Title of Article: Physico-Chemical And Microbial Assessment of Different Water Sources in Ota, Ogun State, Nigeria

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Abstract: Pollution of water bodies is one of the areas of major concern to environmentalists and requires continuous assessment. This necessitated the evaluation of the physical, chemical and microbiological quality of water from the primary sources of supply in different locations of Ota using standard methods. Results of the values of the surface and potable water in the study area showed that turbidity (0.19 to 11.6 NTU), conductivity (36.5 to 396 μs/cm), salinity (10 to 80 mg/L), alkalinity (0 to 64 mg/L), nitrate (0.20 to 4.60 mg/L), total hardness (5.0 to 80.0 mg/L), total solid (4000 to 7000 mg/L) total suspended solids (3967 to 6978 mg/L) total dissolved solids (17.9 to 198 mg/L), dissolved oxygen (4.50 to 9.60 mg/L), bi MPN count (2 to 1600 MPN/100 ml) and the faecal coliform counts ranged between ND to chemical parameters of most of the samples analysed were within the limits set by both National and International standard regulatory bodies for drinking and domestic waters (SON, 2007; WHO, 2011). Overall, the potable water sources are suitable for drinking, but the faecal contamination in Iju river makes it unfit for drinking.