

EFFECT OF PHYSIOGRAPHIC LOCATION ON SOIL QUALITY DEGRADATION IN IRAQI MESOPOTAMIAN PLAIN USING GIS.

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ABSTRACT

The area of this study located in Iraqi Mesopotamian plain, in Western of Falluja city between longitude $43^{\circ}36'$ to $43^{\circ}50'$ East and latitude $33^{\circ}16'$ to $33^{\circ}38'$ North. Used Soil Quality Index Model. The soil quality index parameters are as follows (texture, soil salinity, organic matter content and drainage states). The Soil Quality Indices are mapped by ArcGIS9.3. The results indicate that 4354.83 ha. of the studied area were moderate soil quality with relative extent 54.08% from studied area ranges from 396.9 ha. to 1921.5 ha. at river levees and irrigation basins physiographic unit. respectively. While low soil quality about 3697.11 ha) with relative extent 45.92% from studied area ranges 130.23 ha. to 1572.57 ha. at river terraces and irrigation basins physiographic unit. Respectively. that due to salinity and poor drainage.

Key words: Physiographic location, Mesopotamian plain , GIS.