

Current informal water allocation limit for the recharge zone of Te Waikoropupu Springs

In 1991 the Nelson Marlborough Regional Council (NMRC) adopted five informal (nonstatutory) policies for water allocation in the Takaka catchment, to help in consent decision-making pending the preparation of a statutory regional plan for water management in the catchment. In 1992 these policies were referred to the Tasman District Council (TDC) as the unitary authority with powers under the Resource Management Act (RMA) to make a legally effective regional plan for water management.

These policies are listed verbatim below:

- 1. The Regional Council will not grant any water right which directly affects the Main Spring or Dancing Sands Spring at Pupu Springs unless the proposal is acceptable to the Department of Conservation.*
- 2. The Regional Council has set an interim limit of 0.5 m³/sec for total abstractions from the recharge zone for the Pupu Springs system.*
- 3. The Regional Council will investigate the recharge mechanism for the Pupu Springs system, with a view to setting a minimum flow in the upper Takaka catchment, to minimise unnaturally low flows from the springs. This process will include negotiations with Electricorp over the timing of shutdowns of their Cobb Dam, so that these do not occur during low flow periods.*
- 4. The Regional Council will not allow any additional abstraction of water within the Fish Creek catchment above Pupu Springs Scenic Reserve unless the impacts are insignificant.*
- 5. Further investigations of the ecology of the Springs River are required to determine whether current residual flows below the salmon farm intake are appropriate.*

The policies were adopted prior to the RMA taking effect, and so their status under the RMA for all time since then, is that they are able to be considered by the TDC as “other matters” under section 104 when decisions are made on water permits. In the decision-making on permits since 1992, the five policies have been followed by TDC.

Policy #2 states an “interim [allocation] limit” of 500 l/sec for total water takes affecting recharge to Te Waikoropupu Springs. The choice of 500 l/sec value (rather than say 300 or 1000 l/sec) was based on an assessment of current water allocation at that time; a precautionary allowance for increase in demand to take from the aquifer until the limit was formally reviewed (intended then to be within 2 years); and an assessment that actual water taken under this level of allocation would be barely detectable in Te Waikoropupu Spring flows.

As well, the 500 l/sec value was set pending completion of an intensive water resource investigation programme in 1992. That programme built on early hydrological research and included seismic surveys of the AMA and completion of two hydrological reports by Michael Mueller under the leadership of Andrew Fenemor, then resources manager of NMRC and TDC. Further work in the late 2000s extended this work, including hydrological modelling of the groundwater system and the completion of a resource statement by Joseph Thomas, the TDC’s water resources scientist, in 2013.

The value and meaning of the limit is now dated, as more recent work has refined Council’s understanding of the nature and hydrodynamics of the AMA groundwater system supporting flows at Te Waikoropupu. There is also considerably more actual data relating to the springs system since the establishment of a monitoring bore next to the Te Waikoropupu Springs in 1999. The amount of hydrological data available from all major rivers and groundwater as a whole in the Takaka Valley is also considerably more than in 1991.

The preparation of a regional plan for water management for Takaka has taken until 2014 to commence, as other water management and policy priorities prevented any earlier policy work by TDC. Among the matters driving the Takaka water management plan through the FLAG process, has been the fact that water allocations in the AMA recharge zone have nearly reached the 500 l/sec interim allocation limit of Policy #2.