SEDIMENT ORGANIC MATTER, NITROGEN, AND PHOSPHORUS OF FOUR RIVERS IN MIAGAO, ILOILO

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ABSTRACT

The four rivers of Miagao are examples of aquatic areas where sediment pollution can be related and mostly caused by anthropogenic and non-point sources. The four rivers of Miagao, namely Bacauan, Naulid, Oyungan and Tumagbok rivers, were assessed and observed to have low levels of water due to the dry season, presence of water stagnation due to dikes; other factors such as discharges from domestic activities and livestock wastes, and thick vegetation are also present in the river. The relevance of this study is to provide baseline information about the levels of organic matter, NH_4-N, and available phosphorus present in the river, provide public knowledge about the negative impacts of excessive levels of those parameters; and locate possible sources of the pollution through the values obtained.

For the total phosphorus concentration present in river sediments, the values are ranging from **0.0648 ppm to 0.154 ppm**. Therefore, the values of the available phosphorus are harmful and can cause eutrophication to the river. However, for the values of organic matter and nitrogen, it was reported to be not harmful to the river but can still contribute to the excessive nutrient levels and eutrophication of the river.