

Orthofer R, Loibl W (2002):
Nitrate Water Pollution Risk in the Lower Jordan Valley. In: Preserving the Quality of Our Water Resources (Rubin H, Nachtnebel H-P, Fuerst J, Shamir U, eds), Chapter 13, p. 230-243, Springer Publ. ISBN 3-540-43148-9

Abstract

This chapter describes the spatial risk assessment for nitrate pollution of groundwater that supplies the Lower Jordan Valley. The assessment is based on the mapping of inputs and leakage of nitrogen compounds. The major risk factors are uncontrolled urban wastewater disposal and agricultural fertilizer use and irrigation. Solid waste dumps and industrial sources are of minor concern. The spatial risk for pollution of the shallow groundwater in the valley floor depends on the water table and the potential leakage depth; it is high in areas of high irrigation and high water tables such as in banana cultivation areas along wadi fans or near rivers. © Springer Publ.

Example result: Calculated nitrogen leakage into soils from fertilizer use, irrigation, domestic sewage, and waste dumps in the Lower Jordan Valley (Target Area = valley floor; Water-Relevant Area = area over the mountain aquifers)

Nitrogen Leakage

