

**IDENTIFIKASI KELAS AIR DENGAN METODE STORET DAN PENENTUAN DAYA
TAMPUNG BEBAN CEMARAN BOD SUNGAI
DENGAN SOFTWARE QUAL2E
(STUDI KASUS SUNGAI SERAYU, JAWA TENGAH)**

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ABSTRACT

Serayu River is one of the river in Central Java which located at 5 Regencies such as Wonosobo regency, Banjarnegara regency, Purbalingga regency, Banyumas regency, Cilacap regency. The length of Serayu river area is 181 km. Environment issue faced by Serayu River is the increasing of the BOD loads that represent the territorial indicator of water contamination. Based on the result of the class identify with the storet method got that at the segments 16 had a good water quality that belong to the I,II,III and IV water classes. While at segment 2,4,5,6,7,9,11,13,15 had an average value to the I water class and had a good water quality to the II,III,IV water classes. While at segment 1,10,12 had an average value water quality to the I,II,III classes and had a good water quality to the IV water classes. While at segment 3,8,14 had an average value water quality to the I,II classes and had a good water quality to the III, IV water classes. Based on the result simulation of BOD with QUAL2E at minimum debit which compared to permanent quality of BOD PP Number 82 Year 2001 got that Serayu River can fulfill permanent quality of class 4. And Serayu River can fulfill permanent quality of class 1,2,3, and 4 at maximum debit simulation of BOD.

Key Word : *BOD, Qual2E, Serayu River*

