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Dynamic changes in the landscape structure in interaction with surface and ground water quality

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This introduction describes a new method for landscape zonation, focused on small catchments with agricultural and forest production. The landscape zonation results in land differentiation depending on anthropological stress, respectively on naturalistic value. Consequently, based on the water quality monitoring, there are eco-critical zones featuring highest water eutrophication defined. Subsequently, using the multifactor regress analysis, the significance of the landscape structure on the qualitative and quantitative parameters of waters is determined. The knowledge how the particular landscape structures (arable land, grasslands, forests) affect water quality in particular micro-catchments can help to predict further development of quality and quantity indicators of surface waters and groundwater. The methodology will be demostrated on Zdikov catchment, situated in submontane region of Bohemian Forest – Czech Republic, which has been monitored since 1985.