

Water Conservation Order: Te Waikoropupū Springs and Associated Waterbodies

Submission Reference no: 41

Ian Millar (Research & Conservation Coordinator, NZSS), **New Zealand Speleological Society (NZSS)**

Submitter Type: Organisation

Source: Web Form

Overall Notes:

Clause

The specific parts of the application that my/our submission relates to are:

Notes

The New Zealand Speleological Society (NZSS) promotes the sport of caving, the exploration of caves and the conservation of caves and the karst or volcanic landscapes they occur in. The Society's membership is mainly made up of members of affiliated local clubs. The Society operates the NZ Cave Search and Rescue system on behalf of LandSAR and SAR NZ. The Society's members map and document new cave discoveries and the information they have documented and the cave maps they have created represent a huge body of knowledge fundamental to all aspects of cave and karst science and management. In addition, individual Society members have contributed over the years in a number of cave science fields, including hydrology, palaeontology and biology. The Waikoropupu aquifer is the largest and most complex karst aquifer in New Zealand. The main spring at Waikoropupu is the largest freshwater spring in New Zealand and amongst the larger springs in the world. The aquifer is an outstanding natural feature, reflected in its ranking as of international importance in the New Zealand Geopreservation Inventory. Although most of this aquifer cannot be physically explored with current technology, nonetheless in the past 10 years major discoveries have been made by cavers and cave divers in the upper part of the aquifer. These have yielded several kilometres of explored and mapped passages. The upper part of the aquifer is likely to remain a target for exploration for years to come. The number of inlet points into this aquifer and the complexity of its associated outflows indicate that the aquifer is also likely to contain by far the most diverse mix of ecosystems available to stygofauna of any karst aquifer in New Zealand. Although a number of stygofauna species are known to inhabit the springs, this knowledge is, again, limited by accessibility and it is likely that more species remain to be discovered. One potential issue that is not covered in the application is the possible impact on a karst aquifer, particularly the shallower parts of that aquifer, of increased drawdown of the water table due to water abstraction. The loss of buoyant support caused by reducing the water table below the roof of a wide, normally water-filled cave conduit can cause the roof to collapse, with impacts on the karst system and hazard potential at the surface. The parts of the application that our submission relates to are the recreational, scientific and conservation aspects associated with the aquifer. We would like to see this aquifer maintained as a largely natural karst aquifer subject to the ongoing processes of karst development.

Clause

What is/are your view/s on the application?

Position

Support

Notes

It is the Society's view that both the scientific values and the actual and potential recreational values of the Waikoropupu aquifer are deserving of long-term protection. Our overall position is therefore to support the application.

Clause

I/we seek the following recommendation from the Special Tribunal to the Minister for the Environment

Position

Grant the order

Notes

We support the granting of this order to the extent compatible with maintaining the values outlined above.

Clause

Would you like to present your views on this submission to the Special Tribunal at a public hearing?

Position

I/we do want to present my/our views at a public hearing

Notes