

**ANALISIS DAYA TAMPUNG BEBAN CEMARAN BIOCHEMICAL OXYGEN  
DEMAND (BOD) SUNGAI DENGAN MENGGUNAKAN METODE STREETER  
PHELPS DAN METODE QUAL2E  
(Studi Kasus : Sungai Garang, Jawa Tengah )**

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**ABSTRACT**

*Garang river basin which is located in Central Java passed the Semarang District (upstream), District Kendal (middle), Semarang (downstream). Environmental problems of the Garang River is increasing water pollution load. BOD is an indicator of water pollution. BOD load capacity of can be identified by using the concept of modeling. The method that used in the calculation of load capacity Garang River BOD contamination are QUAL2E model and Streeter Phelps method. Based on simulation results that using QUAL2E method and Streeter Phelps method, contamination BOD load on the minimum flow standard quality compared to Government rules No. 82 of 2001 found that Garang River is not between the quality standards for BOD in segment 1 class 4 with seating capacity > 603.44 kg / day. While the simulated contamination load capacity BOD that using QUAL2E method and Streeter Phelps method at the maximum flow compared with the standard quality BOD in Government Rules No. 82 of 2001 found that Garang River can not meet the quality standards for Class 1, Class 2.*

**Key words :** *Garang River, Pollution Load, QUAL2E Method, Streeter Phelps Method.*