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## Evaluation of potability of water consumed by residents of the Lagoa de Cima region

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The research is directed towards the study of water quality, specifically, of the residents who live in the Environmental Protection Area (EPA) of Lagoa de Cima, in Campos dos Goytacazes – RJ. Water is a primordial resource for the survival of all living beings, but when it comes to human beings, some care is needed in relation to its potability. Unfortunately, not everyone has access to portable water or even adequate treatment for it, which can lead to health problems in the future. This work aimed to evaluate the quality of water that is consumed by residents living in the urban center of São Benedito, which is located in Lagoa de Cima. Regarding the methodology, the following procedures were carried out: collection of bibliographic and documentary data, such as: ordinance, theses, articles, pre-existing “shapefiles” from Lagoa de Cima and the municipality of Campos dos Goytacazes; systematic review; collection of water samples from shallow wells for physicochemical and bacteriological analyses, map generation with spatialized water samples and elaboration of tables. According to the results obtained from the bacteriological analyses, the presence of total coliforms and thermotolerant coliforms was found in some samples. Among the physicochemical parameters analyzed, pH, Fe and Mn are in disagreement with the consolidation ordinance of N<sup>o</sup>. 5/2017. Thus, it can be concluded that it is necessary that the public authorities provide assistance to the local population in relation to water quality.

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