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LOW FLOW FREQUENCY ANALYSIS OF THE NILÜFER RIVER AT THE GEÇITKÖY STATION, TURKEY

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ABSTRACT

Frequency analysis of low flows (critical drought flows) is the first step in surface water pollution control. In this study, a Type-3 Extremal (or Weibull) Distribution with a lower limit is applied to 7-day moving average minimum flows of the Nilüfer River at the Geçitköy station. For the Geçitköy low flows, it is shown that reliable and physically meaningful estimates of parameters should be obtained using estimation procedures satisfying these restrictions. A lower flow limit, $X_0 = 0.20 \text{ m}^3$ /sec, obtained by the method of iterative least squares, is a reliable and physically meaningful lower limit for the probability distribution of 7-day average minimum flows at Geçitköy.

Reference: Pala, A.I. and E. Benzeden; Low Flow Frequency Analysis of the Nilüfer River at the Geçitköy Station, *Turkey, Journal of Environmental Hydrology, Vol. 9, Paper 8, March 2001.*

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