Building Resilient Futures with Less Water:
Communities can but not on their own.

Background

The current crisis in the Murray-Darling Basin provides the best opportunity since Federation for Australians to work together to rebuild our Murray-Darling heartland resulting in more resilient communities and healthier rivers. We must accept that we have a future with less water and a system which is currently over allocated which is also confronted by climate change.

In the last 50 years the majority of Australians, whether we live in the city or the country have benefited from the development of irrigated agriculture in the Murray-Darling Basin.

In a relatively short time we have developed an industry that produces much of the top quality food and fibre we all enjoy at a cost the majority of us can afford.

This growth in irrigation has been largely achieved as a result of families and individuals investing their time, money and aspirations into their farms, infrastructure and businesses.

Industries that support irrigation have developed and employed people. In turn, service industries ranging from the pub to the newsagent have set up, or expanded, to service the needs of the growing population. Successive governments have used our taxes to build roads, schools and hospitals to provide the services to these growing communities.

People have built their livelihoods; they have fed and clothed their families, paid school fees and mortgages. All off the back of irrigation and the industries it supports. Regional towns have grown as a result of the people irrigation brought. More people have meant social groups and sporting teams have set up or expanded. Trophies have been won and lost and community spirit and identity has evolved.

The gold that fed this rush was water. In the last ten years much of the gold has dried up.

It is tempting to simply say that the climate we are experiencing is drought, it will rain again soon, the good times will return. Unfortunately this is not the full story. We developed our irrigation industry in a period of plenty.

Ultimately the hard truth is we don’t have enough water to continue to do things the way we have been doing them in the past. For many irrigation communities it is time for the painful process of finding a new identity.

Like any addiction there were third parties that also paid a price, even in the time of plenty. In the case of our addiction to the high quality, cheap food and fibre that irrigation provided it was the river, floodplains, wetlands and estuary that picked up the tab. As times got tough the addiction meant that we took more of the water for ourselves and gave less to the river.

We all know our rivers, lakes, estuaries, wetland and floodplains are very sick and we all have to change.

The current approach to the adjustment, although beginning to return some water to the system, has a fundamental flaw. Irrigation communities already suffering see it as another attack on their livelihoods.
People cannot see a positive vision for themselves and their community of a future with less water. Subsequently they do not want to sell their water as irrigation is the only future they can see, albeit one fraught with risk.

In some areas those who can see a vision for themselves and are willing to sell must struggle with the added burden of the expectations of the rest of the community and the importance of the water and the income it potentially generates for them. A large proportion of the community that rely on irrigation related activities for their income have no water to sell and rely on those that do to keep it in the local area.

The social implications of the adjustment are massive and if we do not address them we will not make the adjustment. We will instead fight amongst ourselves to protect our livelihood. Rules limiting trading volumes, embargoes on trade and bickering between states highlight this reality.

However, in this challenge lays opportunity.

**Social process to build more resilient future**

With the right social processes in place the irrigation communities of the Murray-Darling Basin could develop a new vision for their future. For some communities the vision may be a future without irrigation. These local visions could integrate into a broader vision for a sustainable and profitable Murray-Darling Basin with healthy rivers, wetlands and floodplains.

Implemented part of this process water reform, and the $12.9 Billion dollars the Government has allocated, could be the catalyst to deliver a new future rather than the threat to communities it is currently seen as.

Other existing nation building and rural development programs could be integrated with the water reforms to deliver services and infrastructure to help communities develop new opportunities. Obviously there will still be challenges. Some communities may not have a future in their current form and others may struggle to survive. However the alternative appears to be a lot worse.

**We need a three-legged Stool**

To deal with this we will need a well balanced three legged stool approach to water reform. Currently we have only two legs, buy-back and infrastructure improvement to lift efficiency. Without the third leg of support to help regional communities structurally adjust and plan for a future with less water the stool will fall over. From what I observe this third leg is currently missing, our communities are being expected to make these huge adjustments with little support from government.

Australian society as a whole has played a role in the development of this catastrophe through our collective state government’s over-allocation of water extraction from our rivers and groundwater. It seems only fair that we all take responsible action to assist our communities to make the required adjustment so that water extraction is in line with capacity of the rivers and groundwater. Ultimately this will give us all an assurance of a more sustainable future.

For communities to begin to shape futures it is so important that there is honesty and transparency in the magnitude of the reduction in water extraction that is compatible with a healthy Murray-
Darling. I am not sure that this has been done. Sure $3.7 Billion has been set aside for water buy-back. At current prices this amounts to roughly 2,500GL.

The work of the Wentworth Group in its recent submission to the Senate enquiry showed that if we are to maintain healthy rivers and provide high quality water to produce food, we need to return over 4,000GL of water to the rivers in periods of average flow. This will result in the consumptive use of water across the Murray-Darling Basin having to be cut by between 42 and 53 percent. The magnitude of the adjustment is massive – beyond anything that has been contemplated before in the Australian community.

Most regional cities, towns and communities within the Murray-Darling Basin face massive social and economic impacts of a water reform agenda designed to improve the health of over-allocated rivers and groundwater. This upheaval comes at a time of severe drought and against a backdrop of climate change. Communities are faced with making tough and painful decisions.

There is evidence that regional communities and industry are actively taking responsibility for planning to live with less water and accept the need to return water to the river.

