National Press Club Address

"Forum on Water Conservation, drought sand the Murray"

South Australian Museum Director, Tim Flannery

Glad the NPC chose the Murray as the subject for its first ever Adelaide-based broadcast.

The rivers of the Murray-Darling Basin are the continent's lifeblood – and always have been.

Before 1788 Aboriginal people flourished along its length. Population densities up to 40 times that seen elsewhere on the continent could be found there. The densest populations of the continent.

Like all rivers it was a river of boom and bust – driven by el nino, in some years it was miles wide, then reduced by drought to a trickle you could step over.

Tens of millions of waterbirds bred along its length. Look in the aboriginal middens at places like Deniliquin – the eggshells & bird bones will astonish you.

And of course the Murray cod – it's unique in being a fish far too big for its river. Elsewhere such vast fish only survive in Mississippi-sized streams. It was a river system like no other – the lifeblood of the continent. In that regard little has changed today, for 40% of the nations agricultural production originates in the basin.

Yet in other ways the river has drastically changed. Consider what we've done to that magnificent river in just 200 years. How are we to understand this?

James Joyce has one of his characters in *Ulysses* say of History that it is 'a nightmare from which I am trying to awake'. Our nightmare, in the context of the Murray, is the Snowy Mountains Scheme.

When the Scheme was first being discussed, Sir Thomas Playford, the cherry-growing Premier of South Australia, argued with Sir Robert Menzies about its probable impact. He said:

> Now that the irrigators know there will be additional amounts of water, I have not the slightest doubt … that they will develop their use of water much more extensively. I do not accept for one moment the argument that because more water will be coming in, there will be less likelihood of restrictions.'

Playford was foreshadowing an addiction to unsustainable water use among Australia's irrigators that would result from the essentially 'free' provision of water. The rest, I'm afraid to say, is history.

We have known for decades that the Murray-Darling basin is facing crisis, yet we have achieved almost nothing in averting that crisis. And what we have done has, on occasion, dug us deeper into the mire.

South Australia capped its water allocation from the Murray decades before the upstream states. In 1997 they capped their allocation at 1993–4 levels. Yet even this level of extraction is simply unsustainable. In some parts of the

basin, more water has been allocated to irrigators than actually exists! Around 80% of the Murray's flow, in a median year, is used by irrigators.

Around the same period allocations were being capped, Australia established a water market. The concept was based on the economic rationalism of the 1980s, and it had the unintended consequence of escalating the price of licenses.

Today a water license that sold for $30.00 in Moree, New South Wales in 1970 trades for $1.4 million!

Strangely enough, people have been willing to pay vast sums for what turns out to be an ill-defined asset, for water rights remain unclear, a point I will return to in a moment.

In 2001 it was agreed that 28% of the water delivered by the Murray and Murrumbidgee Rivers by the Snowy scheme should be returned to the Snowy. This is to be achieved by greater water efficiency. Yet unless water allocations are dramatically cut this will only make matters worse, for highly efficient irrigation actually delivers less water to the river. Inefficient

irrigation lets at least some water seep back into the river. It might be loaded with salt, but if no water seeped back from irrigator's allocations, the Murray would be dry.

Today, discussions are being held aimed at returning 20 per cent of the water used for irrigation to natural flows. Thanks to the nightmare of history, as manifested by economic rationalism and water markets, this will be a vastly expensive exercise. Yet so massive is the problem that the chances that it alone will substantially restore the catchment to ecological health are poor.

The Wentworth Group has developed a new way forward for management of the Murray, and I would like to elucidate their plan here.

It spells out 5 major changes that need to be made if we are to achieve sustainability in water use. They are (overhead)

1) Water Rights. Clarify water property rights and the obligations associated with those rights, to give farmers some certainty and to enable water to be recovered for the environment.

Our present system of water rights is so chaotic that increases in water-use efficiency by irrigators actually result in less flow in the river system. That's because, as I have explained, highly efficient irrigation results in more water used by the plants (instead or running back through the ground table to the river) and because irrigators are allowed to keep the allocations liberated by their increasing efficiency. Clearly such increased efficiency stops pollutants like salt from reaching the river, but right now this comes at the cost of less water being available in the river, and that must change.

Under the system developed by the Wentworth group, the basic right should be to use a proportion of available flow, for a finite time. This needs to be accompanied by a clear statement about the reliability (or lack thereof) of the resource, and the risk of change without compensation.

It is also critical that water be returned to the river in the same condition as it left it. Pollution licenses should be required of producers who release sediment, salt, and unwanted nutrients back into the river. Good farmers, using best practice, would pay nothing under such a provision.

Looking at water use in the wider context, I think that this principal should apply to cities as well. Polluter's licenses, issued by an independent authority, should be reflected in every water bill in Australia where end-use water quality is not assured.

2) Environmental flows

WE need to establish substantial environmental flows. There are only three ways that the water required for those flows can be secured:

A) Take it, by reducing allocations without compensation

B) Buy it, either on the open market or via compensation

C) Save it, by reducing evaporation

A mixed approach will probably be the most acceptable.

In this regard COAG needs to:

convert all existing water licences into one system robust enough to actually deliver environmental flows

Reduce irrigation licences by 1% p.a. over the next 10 years: provide 600 million to begin to secure environmental flows.

3) End Landclearing.

We need an immediate end to broad scale land clearing of remnant native vegetation and to assist rural communities with the adjustment.

South Australia has a proud record in this regard – it ceased land clearing decades ago.

The release yesterday, by Bob Carr, of the Wentworth group's plan to end land clearing in NSW points the way forward here. Carr said that he liked the idea of a new approach that cuts bureaucratic red tape & brings farmers & environmentalists together. Its good model for what we need to do with many environmental issues.

4) Pay farmers for environmental services (clean air, water, healthy soils)

This may involve applying an environmental levy on the Australian community. Levies are not popular, but where the benefit is seen as great

enough – such as paying for NSW's ocean outfall for sewerage, for example, they will be accepted.

5) Incorporate into the cost of food, fibre & water the hidden subsidies borne by the environment.

This is really just good economics & environmental & social management. Why should the growers of organic produce, for example, suffer the disadvantage of having to compete with growers that benefit from hidden subsidies?

The issues facing us in terms of water use are so complex, multi-faceted and ubiquitous that they have left governments at all levels seeming unable to act.

If we are ever to be effective, we need to bring the communities along with us. As with land clearing in NSW this can only happen of we slash bureaucratic red tape.

There are good models out there. South Australia's catchment management boards were the first to be established in the country. They directly engage and empower the community & have the potential to initiate change in ways that bureaucracies cannot. Elsewhere on the continent catchment management groups have operated with varying degrees of success. Beef them up – give them statutory powers, access to scientific expertise & financial resources

We also need to think laterally.

Mitsubishi's plant in SA must have the largest roof area in Australia. It sheds water into our storm water system, while the plant draws water from the Murray. Why not harvest water off the plant's roof, providing a double benefit. Need to put water thinking at the top of the agenda.

The Snowy Scheme united the nation because it appealed to a potent cocktail of Australian sentiments:

1) The frontier myth of turning the rivers inland

2) Building the white population to fight off the yellow peril

3) The dream that we could one day be an antipodean US

If we are ever to set to rights the problems created by our history, we will need to appeal to an equally potent social mix.

I believe that Australians are engaged in a struggle for their own long-term survival. We are effectively fighting a slow-burning war for future clean water, air and fertile soil.

We will only find ourselves, and our shape as a nation, through reconciling ourselves with our land – it's the one thing all Australians share in common that is unique to us.

Australians need to realise that the fate of the Murray lies at the heart of all of these things, and to act accordingly.