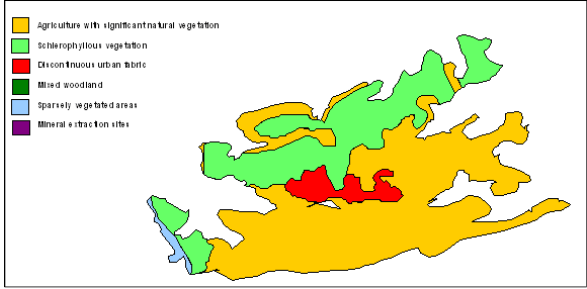
 MALTA RESOURCES AUTHORITY		
Groundwater Body Code		
MT003		
Groundwater Body Name		
Mgarr-Wardija Perched Groundwater Body		
Reference Year		Corinne Landcover 2000
Hydrogeological Characteristics		
Aquifer Description		
<p>The Groundwater body is sustained in the Upper Coralline Limestone by the underlying impervious Blue Clay formation. The UCL is a porous massive formation which outcrops over the western and northern zones of the island and forms the highest parts of the topography. Due to its lithographic nature and its sensitivity to weathering this formation should hosts a generalized aquifer. The maximum preserved thickness of Upper Coralline Limestone in this region is 51m recorded at Wardija . Two limestone facies are developed: west of the village of Mgarr an algal reef facies occurs whilst east of Mgarr there is a lagoon facies.</p>		
Mean Aquifer Thickness	32.6m	
Soil Type and Indicative Thickness	Xerorendzinas are common at Bingemma whilst Terra Soils are more dominant at Wardija. Indicative thickness 25-80cm	
Mean Hydraulic Conductivity	2.93E-6m/s	
Mean Annual Groundwater Level Amplitude*	64,876m ³	
Pressures—Quantitative Status		
Mean Annual Recharge (Natural and Artificial)	2.86hm ³	
Mean Annual Groundwater Demand	3.46hm ³	
Balance	-0.59hm ³ Groundwater resource not enough to supply demand in overlying catchment area.	
WSC Groundwater Sources	3 pumping stations and one spring (currently unutilised)	
Registered Private Groundwater Sources	7 springs, 180 boreholes	
Pressures—Qualitative Status		
Principal Diffuse sources of Pollution	Intensive Agriculture	
Principal Point sources of Pollution	Animal Husbandry Activities	
Nitrate Content in Groundwater	High—exceeding 50mg/l	
Chloride Content in Groundwater	Low—less than 250mg/l	
Pesticide Content in Groundwater	Low—total pesticide content significantly below 0.5µg/l	
Other Pollutants	n/a	
Direct discharges to Groundwater	No direct discharges have been permitted	
Associated Aquatic Ecosystems-sites under investigation		
No sites enclosing potential groundwater dependent eco-systems have been identified.		
Preliminary Risk Assessment		
Groundwater Body is at risk of failing to achieve the Environmental Objectives of the Regulations both from the point of view of criteria related to the achievement of ‘good’ quantitative and qualitative status. It should be noted that the groundwater body is also at risk of failing to achieve the objectives set in the Nitrates Regulations.		

* Reported as the groundwater flow from the Ghajn Tuffieha Spring for the period 1966-1992.