

Application Water Quality Modelling In Total Maximum Daily Load (TMDL) Management: A Review

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ABSTRACT

Nowadays the issues of water quality and water pollution have been a major problem across the country. A lot of management attempt to develop their own TMDL database in order to control the river pollution. Over the past decade, the mathematical modeling has been used as the tool for the development of TMDL. This paper presents the application of water quality modeling to develop the total maximum daily load (TMDL) information. To obtain the reliable database of TMDL, the appropriate water quality modeling should choose based on the available data provided. This paper will discuss on the use of several water quality modeling such as QUAL2E, QUAL2K, and EFDC to develop TMDL. The attempts to integrate several modeling are also being discussed in this paper. Based on this paper, the differences in the application of water quality modeling based on their properties such as one, two or three dimensional are showing their ability to develop the modeling of TMDL database.

KEYWORDS: TMDL, Water Quality Modeling, QUAL2E, EFDC