



Event Sampling Report

Alligator / Hedlow Neighbourhood Catchment Event Report 1 (December 2006)

Landholder interest sparked the FRCC-sponsored community monitoring of local runoff in the Alligator/Hedlow Creek catchment. A collaborative approach with another government funded project enabled an automatic sampler to be installed in a local creek. The sampler gathered water quality data during flow events with this data considered to be representative of grazing lands in the Hedlow Creek catchment.

Rainfall was patchy and sparse during the year resulting in only two sampling periods. The intense rainfall event in March 2006 created flash flows in the Hedlow Creek catchment after about 100 mm fell in 48 hours and provided localised runoff.

Results

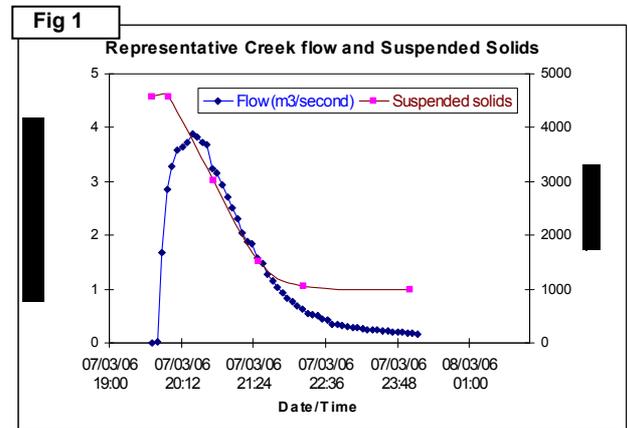
“Water quality data collected from the sampler on the creek during the flow event showed a typical response for grazing lands in the Fitzroy Basin after an extended drought” said Bob Packett, Senior Project Officer NAP Water Quality.

Event mean concentrations over a five hour flow event were:

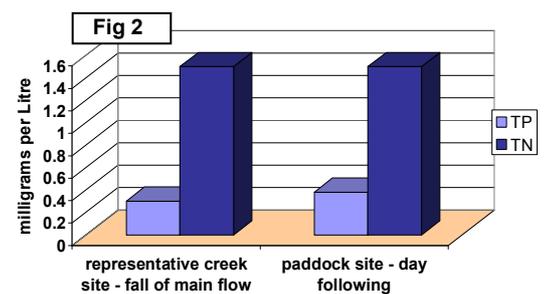
- 2800 mg/L for total suspended sediments (TSS),
- 3.13 mg/L for total nitrogen (TN) and
- 0.61 mg/L for total phosphorus (TP).

The total sediment exported during this time was equivalent to 62 one-tonne truck loads. Highest concentrations were at the rising flow stage (Fig 1). Sediment usually drops out as the flow moves downstream.

Water quality was examined by a landholder at a paddock site the day after the main flow in March. The TSS (45 mg/L) in this instance was much less than that recorded at the creek site during the flow event. TN and TP results were similar at the creek and the paddock sites after the flow had reached its peak (Figure 2). Overall the TN and TP were slightly less than the Fitzroy Basin average (Figure 3).

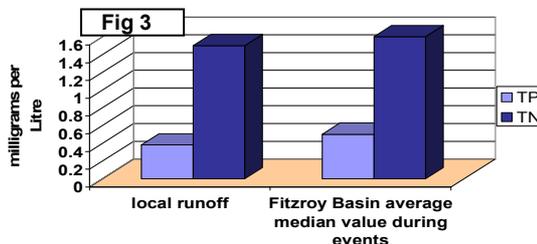


Total Nitrogen (TN) and Total Phosphorus (TP) in paddock runoff compared with representative site



Note: As more samples are collected better comparisons will be available.

Total Nitrogen (TN) and Total Phosphorus (TP) in local overland runoff compared with mid range values found in the Fitzroy Basin streams



Future water quality monitoring and reports

Landholders are encouraged to dust off sampling kits in preparation for the next big rain event. Contact Mary-Anne Jones (FRCC Monitoring Officer) for further information or training.

T: 4921 0573, M: 0428 123 902, E: mjones@frcc.org.au . - Next report due July 2007 -