

Factor governing the river water quality in the urbanizing area, studied in the Shimousa upland

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It is thought that urbanization will make a great influence on the river water quality, but its mechanism is not fully understood. Previously, leakage from fertilizers or pesticides in the arable area or wastewater from urban area has been studied. This was because contaminant phase of the river water had a big impact. Understanding the river water quality from the river basin scale is becoming more important topic. Urbanization is characterized not only with the spread of commercial areas or residential areas, but with the complexity of the land use composition within the drainage basin. To figure out the influence of the urbanization on the river water quality, Shimousa upland has been chosen as the test field, which has low geological differences within the area and the urbanization is ongoing.

According to the high ratio of the arable land or residential land in the watershed, value of the concentration of river water quality became high. On the contrary, forest ratio and ion concentration had an inverse correlation. This is because forest loads lower materials into the river compare to the materials from arable lands or residential lands. More discussion will be added about how the river water quality will be made in the complexed land use areas.