

# Managing the unseen: Langebaan Road Aquifer System

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## **Abstract**

The effective management of groundwater resources is a critical aspect to ensure sustainability. The paper discusses the structures used to ensure effective monitoring at a local government level, and focuses specifically on the process followed and the critical monitoring factors identified to ensure sustainability.

The paper highlights specific problems experienced with the implementation of the Langebaan Road Aquifer well-field as an integrated water resource, and the interaction required between the different role players. Suggestions, based on the Langebaan case study, are made regarding the different aspects to be monitored and the institutional arrangements required, ensuring effective participation between National and Local Government and other affected parties.

The paper concluded that an independent monitoring committee is of utmost importance to ensure the successful management of a sustainable groundwater resource. The lessons learned through the implementation of the Langebaan Road Aquifer proves that structured participation in the management of these resources is of critical importance and that success cannot be achieved without cooperation between all parties, in particular the different government departments.

**Keywords:** groundwater monitoring, management structures, sustainable groundwater