

14 June 2009

Dear Editor

The Environmental Protection Agency has recently released a report detailing the water quality of the Lower Lakes (available from their web site). Since August 2008, fortnightly measurements were taken at 20 sites in Lake Alexandrina, the Goolwa Channel, the Currency Creek and Finniss River tributaries and four sites in Lake Albert.

Of particular interest are the readings of pH, a measure of whether the water is acid or basic (7 being neutral with lower numbers acidic) and alkalinity, shown by the amount of dissolved calcium carbonate (limestone) which indicates the capacity of the water to neutralise acids.

Despite the drastic reduction in water levels, and hence volume during this period, (Lake Alexandrina shrank from 1100 GI to 660 GI, almost half), the readings for pH and alkalinity have remained essentially constant. Lake Alexandrina has been between pH 8.5 and 9.1 (safely basic) and the alkalinity varies between 160 and 234 mg/l. This is well above the Government's "trigger" point for increased monitoring (100 mg/l) and up to 10 times the supposed danger level at which "action needs to occur". (Minister Maywald's press release of November 2008)

Levels in the Currency Creek and Finniss River tributaries are pH 8 to 9.5 and alkalinity of 70 to 300 mg/l. In fact in the Goolwa Channel, near the outlets of the tributaries, the alkalinity has actually increased as water level decreased.

The report only covers the period to the end of March 2009, but current data from automatic measuring beacons (available on the DWLBC's web site) in Lake Alexandrina and Goolwa Channel for 1st to 7th June are showing constant pH readings of 8.7 in the Lake and 8.6 in the Goolwa Channel, suggesting there have been no sudden changes since March.

While some highly acidic soil points and pools have been found in certain spots on the Currency and Finniss, CSIRO and NRM supervised monitoring of soils in the creek beds indicates mostly alkaline conditions on the surface layers. Most significantly, the main bodies of water in the tributaries and in the Goolwa Channel which have to neutralise the feared acidic flows after the autumn rains, are remaining consistently basic.

This prompts one to ask two questions.

- 1) Where is all the acid that the Government has been scaring us with?
- 2) How can they now justify the use of millions of dollars of taxpayer's money? On the construction of "temporary" massive rock walls across the soft muds of the Currency and Finniss and also the soft bottom of the main river channel at Clayton?

The engineering outcomes are largely unknown and the environmental consequences

will be devastating for Lake Alexandrina. In our current drought conditions, with almost no water coming down the Murray, freshwater flows from the Finniss and Currency are all that has kept the Lake alive. This flow will be effectively blocked off by the weir/regulator/wall at Clayton.

As a first step, the acid "hot spots" in the Finniss and Currency could be effectively and cheaply treated with targeted application of granulated limestone (as has already been done to good effect in the Finniss below Wally's Landing and in the Currency Creek.)

Is the death of our beautiful Lakes Alexandrina and Albert - internationally recognised Ramsar site, once rich with migratory and resident birds, fish and other aquatic life - the price we have to pay for a "perhaps" acid scare?

What is this based on? Computer models, theoretical extrapolation, or just plain guesswork?

In real life, the acid scare appears to be greatly exaggerated.

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