The Extents of Stream Disappearance in Middle Enyong Basin in Akwa Ibom State, Nigeria

by

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Abstract

This study was necessary to ascertain the extent of stream disappearance in the middle Enyong basin in Akwa Ibom State, Nigeriabasin. The study was based on the collection of data for morphometric analysis as well as adopting quantitative analysis to determine depth and width of streams in 2016 and qualitative method of PRA and oral testimony to get depth and width of streams in 1966. Drainage density dropped by –3.7% signifying that percentage drop of drainage density is low. The percentage change in morphometric parameters of the basin between 1966 and 2016 showed that change had occurred in the basin with less impact factor. Stream number dropped by -10.94%, that is, from 64 to 57 between 1966 and 2016. That meant 7 streams had totally disappeared. Direct proportion showed that about 14 streams will be disappearing in one hundred years to come. ANOVA was used to test the significant difference in the extent of stream disappearance between 1966 and 2016. The test of hypothesis one showed that there was no significant variation in the extent of stream disappearance between 1966 and 2016 in the basin. Testing hypothesis two showed that there was significant difference in disappearance of various streams in the basin. It has been recommended that proactive measures such as dredging of streams be considered at this early stage of disappearance because it will be cost effective than mature stage.

Keywords: Disappearing Stream, Extent of Disappearance, Enyong Basin and South Eastern Nigeria