

## THE IMPACT OF MARINE TRANSGRESSION IN THE MARSHES OF SOUTHERN IRAQ

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### Abstract:

The marshes in southern Iraq are one of the most interesting phenomena to study because of their unique environment. Therefore, this region has received a lot of attention in various studies. It is known about the environment of the marshes that it represents a fresh water environment where it is supplied with river water. Therefore, it would be natural for the sediments to reflect that environment, especially in the surface areas of it. However, the location of the marshes in the southern part of Mesopotamia, which was affected by changes in the sea water level during the Holocene period, may raise interest to know the environmental status of the marshes during that period. To find out, three sites were chosen in the marshes of northern Basra province to represent the southern part of Iraq, where the depths of the samples varied between surface and subsurface samples, reaching a depth of three meters. The samples were subjected to grain size analysis in order to know the nature of the sediments and the extent of their differences or similarities through the depths, as well as the diagnosis of the shells present in them to define the environment in them at the time while they were following the same environment or there was a change in it with the varying depths. The study showed the dominance of silt deposits in the study area clearly over other types of sediments, in addition to the variation in the sources of those deposits. While the shells, which belong to different types of fauna, revealed the presence of the marine influence in addition to the well-known riverine influence in the region, which confirms the arrival of the impact of the change in the level of marine waters during the Holocene period to the marsh areas in southern Iraq.

**Key words:** Marine Transgression, Marshes, Southern Iraq, Holocene, Northern Basrah.