



Palestinian National Authority
Palestinian Water Authority



السلطة الوطنية الفلسطينية
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Management Options Inception Report

SUSTAINABLE MANAGEMENT OF THE WEST BANK AND GAZA AQUIFERS

UNIVERSITY OF
NEWCASTLE

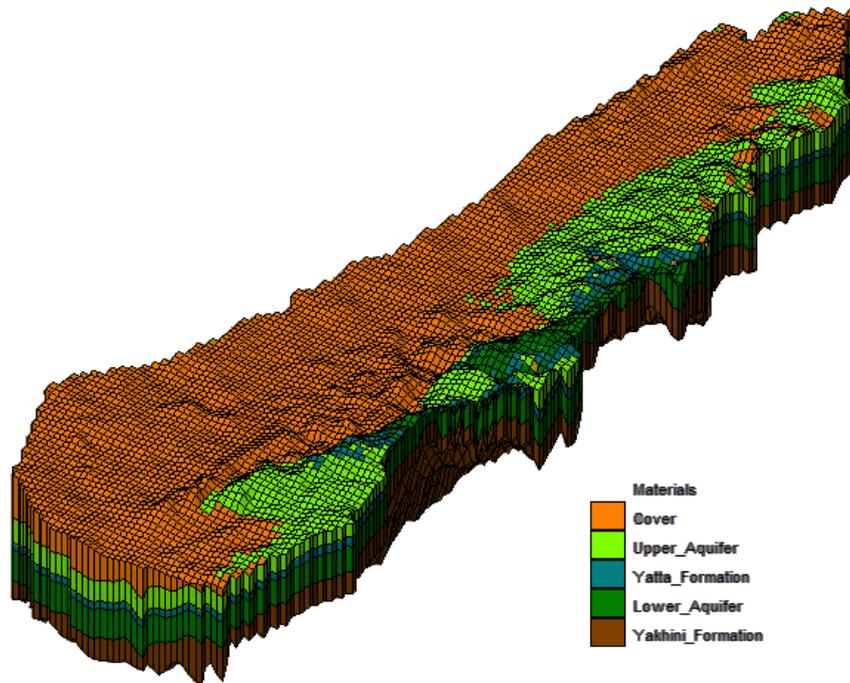


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<p>Disclaimer</p> <p>This report is an output of the Management Options (MO) study, part of the project Sustainable Management of the West Bank and Gaza Aquifers (SUSMAQ).</p> <p>The findings, interpretations and conclusions expressed are those of the authors, and should not be attributed to the Palestinian Water Authority or any other Palestinian organisation.</p>	<p>Contact Details</p> <p>Professor Enda O’Connell Project Director University of Newcastle upon Tyne Tel: 0191 222 6405 Fax: 0191 222 6669 Email: P.E.O’Connell@ncl.ac.uk</p> <p>Engineer Fadle Kawash Deputy Chairman Palestinian Water Authority Ramallah, Palestine Tel:02 295 9022 Fax 02 2981341 Email: fkawash@pwa-pna.org</p> <p>Dr. Amjad Aliewi Operations and Technical Manager Team Leader, Hydrogeology and Flow Modelling Sunrise Building Al-Irsal Road Al-Bireh/Ramallah, Palestine Tel. 02 298 89 40 Fax. 02 298 89 41 e-mail: a.s.aliewi@susmaq.org</p>
<p>The SUSMAQ Project</p> <p>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 all levels in relation to the sustainable management of the West Bank and Gaza Aquifers.</p> <p>The project runs from November 1999 to October 2004 and is a partnership between the Palestinian Water Authority (PWA), University of Newcastle (NCL), the British Geological Survey (BGS) and the Overseas Development Institute (ODI). The project is funded by the United Kingdom’s Department for International Development (DFID).</p>	<p>Management Options Study</p> <p>The Management Options (MO) Study is part of the SUSMAQ project.</p> <p>The MO Study focuses on changing water demands, the use and allocation of water as both an economic and a social good, and the policy and institutional arrangements that can support sustainable water use and sustainable livelihoods.</p> <p>The MO Study has two main objectives. Firstly, it aims to identify alternative groundwater management options and evaluate them against a range of performance and feasibility criteria. These include cost and economic efficiency; equity; technical, political and institutional feasibility; public and political acceptability; and hydrogeological impact. Secondly, the study aims to develop economic, demographic and land use scenarios and evaluate possible abstraction/pollution outcomes.</p>
<p>Bibliographical Reference</p> <p>Report No.: SUSMAQ-MO#03 V0.2 Management Options Study Inception Report, April 2001.</p> <p>Contributors: Tony Allan, Don Brown, Roger Calow, Alan MacDonald, Steve Merrett</p> <p>Editor: Roger Calow</p>	<p>Feedback</p> <p>The SUSMAQ and PWA teams will appreciate any feedback on this report. Feedback should be sent to the above contacts.</p>

