



The fluvial flux of carbon from the UK – controls and processes

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Recent trends in the loss of DOC from catchments has focused interest on carbon fluxes from catchments. Studies of fluvial fluxes of forms of carbon exist, but these fail to take account of catchment process and losses in the network. This study attempts to account for catchment processes and understand present UK trends. The following forms of carbon: dissolved organic carbon; particulate organic carbon; and the excess dissolved CO₂. In order to calculate the dissolved CO₂ the contribution from groundwater was calculated from extensive groundwater records and the proportion of groundwater contributing to English rivers. The in-stream source of CO₂ was estimated from the BOD records from the harmonised monitoring network. Although patterns are clear processes are still uncertain and unpredictable.