli* and coliform bacteria were detected in the groundwater. In order to assess the impact of heavy rainstorms on groundwater quality and to design an early warning system, a field UV-VIS spectrometer was installed for continuous monitoring of the critical parameters. We have analysed the effects of two extreme rainstorms on groundwater quality.
Key words gravel aquifer; groundwater; microbiological pollution; UV-VIS spectrometer; extreme rainfall