



A Geographic Information System Tool to Solve Regression Equations and Estimate Flow-Frequency Characteristics of Vermont Streams: Open-File Report 2002-494 (Paperback)

By Scott A Olson

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****. Estimates of the magnitude and frequency of streamflow are needed to safely and economically design bridges, culverts, and other structures in or near streams. These estimates also are used for managing floodplains, identifying flood-hazard areas, and establishing flood-insurance rates, but may be required at ungaged sites where no observed flood data are available for streamflow-frequency analysis. This report describes equations for estimating flow-frequency characteristics at ungaged, unregulated streams in Vermont. In the past, regression equations developed to estimate streamflow statistics required users to spend hours manually measuring basin characteristics for the stream site of interest. This report also describes the accompanying customized geographic information system (GIS) tool that automates the measurement of basin characteristics and calculation of corresponding flow statistics. The tool includes software that computes the accuracy of the results and adjustments for expected probability and for streamflow data of a nearby stream-gaging station that is either upstream or downstream and within 50 percent of the drainage area of the site where the flow-frequency characteristics are being estimated. The custom GIS can be linked to the National...

Reviews

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The book is fantastic and great. It generally does not expense excessive. Its been designed in an exceptionally easy way and it is simply right after i finished reading through this book by which really changed me, change the way i think.

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