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Potential of field turbidity measurements for computation of total suspended solid in Tasik Kenyir , Terengganu , Malaysia (Article)

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Abstract

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The urbanization has significant effects on watershed hydrology and the quality of water in this catchment. One component of water quality is total suspended solids (TSS) which a significant part of physical and degradation and a good indicator of other pollutants on the surface of sediment in suspension. The purpose of this study is to

investigate whether turbidity could produce a satisfac-tory estimate of TSS in urbanizing at the Tasik Kenyir . TSS and Turbidity were analyzed based on in -situ and ex-situ analyses were carried out according to the correlation matrix and linear regression methods at 14 (10–140 m) different depths for two sampling locations in the Tasik Kenyir (which are Chomor River and Mahadir Island-the name of sampling location in Tasik Kenyir), using data compiled. A log-linear model showed a strong positive correlation between TSS and Turbidity with is (R^2 = 0.991 for Chomor River and R^2 = 0.995 for Mahadir Island) with a regression equation of ln (TSS) = 1.32 ln (NTU) + C, with C not significantly different. From the result, water quality parameter (TSS and Turbidity) showed outlet significantly which decreased over depth caused the water quality deterioration of Tasik Kenyir development. These results strongly suggest that turbidity is a suitable monitoring parameter where water-quality conditions must be evaluated. © 2020. The Author(s). Published by Desalination Publications.

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