

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

*The implications for the long-term sustainable management of the Murray Darling Basin system for inquiry and report by 4 December 2008,*

Submission by Liz Yelland, Point Sturt SA

PO Box 73 Milang 5256

I refer you to the comments and suggestions already provided in my submission (number 32) to Part 1 of this Senate Inquiry, as the water management in the Coorong and Lower Lakes is inseparably interconnected with the water management of the Murray Darling Basin as a whole.

I refer you in particular to my section on “River Health and Sustainable Production”, which I have reproduced in part here:

**River health and sustainable production.**

We are beyond “business as usual”, we are running on empty. There is no way we can continue to support the excess of over-allocated acres of production currently in the Basin. The hard truth: if the Murray Darling system is to survive as a food bowl into the future, it is imperative to reduce extractive activities immediately. The prevailing attitude, pitting billions of dollars of economic productivity versus the environment for the available water is not viable: reliable productivity can only be sustained by a healthy river, reliably offering non-saline, non-polluted, safe water. And a healthy river is underwritten by adequate river flows and cleansing wetlands.

A river is like the human body.

Water is its lifeblood.

Wetlands are its lungs and kidneys.

An open flowing mouth enables it to eliminate its waste.

“Just in time” water management is a recipe for disaster. How long would we last with no oxygen, no kidneys and being unable to pee?

It is not just a matter of lots of national wealth versus a couple of piddly Lakes.

The health of a river system is measured by the health of its estuary. The estuary is the “canary in the coalmine”. Stress and collapse of a viable water ecology here will creep upstream like a cancer, ultimately affecting the whole system. To abandon the estuary is to abandon the idea of a sustainable river system and sustainable industries dependent on it. History is littered with failed civilisations dependent on failed irrigation schemes. That failure began with just the situation we are facing now. It appears the lessons of history are repeatedly ignored. We have the chance now to reverse this.

We have to change our mindset from extractive production versus the environment to sustainable production and the environment.

The current system has failed. It has failed the rivers, the rivers’ creatures and now it is failing us. The crisis afflicting the Lower Lakes and Coorong and the accompanying economic and emotional stress gripping the surrounding communities, is testament that the governance criteria for the MDB referred to in parts a, b, e & f of your guidelines are at best, woefully inadequate, at worst, completely impotent.

The prospect for the supply of adequate environmental flows for the successful management of the Ramsar wetlands (part c) under the current multiple regimes is zero.

Any flexibility to deal with the possible effect of climate change (part g) i.e. reduced rainfall in the catchment and proportionately larger reduction in run-off, is non-existent.

The system is stretched beyond capacity by over extraction now. Development has been allowed to continue unabated throughout the Basin as if the very wettest years were the norm.

Floods are harvested before they can do their work of replenishing ground water, and the grasslands and wetlands dependent on them.

On top of this, according to a recent Murray-Darling Basin Commission report<sup>1</sup>, 31,000 new dams, most of them unregulated water interceptions, have appeared in the eastern

half of the catchment (an area of 509,000 square km) on satellite photos between 1994 and 2005. Many of these are small, constructed to supply households on the ever increasing numbers of hobby farms. But all take water which once entered the rivers.

The water theft referred to in part d will inevitably occur in situations of scarcity. Neighbour will cheat neighbour in the struggle to survive. Certainty and harmony are only preserved if there is enough to go round.

### **Steps towards sustainable management of the MDB:**

1. The creation of a strong integrated single management body at arms length from Government in the manner of the Reserve Bank. This body must be backed by ongoing scientific studies and measurements, and have real authority, real teeth. I repeat: real authority, real teeth, to place moratoriums on any further extractive development, to reverse illegal developments already happening, to exact effective heavy penalties for non-compliance with restrictions, water theft etc.

2. An audit of all water throughout the Basin - including tributaries, storage, (both official and unofficial such as hobby farm dams) and underground water; and subsequent computer modelling of the entire Basin as an integrated system. This modelling can be developed to show the effect on the entire system of changing rainfall or extraction in any part of it (including ground water). CSIRO has already begun a project along these lines.

3. Painful as this will be, a complete restructuring of extractive arrangements throughout the MDB is necessary. I stress - we are beyond "business as usual".

This restructuring needs to be handled sensitively and fairly. As rural people, whose property on Lake Alexandrina has been in the same family for five generations, my husband and I have great empathy for all the families who are suffering from stress due to lack of water, and whose livelihood and way of life is in balance. It is not their fault that they are in a situation they face now. Many river communities were set up for social reasons to give employment to soldiers returning from the two World Wars. I have dozens of relatives in South Australia's Riverland whose forebears took up soldier-settler blocks after the Boer War and World War 1. Many of their descendants and their neighbours are now of retirement age and their children have left the block for other careers. A fair plan to assist them to leave the irrigation industry with dignity, while

remaining as active participants in their community could be appealing to this group. Their water licences must be purchased by the Government for a fair price and retired, not returned to the general water market.

I refer you here to my comments in Part 1 of the Inquiry regarding water buyback i.e. the need for the purchase of real high security water, rather than paper water (“sleeper licences” and unused portions of allocations), or low security water available only in times of excess, and also the fear among communities of losing their farming base and hence their viability, and the consequent pressure on irrigators not to sell.

This community fear is real and must be addressed if the water buyback is to be successful. My husband and I and many of our neighbours support the ideas expressed in Professor Mike Young's paper "A future proofed Basin", where he offers an imaginative new approach, compensating the community as a whole and empowering them to decide how to spend the money to rationalise water use, and perhaps develop alternate industries.

4. In his re-imaginings of the Murray Darling Basin water management, Professor Young suggests the amount of water extracted must be flexible and pegged to the amount available in any one year. Most importantly extraction cannot just match input. A river needs maintenance flows to preserve water quality, to keep it oxygenated, to transport away salt, excess nutrients and other pollutants and replace evaporation and seepage losses from the river channel.

5. Sustainable management requires management from the estuary up, rather than from the source down. Maintenance water to preserve sufficient flows for the removal of waste and provision of adequate water quality at the estuary, must be a bottom line priority. Consumptive extraction then occurs on top of this. Only in this way is the future health of the entire system assured and with it, ongoing food security.

6. We have to change our thinking from “people versus the environment” to “people and the environment”. Where I live on Lake Alexandrina, kids in the Milang Primary School are rescuing stricken turtles, whose shells are encrusted with a coral-like growth. This is produced by the salt-loving bristle worm. This normally marine invader now thrives in the increasing salinity of the Lake. The turtles become so weighed down by the increasing burden of coral that they cannot move or swim, and die of starvation or drowning. The kids, their eyes shining with hope, clean the coral off the turtles, rehabilitate them in a special enclosure in the schoolyard and finally re-release them near

Murray Bridge where the river is less salty. Under the current multiple Murray Darling Basin management regimes there is a high probability that the water at Murray Bridge will soon be too salty for the turtles too.

Professor Young's ideas offer the best hope we have to reinvent a sustainable management system for the Murray Darling Basin. We owe it to these kids and the turtles they so passionately work to save, to give it a go.

Their grandkids, living in a flourishing Murray Darling River system will thank us if we do.

Liz Yelland

Point Sturt SA.

References:

- 1 A copy of the report “Mapping the Growth, Location, Surface Area and Age of Man Made Water Bodies, including the Farm Dams, in the Murray-Darling Basin” is available at [www.mdbc.gov.au/news](http://www.mdbc.gov.au/news)