Tendered by Mr Ray Stubbs
Riverina and Murray
Organisation of Councils,
received by
Claire Anstey.
28 February 2017

Ray Stubbs

From: Ken Jury
Sent: Monday, 27 February 2017 5:39 PM
To: Ray Stubbs
Subject: Re: ABW in brief version!
Attachments: A_Better_Way-May2016.pdf

Thanks Ray.
You have my absolute permission to refer to all or part of the summary pages of my ***A Better Way*** document.

It should be considered by NSW that under no circumstances can the barrages be removed due to the infrastructure built 'over time' around the edges of 4 Lower Lakes towns. We cannot turn the L Lakes into a tidal system **with the barrages removed**, whereupon any vessel traffic or berthed for that matter, would be sitting in the mud til the next tide. The locals and visitors alike would have to face up to 5 hours of outgoing and incoming tides with the likelihood of bad smells from mobilised sulphuric acid as a secondary complaint. It would destroy the region. Goolwa has the honour as the most historic sailing club in Australia so that would never do!

When researching ***A Better Way - for the M D B,*** all of these and many other conditions arose. Albeit, my final ABW caters for these contingencies by not changing what isn't broken together with a goal was to use what's left and make the most of it. Corny perhaps but my road to writing ***A Better Way-for the Murray Darling Basin*** was long and perplexing until the puzzle fell into place.

I'd urge you to have a full 13 page copy on hand as well Ray. (Attached below).

My very best to you and your colleagues!

Ken Jury
Senior Investigative Journalist
Marine & Aquatic Ecology
GOOLWA SA 5214

On Mon, Feb 27, 2017 at 4:36 PM, Ray Stubbs wrote:

Hi Ken,

If I get a chance at tomorrow's Inquiry Hearing, we would like to table your 2 page summary of "A Better Way", as part of the discussions relating back to the report and recommendations of the previous Upper House Inquiry into the adequacy of Water Storages in New South Wales

The Committee's Executive Summary in 2013 included the following comments:-

A Better Way - for the Murray Darling Basin is a serious solution for the basin!

The Document, ***"A Better Way -for the Murray Darling Basin,"*** *is* researched and written by Senior Investigative Journalist in Marine & Aquatic Ecology, Ken Jury from Goolwa in South Australia.

Of thirteen pages, the main document outlines in plain terms, the processes required to turn the fortunes of all basin states around by retracing early years and benefits gained from South Australia's Lower Lakes, the Coorong and the Murray Mouth.

A Better Way - for the MDB - provides a series of processes necessary to enhance basin grower's water availability, to protect Adelaide's river water supplies, to return the lower lakes back to estuarine and to revitalise one of Australia's largest estuarine fisheries.

The costs are minuscule compared to a $13 Billion Dollar budget for the MDB Plan.

In a 'snapshot' 2 page only, these are the steps required.

1. Build one more river lock named Zero between Wellington and Tailem Bend on the River Murray in Sth. Australia. It should be founded on friction piling as the new alternative to bedrock.

2. During the same construction period, remove the cumbersome, stacked Goolwa Barrage concrete stop logs from each bay and replace with single, thick-walled polly-tanks to fit current height and width dimensions in each barrage bay. Each tank lifting/lowering hydraulics will be serviced by the water below, while each tank will have its own pump, operated remotely according to daily river operations elsewhere.

3. During the refurbishment of the Goolwa logs, we then set about removing Bird Island located in the delta, or Coorong end of the Mundoo Channel. Prior to building Mundoo Barrage, Bird Island was a mere, small sandbar of little significance. Today, its grown to several vegetated hectares and it blocks about 70% of free passage of out flowing water from Lake Alexandrina, through Mundoo channel and straight across to the Murray Mouth close by.

4. With these items in place, the barrages are opened to allow pristine Southern Ocean water entry on a rising tide. The gates are automatically closed again at peak tide.

5. By now we would have saved 1800GL of fresh, river water upstream of the new Lock Zero. Small portions of fresh water will be released from the new lock into lakes entrapped ocean water for a gradual estuarine mix. Gradually, because the Lower Lakes are known for wind seiche* mixing of stratified water. Even Captain Sturt found stratified water in the Lower lakes.

6. Previously, the Lower Lakes, and the Murray Mouth used an average 4500GL/yr of river water. That amount will no longer be required. There will be a surplus freshwater return 2700GL 'plus'/year of freshwater for use back upstream where our food producers will benefit. The 'plus' is an average 9GL year of freshwater from several Lofty Ranges streams, flowing into the lakes.

7. The Lower Lakes and the Murray Mouth will require refreshing from time to time. With Mundoo and Goolwa barrage operations, the surface levels of the 840 sq km Lake Alexandrina and Lake Albert will lowered by a mere 20cm on an outgoing tide. This will provide a massive 150GL flush of the lakes system and the river mouth in one single outgoing tidal session. The river mouth should no longer suffer blockage!

8. Both flushing and replenishment can be done at will on an outgoing tide and during the next rising tide.

It's a win – win for those who want to save expensive freshwater to improve our food security. It's a win for many locals who want to see the return of these massive lakes to estuarine.

It's certainly a win with our basin freshwater resources and for the Murray Darling Basin river environment's.

Ken Jury
Senior Investigative Journalist
Marine & Aquatic Ecology
GOOLWA SA 5214

Full document version available by attachment!

*Wind seiche
Similar to holding a saucer filled with water to ones mouth and gently blowing across the top, causing the water to build up on the opposite side. The Lower Lakes and Goolwa channel region are susceptible to prevailing South to South West prevailing winds from the Southern Ocean.

KJ/snapshotabwFeburary252017.