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JEP > Vol. 3 No. 10, October 2012

OPEN ACCESS

## Mesopotamian Marshlands: Salinization Problem

PDF (Size: 839KB) PP. 1295-1301 DOI: 10.4236/jep.2012.310147

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### ABSTRACT

Salinization becomes a very serious problem affecting the restoration assessment of the newly re-flooded marshes of the Mesopotamian southern Iraq. From mid-1970 to early-1990, the whole marsh area was influenced by water shortage and desiccation processes. Increasing the average salinity level in the re-flooded marshes is acting versus their recovery progress and significantly affecting their aquatic biota. This study will examine the contributions of dams' construction and desiccation on increasing the salinity level with in the Mesopotamian marshlands overtime. Water discharge and salinity concentration were monitored in the direct water inputs and outlets of the three marshlands from May 2006 to February 2007 on a monthly basis, while salinity and major ions concentrations including " Ca<sup>1+</sup>, Mg<sup>2+</sup>, Cl<sup>1-</sup>, and SO<sub>4</sub><sup>2-</sup>" were monitored in 28 re-flooded marshes from March 2005 to August 2008 on a seasonal basis. The study indicate that increasing the salinity level in the Mesopotamian marshlands is due to three reasons: 1) The overtime increasing in the salinity level of their direct water inputs, due to dams' constructions; 2) the increase of the Arab Gulf tide via Shatt Al-Arab river due to the reduction of the water level in the outlets of the Central and Al-Hammar marshlands; and 3) the huge accumulation of salts due to desiccation.

### KEYWORDS

Mesopotamian Marshlands; Water Shortage; Desiccation; Salinization; Major Ion Sources

### Cite this paper

S. AlMaarofi, A. Douabul and H. Al-Saad, "Mesopotamian Marshlands: Salinization Problem," *Journal of Environmental Protection*, Vol. 3 No. 10, 2012, pp. 1295-1301. doi: 10.4236/jep.2012.310147.

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