

September 10th, 2008

**The Secretary
Senate Standing Committee on Rural and Regional Affairs and Transport
Parliament House
Canberra ACT 2600**

A simple Coorong solution requiring no freshwater.

It is of concern that people when discussing the lower lakes refer to the Coorong needing freshwater. The Coorong is saltwater currently up to 6 times as salty as the sea at the southern end. It's problem is it is too salty. By diluting with seawater we can reduce its salinity to the required level, no more than 3 times saltier than the sea.

If I may quote David Patton, Adelaide University.

“In the past, when fresh waters typically flowed over for several months per year, the salinities were kept at levels that allowed hyper marine organisms to survive. They struggle once salinities get about 3 times saltier than sea water.

What has happened for the last 7years, is that increasing amounts of salt have moved into the southern Coorong because of the lack of flows down the river. As a consequence, the salinity levels have reached six times higher than sea water. The tidal prism has no ability to influence the water levels for the southern part of this system.”

See http://www.envict.org.au/file/Winter_2005_Coorong_report.pdf

Ruppia Tuberosa is an annual plant that exploits the ephemeral mudflats around the shores of the southern Coorong. It is a major provider of food resources and habitat for waterbirds and fish. Ruppia Tuberosa does not survive once salinity exceeds 3 times the sea.

By admitting seawater to the Southern Coorong we can lower the salinity to a suitable level.

By controlling the seasons when we admit seawater to the Southern Coorong we can control the water level to provide Ruppia Tuberosa with the drying mudflats in summer and the required rising water level in late autumn and winter needed for it to germinate and spread.

By admitting seawater to the Southern Coorong during autumn, winter, spring we can establish a flow from the Southern area to the Northern and on out the mouth flushing the excess salt from the system.

By setting up a flow out through the mouth we will reverse the current inflow which is bringing in sand which clogs the mouth. Enough outflow current and the mouth will become self cleaning.

Currently the Murray Mouth Dredging is costing \$5m/yr. In the 5 yrs to 27/4/07 dredging has cost \$27m.

If the \$5m/yr was put into getting seawater into the Southern Coorong I believe we could save the whole Coorong environment and keep the mouth clear.

Seawater need to be moved from the Southern Ocean a distance of about 1km over the peninsula and into the Southern Coorong around Salt Creek. The exposed open surf beach there will be a challenge but ultimately we could come up with a solution which uses the power of the surf to push the ocean water on its way.

A temporary solution may be to move seawater in using the existing dredging equipment.

Ultimately a larger version of the system as used at West Lakes, South Australia, needs to be in place. West Lakes have inlet pipe at one end with auto opening gate at high tide, through which 500meg/litres per day flows in. A similar system is needed which will allow water at high tide to flow through into the Southern Coorong. This water then makes its way thru the Coorong to eventually flow out the mouth, whilst at West Lakes it flows into the Port River and the sea.

Thank you for considering this solution and I urge to speed it implementation

Sincerely yours,
George Bennett