Suspended-Sediment Loads, Reservoir Sediment Trap Efficiency, and Upstream and Downstream Channel Stability for Kanopolis and Tuttle Creek Lakes, Kansas, 2008-10: Usgs Scientific Investigations Report 2011-5187

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Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book ***** Print on Demand *****.Continuous streamflow and turbidity data collected from October 1, 2008, to September 30, 2010, at streamgage sites upstream and downstream from Kanopolis and Tuttle Creek Lakes, Kansas, were used to compute the total suspended-sediment load delivered to and released from each reservoir as well as the sediment trap efficiency for each reservoir. Ongoing sedimentation is decreasing the ability of the reservoirs to serve several purposes including flood control, water supply, and recreation. River channel stability upstream and downstream from the reservoirs was assessed using historical streamgage information. For Kanopolis Lake, the total 2-year inflow suspended-sediment load was computed to be 600 million pounds. Most of the suspended-sediment load was delivered during short-term, high-discharge periods. The total 2-year outflow suspended-sediment load was computed to be 31 million pounds. Sediment trap efficiency for the reservoir was estimated to be 95 percent. The mean annual suspended-sediment yield from the upstream basin was estimated to be 129,000 pounds per square mile per year. No pronounced changes in channel width were evident at five streamgage sites