

# The Sherry River

Motueka

Nel

- A Success Story

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Figure 1: Monitoring the Sherry River.

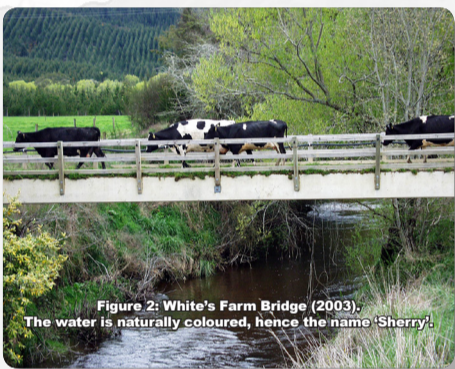


Figure 2: White's Farm Bridge (2003). The water is naturally coloured, hence the name 'Sherry'.



Figure 3: The spring 2009 field day planting of a retired wetland swale on Dennis Meads place brought the researchers, council, farmers and wider local community together.



Figure 4: Unveiling of the Catchment Group Sign at Matariki, ICM workshop, October 2010 - Harry & Joan Hancock, A Fenemor, B Stuart.



Figure 5: Stock exclusion, Loughray property 2009 - plant establishment may not happen overnight but will affect water quality.

## Aim

- improve water quality so that the Sherry River meets recreational use guidelines by farm BMP's

## Methods

- as part of the Motueka ICM program a water quality monitoring study in the Sherry River catchment was started in 2001 continuing to present day
- a study on cow herds crossing the river was undertaken in 2001
- in 2007-08, TDC and the Sherry Catchment Group undertook sampling of seven of the tributary creeks
- in 2008-2009 a campaign of storm event sampling was undertaken by NIWA
- the relative loadings of these waterways (**hotspots**) were then used to prioritise on-farm action
- individual farm plans (TDC) to institute BMP's completed in 2008

## Findings and Action

- cows crossing the river - major source of water pollution
- 4 cow crossings replaced with farm bridges
- improvement in *E. coli* levels attributable mainly to bridging
- 40% *E. coli* loadings at the Blue Rock site were due to four tributaries
- further improvements are expected for other BMP's
- individual farm plans initiated the following actions:
  - riparian areas and streams fenced and planted
  - wetlands protected
  - greater awareness and stewardship by community
  - improved farm management

Sherry Catchment

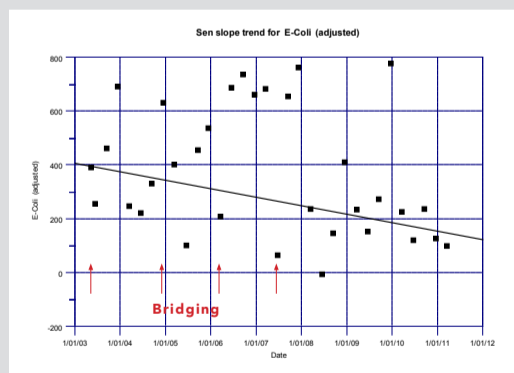


Figure 6. *E. coli* data over 8 years in the Sherry River at Blue Rock in relation to times when dairy bridges were commissioned.

## Recent trends

Using the NIWA 'Times Trends' statistical analysis package, the Seasonal Kendall (flow adjusted) test for 8 years of monthly *E. coli* data at the Blue Rock site shows a decline approaching recreational quality in 2011.

## References

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- Wilkinson R. J.; McKergow, L. A.; Davies-Colley R. J.; Ballantine D. J.; Young R. G. (2010). Modelling *E. coli* in the Motueka and Sherry Rivers. Proceedings: IWA DIPCON 2011, Rotorua N.Z. 18-23 Sept 2011.

Should we swim here?

"It may not happen overnight, but it will happen"

Rachel Hunter

Lake Rotoroa