



Elimination of agricultural nonpoint source pollution using a pre-dam in the Taihu Lake basin: perspective from a laboratory study

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ABSTRACT

This study analyzes the influence of a pre-dam reservoir on the quality of agricultural nonpoint source pollution. The results clearly indicated that the pre-dam reservoir under study significantly improved the quality of the water flowing through the pre-dam. The greatest reduction in the pollutant concentration, particularly for suspended solids, NH₄-N, and chlorpyrifos was observed in the settling area of the pre-dam reservoir. The results of this study indicate that pre-dams may be successfully applied to reduce agricultural nonpoint source pollution in the Taihu Lake basin. However, the pre-dam reservoir was not able to completely eliminate all the contaminants flowing into Taihu Lake.

Keywords: Agricultural nonpoint source pollution; Functional areas; Pre-dam; Water retention

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