Abstract

This study focused on the characterization of physical, chemical and biological water quality of the Fountain of Utinga, which includes the river Guamá, Água Preta Lake and Bolonha Lake, located in the State Water Complex called Utinga. The study area comprises the Lakes Água Preta and Bolonha that have natural springs, but 90% of the water of these lakes are up-taken from the river Guamá to the Água Preta Lake and then through a pipeline to Bolonha Lake, where it is treated in the Bolonha station. Results showed a relationship between the increase in population and the production of untreated sewage released into bodies of water, and as a consequence, significant deterioration in physical variables such as: color and turbidity, and in the biological variable coliform and chemical variables including N-ammonia and nitrate as compared with the CONAMA resolution 357 standards. The results showed that the population that lives in the vicinity of the reservoir Utinga nearby Bolonha lacks adequate sanitation systems (garbage collection and sewage treatment).

Keywords

Urban watershed, water treatment, water resources, environmental degradation.