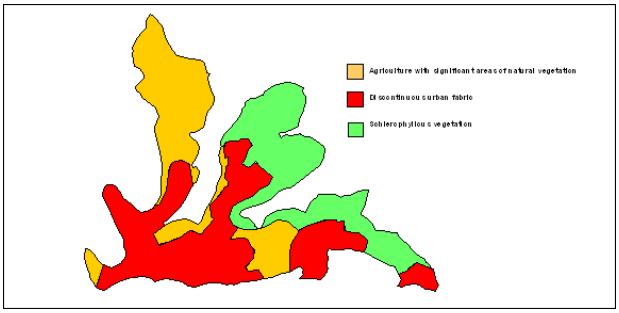
MALTA RESOURCES AUTHORITY

Groundwater Body Code
MT015
Groundwater Body Name
Nadur Perched Groundwater Body
Reference Year
2004



Corinne Landcover 2000

Hydrogeological Characteristics

Aquifer Description

The outcropping aquifer formation in the Nadur region is the Upper Coralline Limestone. Due to its lithographic nature and its sensitivity to weathering this formation hosts a generalized aquifer. The UCL formation varies considerably in thickness due to erosion and attains a maximum thickness of 60m in the region. The rather small thickness of this formation on the plateaus has made possible the direct exploitation of water resources by shallow wells. The outcrops of the Upper Coralline Limestone acts as a generalized recharge area for the underlying groundwater body.

Mean Aquifer Thickness	30m
Soil Type and Indicative Thickness	The Nadur series, a type of Carbonate Raw Soil dominates whilst there are minor occurrences of Terra Soil Complexes. The indicative thickness is between 18-37cm.
Mean Hydraulic Conductivity	2.93E-6m/s
Mean Annual Groundwater Level Amplitude	n/a

Pressures—Quantitative Status

Mean Annual Recharge (Natural and Artificial)	1.33 hm^3
Mean Annual Groundwater Demand	0.58 hm^3
Balance	0.57 hm^3
WSC Groundwater Sources	None
Registered Private Groundwater Sources	430 boreholes and 37 Springs

Pressures—Qualitative Status

Principal Diffuse sources of Pollution	Agriculture, leaks from the sewerage.
Principal Point sources of Pollution	Animal husbandry activities
Nitrate Content in Groundwater	No data available but expected to be high due to urban and agricultural land use which are considered as potential sources of nitrate pollution.
Chloride Content in Groundwater	No data available but expected to be moderately high due sea spray.
Pesticide Content in Groundwater	No data available; however karstic nature of the aquifer makes it highly vulnerable to pesticide pollution.
Other Pollutants	n/a
Direct discharges to Groundwater	No direct discharges have been permitted

Associated Aquatic Ecosystems -sites under investigation

No sites enclosing groundwater dependent eco-systems have been identified.

Preliminary Risk Assessment

The Groundwater body is probably at risk of failing to achieve the environmental objectives of the Water Framework Directive particularly those concerning its qualitative status.