
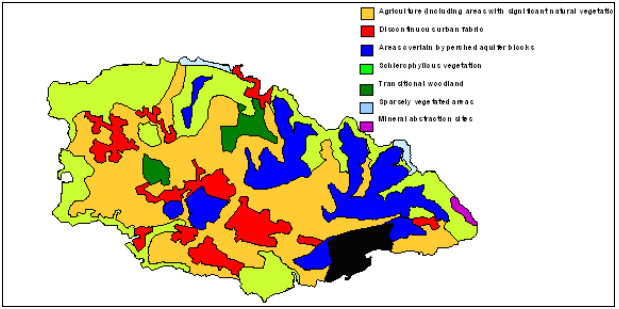


<p style="text-align: center;">  MALTA RESOURCES AUTHORITY </p>	 <p style="text-align: right;">Corinne Landcover 2000</p>
Groundwater Body Code	
MT013	
Groundwater Body Name	
Gozo Mean Sea Level Groundwater Body	
Reference Year	
2004	
Hydrogeological Characteristics	
Aquifer Description	
<p>The Lower Coralline Limestone is the most important aquifer formation in the island of Gozo. The limestone formation is pervious to great depths allowing the freshwater body to develop freely. Effective porosity and permeability of this formation are mainly of secondary nature, due to an intensive fracturing and fissuring of the limestone deposits. These fractures show a preferred direction, south-west to north-east and in this direction the permeability will have a much higher value than in the direction perpendicular to it.</p> <p>The Globigerina Limestone overlays the main aquifer over most of the island. Percolation of rain water is mainly along fissures. There is a limited and irregularly distributed filtering effect. Locally, the Globigerina Limestone where it is intensely fractured and depressed below the water table, becomes part of the Lower Coralline Limestone aquifer.</p>	
Mean Aquifer Thickness	66m
Soil Type and Indicative Thickness	All three soil types can be found. Their indicative thickness lies between 34-100cm
Mean Hydraulic Conductivity	6.0E-4m/s
Mean Annual Groundwater Level Amplitude	n/a
Pressures—Quantitative Status	
Mean Annual Recharge (Natural and Artificial)	10.02 hm ³
Mean Annual Groundwater Demand	9.78 hm ³
Balance	-1.12 hm ³
WSC Groundwater Sources	2 Pumping Stations and 72 Production boreholes.
Registered Private Groundwater Sources	434 boreholes
Pressures—Qualitative Status	
Principal Diffuse sources of Pollution	Agriculture, leaks from the sewerage network
Principal Point sources of Pollution	Animal Husbandry Activities
Nitrate Content in Groundwater	Low to Moderately high—between 50 mg/l– 100mg/l
Chloride Content in Groundwater	Exceeds 500 mg/l
Pesticide Content in Groundwater	Low—total pesticide content below 0.5µg/l
Other Pollutants	n/a
Direct discharges to Groundwater	No direct discharges have been permitted
Associated Aquatic Ecosystems-Sites under investigated	
<p>The catchment area of this groundwater body supports two small surface water pools, which owing to their topographical position have no visible connection to the groundwater body. They are called ‘L-Ghadira ta’ Sarraflu” and ‘Il-Qattara”. These pools support populations of plants and animals that due to the scarcity of such habitats are rare in the Maltese Islands. It is very probable that these features depend on lateral flows of percolating water for their supply of freshwater.</p>	
Preliminary Risk Assessment	
<p>The Groundwater body is probably at risk of failing to achieve the environmental objectives of the Water Framework Directive both from the view of the achievement of criteria related to its quantitative and qualitative status. The groundwater body is also probably at risk of not achieving the objectives set in the Nitrates Regulations.</p>	