



RIVER WATER



USEFUL INFORMATION

- Tasman District Council monitors over 50 sites on rivers and streams quarterly throughout the district to determine the condition & trend of water quality.
- The Motueka and Buller Rivers have some records of monthly sampling back to 1989. Analysis shows improvement in water clarity and ammonia-nitrogen at all sites but higher concentrations of nitrate-nitrogen in the lower Motueka River, possibly caused by intensive landuse
- E.coli concentrations in the Sherry River have been halved by farmers installing bridges across streams where cows regularly cross
- Most of our rivers and streams have very high water quality when flows are not elevated by rain. Good examples of this are the Aorere, Takaka, Motueka, Wangapeka, Waimea and Buller rivers.

What is the state of our rivers?

Studies in the Motueka River and Golden Bay streams have shown that the concentration of disease-causing organisms and fine sediment increases significantly after heavy rain in intensively farmed catchments.

Many smaller streams in lowland intensive or urban land use areas have poor water quality at all flows. The biggest issues in these small streams are: high water temperatures, particularly in streams draining to Tasman Bay, poor water clarity, excessive fine sediment in the bed, high concentrations of nutrients, *E.coli* and poor ecological condition, as indicated by the presence or relative absence of pollution-sensitive stream invertebrate life such as insects, crustacea, shellfish, worms etc.



Community Monitoring Demonstration in Motupipi River near Takaka

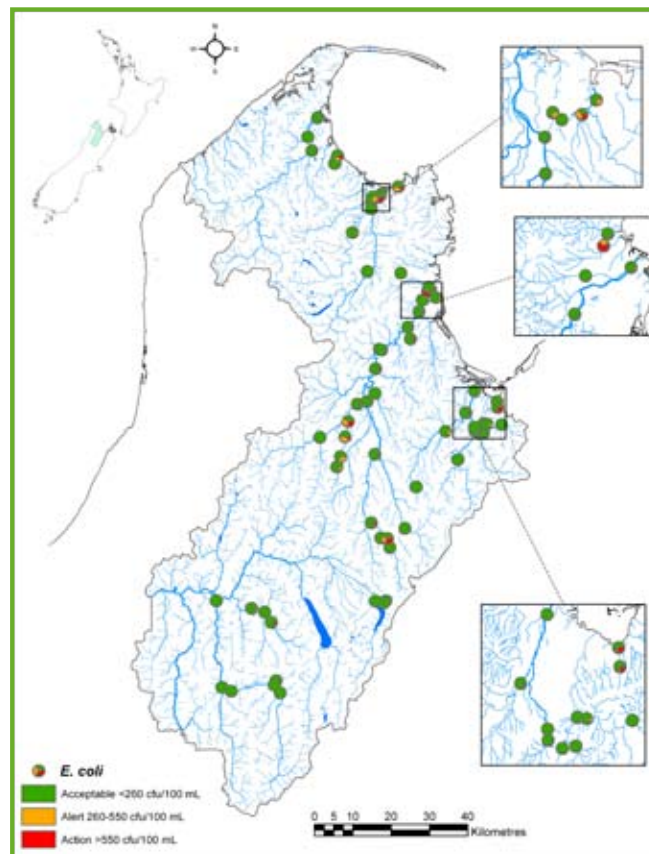


Figure Above: Proportion of faecal indicator bacteria measurements at each site that met or exceeded guidelines for contact recreation (samples taken at base flows)

Streams with poor water quality include: Motupipi River in Takaka, Kikiwa Stream near Motupiko, Little Sydney near Riwaka, Reservoir Creek in Richmond and tributaries of the lower Motueka River.

Relatively few streams have excessive accumulations of nuisance algae indicating that nutrients are not a significant issue in Tasman.

Generally dissolved oxygen levels are high enough to support healthy stream life. However, some small fern streams in the Moutere and spring-fed streams around Takaka have very low dissolved oxygen because of excessive plant growth related to no shade, high nutrients and stable flow.

Continuous stream temperature records show likely adverse effects to aquatic life for 10-40 days each summer at many sites in the Waimea and Motueka catchments where there was limited riparian vegetation. Well-shaded streams almost never exceed temperature criteria for protecting ecosystem health.

What is Tasman District Council doing about river water quality?



Aorere River at Le Comte. This catchment is the focus of a programme to reduce the concentrations of disease-causing organisms affecting shellfish farms and bathing areas.

- Regular compliance inspections eg dairy farm, horticultural and industrial wastewater discharges
- Investigations into the cause of poor water quality or ecological condition eg Motupipi River, Sherry River, Aorere River
- Environmental education
- 100km of fencing materials provided each year to landowners to exclude stock from streams
- Trees supplied for erosion control
- Technical advice available to stream-care groups
- Streamside planting on Council managed reserves
- Control of priority aquatic weeds such as Hornwort and Lagarosiphon.

What can you do about it?

- Call the 24 hour pollution hotline: 03 543 8400 to report potential or actual water pollution
- Don't flush chemicals or cleaners down the drain as this could affect stream life
- Avoid spreading aquatic weeds in nets or boats
- Keep vehicles and stock out of streams as much as possible
- Avoid clearing vegetation near waterways, particularly from January to April

For the full report on this topic see: www.tasman.govt.nz click on "Environment" pages, then click "Water" and then "How to we measure up" or use the following link:

<http://www.tasman.govt.nz/index.php?Recreationalwaterqualityresults>



What are commercial water users doing about it?

Dairy farmers have made considerable progress towards achieving the targets set down by the Dairying and Clean Streams Accord.

- 93 percent of streams have stock excluded from them
- 100 percent of estuaries and lakes have stock excluded from them
- 92 percent of regular stock crossings have bridges or culverts
- 100 percent of farms have a nutrient budget
- 93 percent of Fonterra farms fully comply with their consent conditions or regional rules

Larger forestry companies have a strong policy for continuous improvement towards best environmental practice, including waterway management.

New urban stormwater infrastructure is designed using low-impact systems to maintain higher summer low flows and avoid damaging high flood flows in urban waterways.

The horticulture industry has dramatically reduced the use of toxic sprays over the last 20 years. Water allocation is often linked to soil type for efficiency.



The Kaituna River bridge was constructed in 2004 to avoid pollution by dairy cows crossing the river.