
Headwater Influences on Downstream Water Quality

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cover is strongly correlated with water chemistry parame-

sources. The few smaller feeding operations (* 1000 animals) included were in all cases at least 0.1 km upstream of

riparian land cover on streams of similar sizes within

explained at local scales represented as riparian cover 2 or 4 km upstream from the sampling site (Fig. 3). Total nitrogen, TP, and NO₃ were the parameters with the greatest R² values related to riparian land cover, and all

We wanted to remove the potential problem that the proportion of length of first order streams would vary by stream order. But if we only used our fourth-order sites, then we had about half the total number of sites and our statistical power decreased. Thus we analyzed the subset of fourth-order stream sites (Fig. 5) to be certain that our results were not an artifact of sampling sites occurring at

Although permitted livestock operations and other point sources were not substantial in each watershed, point sources falling below Kansas' permitting regulations (e.g., confined livestock operations under 300 animals) were likely present in some watersheds and may have

Our study was correlative in nature and does not

