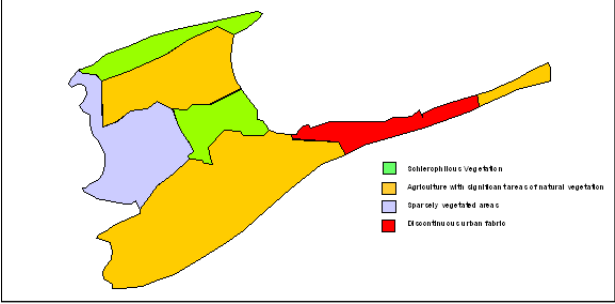
 MALTA RESOURCES AUTHORITY		
Groundwater Body Code		
MT009		
Groundwater Body Name		
Mellieha Coastal Groundwater Body		
Reference Year		Corinne Landcover 2000
2004		
Hydrogeological Characteristics		
Aquifer Description		
<p>The aquifer formation in the region is the Upper Coralline Limestone. The area displays three major structural subdivisions, i.e. two strike faulted synclines, each somewhat narrower than that of Wied tal-Pwales, separated by an eastward-pitching anticline. A sea level water table extends throughout the Upper Coralline Limestone where the top of the Blue Clay is below sea-level.</p>		
Mean Aquifer Thickness	n/a	
Soil Type and Indicative Thickness	Xerorendzinas dominate at Ghadira whilst Terra soils are spread over the whole of Mellieha. Indicative thickness 19cm.	
Mean Hydraulic Conductivity	2.93E-6m/s	
Mean Annual Groundwater Level Amplitude*	n/a	
Pressures—Quantitative Status		
Mean Annual Recharge (Natural and Artificial)	0.69hm ³	
Mean Annual Groundwater Demand	0.38hm ³	
Balance	0.31hm ³	
WSC Groundwater Sources	None	
Registered Private Groundwater Sources	92 boreholes and 2 springs	
Pressures—Qualitative Status		
Principal Diffuse sources of Pollution	Intensive Agriculture, Irrigation and leakages from the main sewer.	
Principal Point sources of Pollution	n/a	
Nitrate Content in Groundwater	No data available but expected to be high due to land-use	
Chloride Content in Groundwater	No data available but expected to be high due to location	
Pesticide Content in Groundwater	No data available; however the 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		
<p>The Ghadira Nature Reserve has been identified as a possible eco-system with significant dependence on groundwater. The Ghadira area is a bird sanctuary with perennial saline pools attracting birds and home to various protected species. Its surroundings, also protected, include important clay slopes and very species-rich garigue, housing many rare species, including the only remaining population of the sub-endemic Beaked Spider Orchid. The degree of dependence of this eco-system on groundwater is currently being investigated.</p>		
Preliminary Risk Assessment		
<p>Owing to the fact that no chemical data exists for the Mellieha coastal groundwater body, the condition of the body should be assessed on the basis of similar groundwater bodies such as that at Pwales. These considerations lead the groundwater body to be considered as 'probably at risk' of failing to achieve the Water Framework Directive's objectives.</p>		