

# Water quality of the plain of El-Hadjar wilaya of Annaba (Northeast Algeria)

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**Abstract:** The region of El- Hadjar is known for its diversity of industries that stretch of the steel industry to the food and materials processing. Industrial and domestic waste is channeled into streams Oued Seybouse is its major tributary Oued Meboudja, both flanked with major industrial areas. Pollution of surface and groundwater has become a particular problem of interest for health and environmental conservation. This study aims to physico- chemical characterization of waters in this area using 11 sampling points covering the entire area of a spread on rivers and plains of El Hajar). The results are expressed in terms of concentrations of the various pollutants such as nitrate, nitrite and chloride in a first step. The physico -chemical parameters were recorded over a period of seven months during 2009 and relate to salinity, conductivity, pH, Eh ... It was found that the region is moderately polluted following the accepted standards. The data are correlated with industrial and agricultural activity in the region. The study is in the process of being completed by a water quality map of the entire region with the concentrations of hydrocarbons and heavy metals. The evolution of these parameters will develop a policy for the preservation of the environment that is needed in these times.

**Keywords :** pollution, environment, surface water, groundwater quality, physical and chemical analysis, environmental policy, El-Hajar.