

Home > Journal > Earth & Environmental Sciences > JWARP

[Indexing](#) [View Papers](#) [Aims & Scope](#) [Editorial Board](#) [Guideline](#) [Article Processing Charges](#)

JWARP > Vol.3 No.10, October 2011

OPEN ACCESS

## The Fate of Disi Aquifer as Stratigic Groundwater Reserve for Shared Countries (Jordan and Saudi Arabia)

PDF (Size: 673KB) PP. 711-714 DOI : 10.4236/jwarp.2011.310081

### Author(s)

Alsharifa Hind Jasem, Maisa'a Shammout, Dheaya AlRousan, Marwan AlRaggad

### ABSTRACT

Disi is a fossil groundwater shred between Jordan and Saudi Arabia with a very high quality properties, this water is limited and has been used for irrigation purposes between both countries, this study helps in highlighted the importance of this water as stratigic reserve to be use later on. This study shows that the amounts of groundwater affected by the thickness of the saturated zone in the aquifer, the porosity of the aquifer and the groundwater flow in the basin. Abstraction from the aquifer will affect water quality so this point must be clearly understood all the time.

### KEYWORDS

Aquifer, Groundwater, Fossile Aquifer, Safe Yeild, Transboundary Aquifer, Rock Retention, Groundwater Flow, Saturated Zone

### Cite this paper

A. Jasem, M. Shammout, D. AlRousan and M. AlRaggad, "The Fate of Disi Aquifer as Stratigic Groundwater Reserve for Shared Countries (Jordan and Saudi Arabia)," *Journal of Water Resource and Protection*, Vol. 3 No. 10, 2011, pp. 711-714. doi: 10.4236/jwarp.2011.310081.

### References

- [1] BGR and WAJ, " Groundwater Resources of Jordan, Vol. 3-Structural Features of the Main Hydro-geological Units in Northern Jordan, Water Authority of Jordan (WAJ) and Federal Institute for Geosciences and Natural Resources (BGR)," BGR-Archive, Vol. 57, No. 118702, 1994, p. 30.
- [2] E. Salameh, " Over-Exploitation of Groundwater Resources and Their Environmental and Socio-Economic Implications: The Case of Jordan," *Water International*, Vol. 33, No. 1, 2008, pp. 55-68. doi:10.1080/02508060801927663
- [3] MOI-Ministry of Water and Irrigation, Open Files, Jordan, 2009.
- [4] GTZ and NRA, " National Water Master Plan of Jordan. Agrarund Hydrtechnik GMBH ESSE," Bundesanstalt fur Geowissenschaeien und Rohstoffe, Hannover, 1977.
- [5] ESRI-Environmental Systems Research Institute, ArcView GIS version 9.1. A Computer Software to Visualize, Explore, Query and Analyze Data Spatially, USA, 2006.
- [6] C. Drake, " Water Resource Conflicts in the Middle East," *Journal of Geography*, Vol. 96, No. 1, January-February 1997, pp. 4-12.
- [7] Ministry of Water and Irrigation, " National Water Master Plan." Amman: Ministry of Water and

- [Open Special Issues](#)
- [Published Special Issues](#)
- [Special Issues Guideline](#)

[JWARP Subscription](#)

[Most popular papers in JWARP](#)

[About JWARP News](#)

[Frequently Asked Questions](#)

[Recommend to Peers](#)

[Recommend to Library](#)

[Contact Us](#)

Downloads: 402,262

Visits: 1,010,870

Sponsors, Associates, and Links >>