

**STUDI KASUS KUALITAS AIR *OVERLAND FLOW*  
DI PERMUKIMAN BANTENG, SINDUHARJO, SLEMAN,  
YOGYAKARTA**

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**INTISARI**

*Overland flow* mempunyai pengaruh dalam pencemaran badan air di kawasan permukiman. Permukiman Dusun Banteng didominasi oleh lahan terbangun sehingga mudah terjadi *overland flow*. *Overland flow* membawa polutan yang bersumber dari aktivitas manusia di daerah permukiman dan dipindahkannya ke anak Sungai Gajahwong.

Tujuan penelitian adalah mengetahui karakteristik kualitas air *overland flow* menggunakan parameter TSS (*Total Suspended Solid*), DHL (Daya Hantar Listrik), Nitrat, Nitrit, Fosfat, pH, dan Fecal coli dan menemukan sumber pencemar serta kaitannya dengan aktivitas manusia.

Data yang dikumpulkan meliputi data kualitas air *overland flow* dan data pengaruh aktivitas manusia terhadap kualitas air *overland flow*. Data kualitas air *overland flow* didapatkan dari uji laboratorium, sedangkan data pengaruh aktivitas manusia didapatkan melalui wawancara terstruktur. Berdasarkan kedua data tersebut, kemudian dilakukan analisis deskriptif kuantitatif.

Hasil penelitian menunjukkan air *overland flow* tercemar, melebihi baku mutu air kelas 2 Peraturan Gubernur DIY Nomor 20 Tahun 2008 Tentang Baku Mutu Air, untuk parameter TSS, DHL, Nitrit, Nitrat, Fosfat, dan Fecal coli. Limbah dari pekarangan berpengaruh pada kandungan nitrat, nitrit, dan TSS. Fosfat ditemukan dari limbah domestik dan pekarangan, bersumber dari tanaman dan penggunaan deterjen. Pengelolaan sampah dengan cara dibakar yang diterapkan mengakibatkan tercemarnya air *overland flow* oleh nitrat, nitrit, dan fosfat. Kotoran hewan peliharaan yang ditemukan di jalan dan pekarangan menyumbang Fecal coli bagi *overland flow*.

Kata kunci: kualitas air, *overland flow*, permukiman

***CASE STUDY OF OVERLAND FLOW WATER QUALITY  
IN RESIDENTAL AREA OF BANTENG, SINDUHARJO, SLEMAN,  
YOGYAKARTA***

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***ABSTRACT***

*An overland flow has an effect in water body pollution in residential areas. One of the examples of residential area is in Banteng where it is dominated by many buildings. Therefore, when the rain falls, it instantly becomes the overland flow. On the other hand, the overland flow also brings pollutants which come from human activities in residential areas and, then, transferred to the Gajahwong River.*

*The aims of this study are to know the characteristics of the overland flow quality by using some parameters, such as TSS (Total Suspended Solid), Electric Conductivity, Nitrate, Nitrite, Phosphate, and pH and find out the sources of pollutants and their relation to human activities.*

*The data collection consisted of overland flow water quality and the impact of human activities on overland flow water quality. The data of overland flow water quality was obtained from laboratory test, while the data of impact of human activities was obtained through structured interview. Then, both data were analyzed by quantitative descriptive.*

*The results of this study showed that overland flow was polluted, it exceeded the standard of water quality of class 2 based on Governor DIY Regulation Number 20 Year 2008 about Water Quality Standard, for TSS, conductivity, nitrate, nitrite, phosphate, and Fecal coli. Waste from the yard affects the content of nitrate, nitrite, and TSS. Phosphate is found from domestic waste and yard, sourced from plants and the use of detergents. Waste management by means of combustion is applied resulting in polluted water overland flow by nitrate, nitrite, and phosphate. Waste from pet found in the streets and yard accounts for Fecal coli for overland flow.*

*Keywords: water quality, overland flow, residential area*