

Underground water prospects at Kettering.

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T.R. Godlee requested an investigation of the underground water prospects on his property at Kettering. The 2.5 hectare rectangular block lies adjacent to the Bruny Island ferry terminal, and rises gently to the south from the road to the brow of the peninsula. Mr Godlee requires additional water for irrigation. Although the catchment area is small, present supplies are obtained from a small dam fed by surface run-off.

The property is underlain wholly by Jurassic dolerite. Permian sandstone crops out at sea level at the eastern end of the peninsula, and a thin veneer of these sediments overlies the dolerite to the south-west near the Channel Highway. The sandstones have no hydrological significance in the area investigated.

Dolerite is considered an unfavourable rock type from which to obtain underground water. Apart from the technical difficulties (and consequent higher costs) involved in drilling hard rock, any water present is confined to fractures and the success of a bore depends on the number of such water-bearing cracks intersected at depth. Since little is known either of the depth and form of the water table or the degree of weathering and fracturing of the dolerite, a high degree of risk is involved with drilling. In addition, it is unlikely that sufficient amounts of subsurface water exist, due to the small area and low altitude of the catchment area. Drilling is therefore not recommended. The prospects of obtaining water by sinking are also considered unfavourable for the same reasons.

Because most of the available surface run-off is already utilised, it is unlikely that present water supplies could be augmented by constructing an extra dam.

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