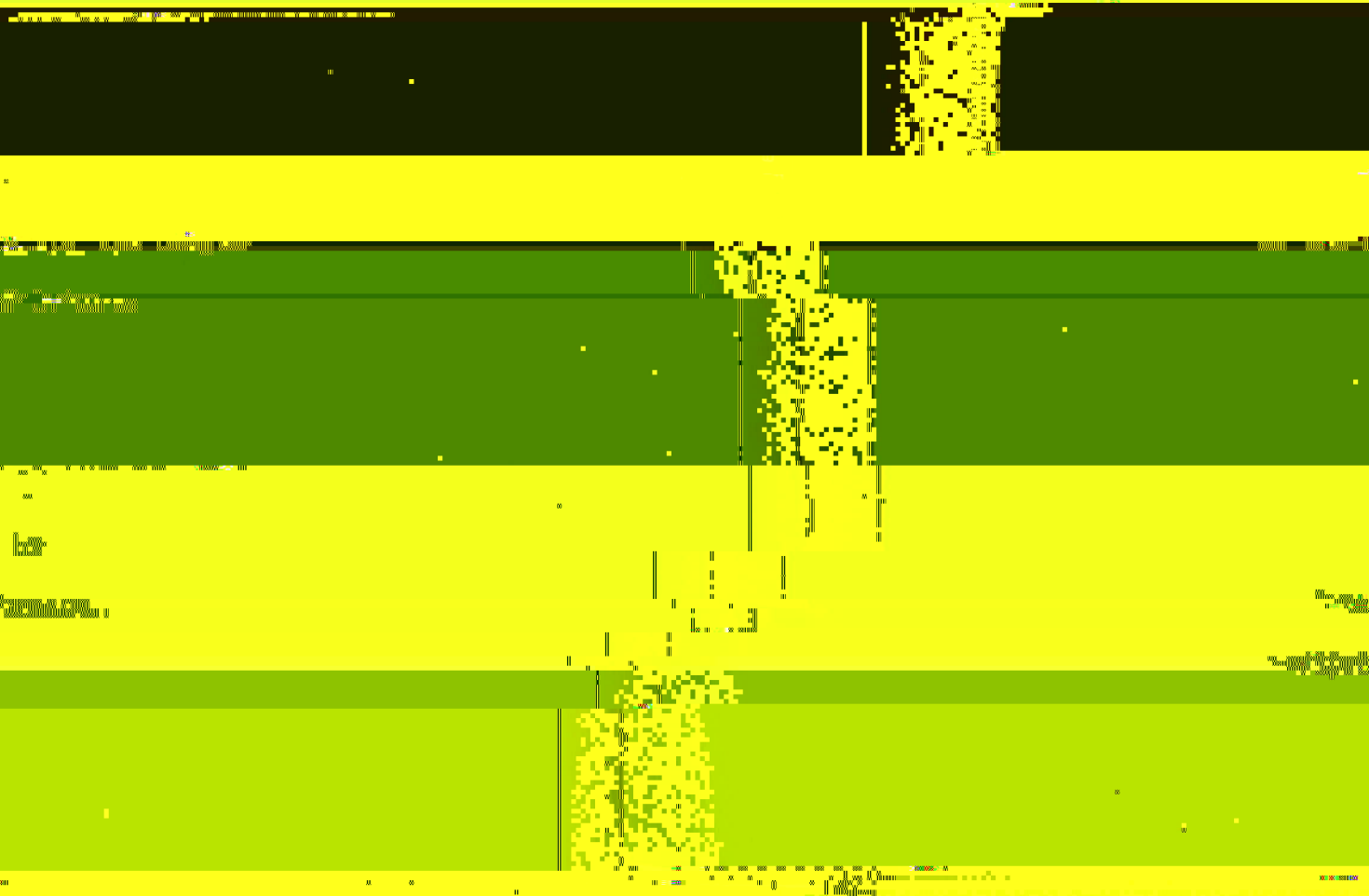


ESTIMATION OF AVERAGE STREAM DISCHARGE

UTILIZING MULTIVARIATE TECHNIQUES

STUDY REPORT NO. 10



ABSTRACT

The USGS groups drainage basins into hydrologic areas as a preliminary step to estimating stream discharge. It was hypothesized that stream discharge estimates could be improved if the grouping procedure was more objectively derived. Cluster analysis and discriminant analysis techniques were applied to

estimates for sixty-three Red River of the North drainage basins to test