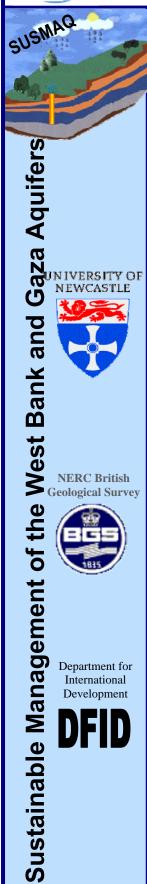


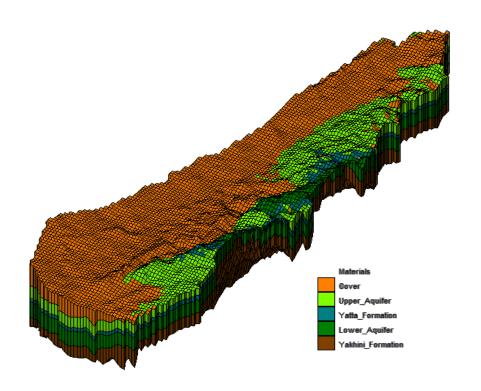
Palestinian National Authority Palestinian Water Authority



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Boundaries of the Western Aquifer Basin and the Eocene Aquifer in the Northeastern Aquifer Basin



NERC British



Department for International Development



Final Report SUSMAQ-MOD #21 V 0.1

> Prepared by: **SUSMAQ TEAM**

Palestinian Water Authority, Palestine **Water Resource Systems Research Laboratory** University of Newcastle upon Tyne, UK

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Disclaimer

This report is an output from the Modelling Study Team, part of the SUSMAQ project.

The findings, interpretations and conclusions expressed are those of the authors (the team) and should not be attributed to other collaborators on the SUSMAQ project.

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The SUSMAQ Project

The aim of the project is to increase understanding of the sustainable yield of the West Bank and Gaza aquifers under a range of future economic, demographic and land use scenarios, and evaluate alternative groundwater management options. The project is interdisciplinary, bringing together Hydrogeologists and groundwater modellers with economists and policy experts. In this way, hydrogeological understanding can inform, and be informed by, insights from the social sciences. The results of the study will provide support to decision-making at al levels in relation to the sustainable yield of the West Bank and Gaza aquifers.

The project runs from November 1999 to December 2003, and is a partnership between the Palestinian Water Authority, University of Newcastle and British Geological Survey. The project is funded by the United Kingdom's Department for International Development (DFID).

Management Options Study

Modelling Study
The Modelling Study is part of the SUSMAQ project.

The Modelling study focuses on the geology and hydrogeology of the Western Aquifer Basin (WAB), its inflows (recharge) and outflows (spring and well abstractions). The conceptual model is followed by a numerical model, using the GMS software modelling code.

The Modelling Study has two main objectives. Firstly to set up a conceptual hydrogeological model of the WAB and the run and calibration of both, a numerical groundwater flow and contamination model of the basin. Secondly, recharge will be estimated in a separate subproject, which includes extensive fieldwork for primary data in a chosen representative catchment within the recharge area (Wadi Natuf).

Bibliographical Reference

Boundary conditions of the Western Aquifer Basin (WAB) and the Eocene aquifer. Report No. SUSMAQ-MOD#21 V0.1. Sustainable anagement for the West Bank and Gaza Aquifers, alestinian Water Authority (Palestine) and University of Newcastle upon Tyne (UK).

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Feedback

The SUSMAQ and PWA teams will appreciate any feedback on this report. Feedback should be sent to the above contacts.



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