

낙동강유역의 하수처리장 방류수와  
인접 하류하천의 수질상관관계 분석

Water Quality Correlation Analysis between Sewage Treated  
Water and the Adjacent Downstream Water in Nakdong River  
Basin

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**Abstract**

The purpose of this study was to analyze the correlation between the effluent of the sewage treatment plant (STP) and the adjacent stream located downstream of the STP in Nakdong River. The flow and water quality such as BOD, COD, SS, T-N, and T-P data for 12 STPs and adjacent downstream monitoring stations in the main stream and tributaries of Nakdong River were collected from 2012 to 2015. As a result of correlation analysis between river flow and water quality at the river water quality measurement point, COD, SS and T-P were correlated positively with river flow rate at 6, 8, and 6 points, respectively. As a result of analyzing the water quality of sewage treatment plant effluent and downstream stream, BOD and COD were correlated at 2 and 3 points, respectively. T-N showed a positive correlation at 9 points, and 7 of them had a strong positive correlation, indicating that sewage treatment effluent had a large effect on downstream streams. In this study, we found that the correlation between river flow rate and water quality factors (COD, SS, TP) was high for river water measurement points, and the sewage treatment plant effluent was correlated with the T-N value of adjacent streams.

**Key words** : Nakdong River, Sewage Treatment Plant, Water Quality, Correlation

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