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INTRODUCTION

Project and study background

The three year, DFID-funded project ‘Sustainable management of the West Bank and Gaza aquifers’ began in November 1999. The overall aim of the project is to increase understanding of the sustainable yield of the aquifers under a range of future economic, demographic and land use scenarios, and to identify and evaluate alternative groundwater management options. The project is interdisciplinary bringing together hydrogeologists and groundwater modellers with economists and policy/institutional experts. In this way, greater hydrogeological understanding can inform, and be informed by, insights from the social sciences. It is expected that the results of the project will support decision-making within the Palestinian Water Authority (PWA).

The management options component¹ of the project began in February 2000. The study will focus on water demands, the use and allocation of water as water is an economic and a social good, and the policy and institutional arrangements supporting sustainable water use and sustainable livelihoods. Specifically, the management options study will:

- Identify alternative groundwater management options, and evaluate options (short, medium and long term) against a range of performance and feasibility criteria. Criteria include: cost and economic efficiency; equity; technical, political and institutional feasibility; public and political acceptability; and hydrogeological impact; and
- Develop economic, demographic and land use scenarios and evaluate possible abstraction-pollution outcomes. This will be closely linked to the evaluation of management options and the hydrogeological modelling work.

Roger Calow	Team Leader and socio-economist. Inputs on water resources policy and economics
Alan MacDonald	Hydrogeologist. Inputs on hydrogeological dimension of management options, and link with modelling (NCL and BGS) teams
Tony Allan	Water policy expert. Inputs on institutional and policy dimensions of water resource management
Stephen Merrett	Economist. Inputs on institutional, economic and policy dimensions of water resource management
Don Brown	Irrigation and farming systems specialist. Inputs on rural livelihoods and farming systems

Inception phase objectives – management options study

As the MO study began three months after the ‘official’ project start date, the study has its own inception phase. This was originally planned for March-June 2000, but as the visit to Palestine was delayed until the end of July, the inception phase should be considered as running from March 2000 until final approval of this inception report.²

¹ Hereafter termed the management options (MO) study

² There are therefore two inception reports: the main project inception report was issued in June 2000 with a minor contribution from the management options team. This inception report concerns the MO study, but also deals with issues of integration between technical and MO components of the wider project.

The overall aim of the MO inception phase was to develop a programme of work with PWA, in consultation with other project stakeholders. In the project logical framework (see main project inception report, June 2000), this task is broken down into three activities:

- Initial project workshop with key water sector stakeholders (Activity 3.1);
- Collaborative development of socio-economic work programme to ensure stakeholder participation and ownership (Activity 3.2); and
- Situation analysis – a review of groundwater management and groundwater use, and existing institutional and economic arrangements influencing user behaviour and water allocations (Activity 3.3).

Following the main project inception workshop and Technical Committee meeting in February 2000, and in consultation with DFID, it was also agreed that a Palestinian researcher should be employed to work on the MO study. A fourth inception phase activity should therefore be added:

- Draw up terms of reference for a local Palestinian researcher to work full-time on the MO study, and employ a suitable candidate (Activity 3.4).

Aim and structure of report

This report has three principal aims:

- (i) To describe activities carried out during the inception phase, particularly in relation to the findings and outcomes of the planning visit undertaken in July 2000;
- (ii) To describe how thinking behind the study has developed during the inception phase, identifying and discussing important concepts and organising ideas that will underpin the analysis; and
- (iii) To set out a programme of work for the remainder of the project, based on the above.

The report is split into five sections. Section 2 provides a brief description of activities undertaken during the inception phase, and outcomes from them. Section 3 provides an introduction to some of the key concepts and ideas that will inform the study, drawing on experience and lessons learned from elsewhere in the region. Section 4 then describes a programme of work for the remainder of the project, working through objectives, outputs, activities and methods, risks and assumptions, and dissemination. Section 5 draws together some conclusions. Additional reference material is contained in the appendices.

This final draft of the inception report supersedes the discussion draft produced in December 2000, sent to NCL and PWA for review. It incorporates feedback from DFID issued on 19 December 2000. Feedback from PWA will be incorporated following a project Technical Workshop planned for April 2001, which will include representation from both PWA and DFID.



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