**Abstract**

Lake water quality degradation and heavy metals pollution have been serious environmental threats for last decades, especially in those fresh water lakes situated in the vicinity of the cities and human habitations. The present study aimed to investigate the physicochemical parameters, level of nutrient contents and heavy metals to determine the water quality of Ukkadam, Kuruchi and Singanallur Lakes. All the physicochemical parameters except dissolved oxygen, sulphate, silicate and nitrate values were found above the prescribed limit as recommended by WHO (2011) and BIS (2003) drinking water quality. The concentrations of Ca, Cr, Cu, Fe, Ni and Pb in waters of the selected three lakes ranged from 0.014 – 0.038, 0.145 – 0.063, 0.025 – 0.552, 0.100 – 3.460, 0.028 – 0.117 and 0.463 – 2.172 mg/L respectively. The concentrations of heavy metals except Cu were found to be higher than the permeable dose. This investigation revealed that the water in these lakes is partially contaminated with high level of heavy metals. It is recommended that proper implementation of new wetland waste management system and constant monitoring is urgently required to maintain good water quality in these lakes for future generation.