Determination of target water quality indicators and values on total maximum daily loads management system in Korea

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\textbf{ABSTRACT}

To improve the water quality of the four major rivers in Korea, Ministry of Environment of Korea (MOE) has introduced the Total Maximum Daily Loads (TMDLs) management system since 2002 and BOD was selected as one of the target materials during the first period (2004–2010). For an effective watershed management, it is necessary to have one or more quantitative measures that can be used to evaluate the relationship between pollutant sources and their impacts on water quality. Such measurable quantities are termed water quality indicators. Once an indicator is selected, target values for that indicator must be established to distinguish between the impaired and unimpaired state of the water-body. Various factors such as available data, application, management conditions and cost will be considered for the selection of an appropriate watershed management indicator. This paper introduces various factors required for choosing target water quality indicators and establishes reasonable target values during the second TMDLs period (2010–2015).

Keywords: BOD; TMDLs; TP; Water quality indicators; Watershed management policy

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