Certainly the government buy-back of water allocations and entitlements is a critical part of the solution as is the government investment in water and irrigation infrastructure. However, from what I see there is an urgent need to bring together these two elements in the water reform agenda with a third element involving a strong focus and commitment to community and social planning for regional development.

From what I can determine the governments have put some $12 Billion on the table to address water reform in the Murray-Darling Basin. When has there been a better opportunity to see this investment as a key plank in the regional development and rebuilding, revitalisation of the communities of the Murray-Darling? It is a magnificent opportunity!

A way forward for the Murray-Darling Basin

The current crisis in the Murray-Darling Basin provides the best opportunity since Federation for Australians to work together to rebuild our Murray-Darling heartland resulting in more resilient communities and healthier rivers. Most regional cities, towns and communities within the Murray-Darling Basin face massive social and economic impacts of over allocation and failure to recognise climate variability in the current drought. This is in addition to a water reform agenda designed to improve the health of over-allocated rivers and groundwater.

Currently water reform is generally seen as yet another challenge to the survival of irrigation communities within the Basin. However, used in the right way as part of a larger program of community and social planning for regional development the $12.9 Billion could be the catalyst to delivering new and prosperous futures. For some communities it could help them reinvent themselves and move out of irrigation, for others it may help them consolidate their position and provide a more secure irrigation future.

Currently each community is struggling to preserve their part of a shrinking pie which is an irrigation future. There is no bigger picture or support network to allow communities and leaders in communities to see the writing on the wall and determine a bigger vision for themselves.
Building resilient futures with less water:
Communities can but not on their own

We present a sketch of a blueprint for a nation building, regional development initiative that works with communities, supporting, facilitating and resourcing our communities and industries with the means to think, imagine, plan and implement better futures.

Our sketch sets out the need for an integrated package to deliver the three aims of Integrated Water Resource Management:

- economic efficiency;
- equity;
- environmental sustainability.

How can it be done?

Thriving communities will be delivered by an approach which includes the following components: the model has three distinct features:

- Bring together knowledge

We must bring together the knowledge in the community with the science and the socio-economic knowledge of what future scenarios could look like. This combined knowledge must be communicated and will provide a platform to begin to vision a new future.

- Deliberative dialogues

The knowledge will be used to inform expert facilitated conversations held with people across local districts. These will occur with groups with an interest in irrigation and the broader community. The new vision must be one of the whole Community. The focus will be on people talking together about their wants, needs and visions for the future. From these we will develop local plans which will be a compact with local, state and national government.

- Collaboration

Although each community is developing a local plan these must collaborate more broadly with higher level aims across the Basin. Therefore the process must include collaboration between government, non government organisations and communities so that we achieve a concerted and coordinated action.

- There are also four critical inputs to the process that are needed to ensure it can be successful. These can be delivered using the $12.9 Billion as well as other existing social programs for rural and regional communities.

1. Structural adjustment resources

Money will be required for the possible development of socio-economic analyses, community mapping, communicating the science, engagement with local communities and the facilitation of deliberative dialogues. Money will be needed for the implementation of action towards community wide structural adjustment to support sustainable activities communities deem to be important as well as those that build local capacity, and enable new economic ideas to develop.
2. Water buyback and water infrastructure investment

Money must be available to buy-back water and invest in irrigation infrastructure. The science exists to tell us what water we need and where in the Basin. This tells us the value of water for the environment at locations across the Basin. From this we can determine what is value for money and use this to guide what we do to get water back into the system. This means we are not making political decisions about where we do buy-back or infrastructure, we are basing it on what will deliver water at the best value for money across the Basin.

3. Broader infrastructure investment

For Basin irrigation communities to evolve and develop there will need to be investment in a range of infrastructure above and beyond irrigation pipes, water meters and lining channels. Once communities have agreed a new vision for their future to deliver prosperity and security they will need new infrastructure to turn the vision into a reality. This could be anything from improved broadband so an area can evolve into an IT hub to a new transport corridor to help make new industries economically viable.

Infrastructure must also include more than just ‘hard hat’ infrastructure. People will need to learn new skills and transition to new careers. People will need vocational training, education, skills enhancement etc. to effectively make the transition. The mix of future industries and the subsequent infrastructure needs will only be determined as communities work through the model.

4. Removal of restrictions to the water market

Communities will only be able to make good decisions about their irrigation future if they are confident there is a water market which lets them trade water quickly and efficiently across the Basin (within the physical limits of the system). With an open and efficient water market it may be possible to make the required reduction in water extraction to maintain and even increase the value of irrigation within the Basin. Add to this the income generated by communities that move from irrigation to new industries and the future does not look so gloomy.

The Wentworth Group are currently working with Prof Chris Miller and Associate Prof Fiona Verity from Flinders University to develop this model.

From what I have seen in the work of the communities of the Wimmera-Mallee Pipeline Project there is active community engagement and visioning of new and better future in response to the change process as outlined by Ian McClelland and others today. I see some of the aspects of community development and regional development that is desperately need across the Basin. Your work appears to me to have within it the seeds of our future and it would be wise for us in the Basin to listen and learn.
John Williams, NSW Commissioner for Natural Resources, founding member of the Wentworth Group of Concerned Scientists and former Chief of CSIRO Land and Water. 

Mr. Tim Stubbs, Policy Analyst with the Wentworth Group of Concerned Scientists. 

Prof Chris Miller, Flinders University. 

Associate Prof Fiona Verity, Flinders University. 

25th June 2009