

Grey water has been discharged onto this wetland for more than thirty years without any measurement of the quality of the influent and effluent. The effluent eventually joins a stream (Kakum River) which is a source of water for recreation, farming, drinking and fishing. The quality of the effluent which enters the receiving water as well as the potential of the wetland in the treatment process has not been determined. The purpose of this research is to assess the potential of the wetland in grey water treatment.

Three communities in Cape Coast, the formal capital of Ghana were selected for this work. The wetland under study has an area of about 17,928m² and hydraulic loading rate of 0.0164m/d. Field studies were conducted to demarcate the borders as well as to confirm the communities which discharges into the wetland.

The results indicate that the wetland has very high potential in treating grey water, with suspended solids showing high removal efficiency. It was also inferred from the results that the wetland's treatment is influenced by the precipitation pattern of the area and this is clearly shown in the removal efficiency of manganese.

The findings will help decision makers to make proper laws concerning wetland use in Ghana. It will inform decision makers to officially consider wetlands as alternatives for grey water treatment.

This paper assesses the potential of natural a wetland and makes recommendations on its proper use as well as its limitations.