

Executive Summary

Hawke's Bay Regional Council, through an Envirolink medium advice grant, commissioned NIWA to: (1) review science programmes for the Tukituki River catchment, (2) establish effectiveness and deficiencies of current programmes, (3) determine technical competency of HBEWG members and HBRC staff, (4) confirm appropriateness of analysis, interpretation and reporting, and (5) recommend any additional programmes. The following is a list of the main recommendations and conclusions – a full list is given in the text.

Conclusions

There is evidence of increasing nutrient concentrations at some sites contrary to the first requirement of Objective 27 to '...maintain or enhance water quality...' There is evidence that nutrients and other contaminants adversely affect water quality and pose a threat to aquatic ecosystems or contact recreation during summer low flows, contrary to the second requirement of Objective 27 to '...sustain or improve aquatic ecosystems...'

In recent years Council has invested a considerable amount of effort in SOE monitoring, and this has identified several problems with water quality and ecosystem health. In some instances Council has failed to act on problems that have been identified. For example, issues of high nutrient concentrations and high summer periphyton biomass were identified in 2004 if not earlier. On the other hand, the issue of high SRP inputs from the oxidation ponds at Waipukurau and Waipawa has been identified and is being addressed, although concerns remain about their effect on contact recreation. I am advised that Council plans to reallocate some resources from SOE monitoring to investigations that address identified problems.

Even drastic reductions in nutrient load may not result in complete compliance with water quality and periphyton guidelines.

The current Recreational Water Quality (RWQ) and State of the Environment (SOE) monitoring programmes are fit for purpose. However, contact recreation and public health risk below the oxidation ponds is a potential issue which merits investigation.

Water clarity seems not to be a pressing management problem in the Tukituki.

Council reports demonstrate the technical competence of the staff who wrote them. Sampling methods are well documented, and results are analysed, written up and archived in a professional manner.

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