

POSSIBLE HUMAN IMPACT ON THE WATER QUALITY OF THE UPPER
ENOREE RIVER BASIN, SOUTH CAROLINA

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Population growth and increasing development along the upper third of the Enoree River basin has led to increased concerns about point source and non-point source pollution. In the upper watershed, dominated by rural/agricultural land cover, the $H_4SiO_4:Na + K$ ranges from 1.7:1 to 1:1 suggesting that mineral weathering controls the chemical composition of the river. Downstream, land use becomes more suburban/industrial, and the Na+K, phosphate, and nitrate concentrations abruptly increase. A shift of $H_4SiO_4:Na+K$ away from 1:1 is associated with this change in composition. Point source pollution by a sewage treatment plant may contribute to this change in chemical composition.