Rain, Land surface and ground water contribution for the river water quality in the north western part of the Shimousa Upland

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As the Shimousa Upland has relatively homogenous geology, the river water of the small watershed in the area is expressed by the sum of the rain water quality, load from land surface, and ground water quality. The contribution of these components are investigated in the Shimousa Upland whose urbanization is still ongoing.

River water samples were taken at forest watersheds and urbanized watersheds. Add to this, rain water samples were taken for several times. Electric conductivity (EC) of the rain water were lower than 30uS/cm. EC of the forest watersheds ranged 131.5-166.4uS/cm. Urbanized watersheds showed rather large value which ranged 386.8-516.3uS/cm. The ratio of their mean values can be expressed as 1:5:14. This suggests large quantity of the materials are added from the land surface of the Urbanized areas.