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Bent Science

As freshwater flows again through the lakes and Murray Mouth, memories of a catastrophically empty lake begin to fade, and as the Basin Plan seeks to cut through a political minefield to restore the health of the river, it is time to analyse the lessons to be learnt from this extreme drought experience.

Freshwater will always end a drought in the highly variable Murray Darling system and the issue that really matters is what to do while we wait for that to occur?

Do we let the lakes dry down as we did this time – with acidifying soils, dust storms, sand-drifted shorelines, slumping river banks, cracked levees, temporary regulators and bunds? All the result of water levels falling below sea level.

Or do we consider the natural alternative – to open the barrages and use tidal pressures to maintain an estuarine system at sea level until the river flows strongly again?

The 'freshwater solution' lobby make three main claims to support their arguments against an estuary.

- The lakes have been naturally fresh for the past 6000 years,
- The estuarine salinity conditions of the lakes in the late 1800s and early 1900s were caused by upstream extraction of water for human use, and
- If the barrages were opened to reconnect the lakes with the sea they would soon become hyper-saline and die.

But when the science behind these claims is examined closely, not one of these claims can be sustained – the science has been bent to fit the ideology which makes it not science at all.

Some former 'freshwater only' proponents are now starting to acknowledge the validity of a natural estuary in times past, at least below Point Sturt and they describe the waters in the main body of the lake as being "merely brackish" – but salinity is salinity and a dynamic estuary displays the full range from the river to the sea.

To be credible in their Basin Plan submissions, water minister Paul Caica and the South Australian Government must now remove their 'freshwater solution' blinkers and give the 'estuarine in drought' solution some genuine and objective scientific consideration.

Trevor Harden Clayton Bay November 2010