

عنوان مقاله:

Domestic Wastewater Quality and Pollutant Loadings from Urban Housing Areas

محل انتشار:

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خلاصه مقاله:

Wetlands are important spawning and nursery ground for fish and prawns. However, wetlands have been reported to be polluted in different parts of the world. One of the pollution sources is domestic wastewater. Therefore, in this study, domestic wastewater quality was studied at three major housing areas. Samplings were conducted in three trips. Results showed that pH ranged from 6.64 to 7.31 and temperature ranged from 23.5 to 31.7 °C. DO values were low, that is, below 3.5 mg/L for all trips at all areas studied indicating that it was not suitable for aquatic life. Nutrients such as ammoniacal nitrogen and soluble reactive phosphorus of the housing areas ranged from 11.1 to 17.2 mg/L and 1.05 to 2.43 mg/L respectively. Biochemical oxygen demand and total suspended solids concentrations at all the housing areas exceeded the Standard B maximum permitted values of Effluent Discharge Standard of Environmental Quality Act 1974. Loadings of pollutants from housing areas in Kuching were computed. This study shows that domestic wastewater was low in DO, high in oxygen demand, high in solids and nutrients thus loading the rivers with pollutants. Therefore, domestic wastewater must be treated before being channeled to the adjacent water bodies to avoid eutrophication in the receiving water and to recover nutrients

کلمات کلیدی:

Household wastewater; Water quality; Pollutant loading; Nutrients

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