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Commentary

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Why water is everybody's business

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Published 8:00 AM, 23 Nov 2010 Last update 10:20 AM, 23 Nov 2010

No society has ever prospered without infrastructure and institutions for managing water – for protection against floods and droughts, for growing food, for people in cities, for generating electricity, for navigation.

But the volume of freshwater available naturally is finite; demand grows and quality degrades. Large parts of the world are having growing difficulties in matching supply and demand. And even larger parts of the world are struggling to maintain the quality of the resource itself.

Now climate change creates an additional layer of stress and uncertainty. For these reasons water management is broadly understood to be one of the great challenges facing mankind.

Australia is the driest continent, with small differences between overall precipitation and evaporation. Australia has built large infrastructure assets, including dams, pipelines and desalination plants, to deal with the wide variability of water availability. It has created markets for the efficient trading of water, and for precision irrigation.

Surprisingly to some, this country is recognised internationally as the leader in water management in an arid environment.

Twenty years ago Australia pioneered micro-economic reforms, including in the water sector, which yielded spectacular results. Adaptive, market-driven institutions meant there has been little economic impact from the decade-long millennial drought.

This drought has been longer and more severe than any previous dry going back to colonial times. Between 2000 and 2007, the reduction in water availability was nearly 50 per cent – yet, because of water management reforms, with very little damage to a water-dependent economy.

However, the millennial drought has inflicted enormous damage on the environment. Red gum forests, wetlands and the lower lakes have had little water and suffered accordingly. Thankfully, the negative ecological impact is being mitigated by recent rainfall and rising river levels.

Yet the science strongly suggests the challenges are far from over. The recent downpours are unlikely to signal a fundamental change in rainfall. The greater likelihood is that the future will be more like the past 10 years.

So Australia faces new challenges. It has started a process of finding a new integration and balance between human uses of water and the environment.

Applied research is going to be critical to address all of the critical water-related issues – climate, environment, agriculture, human uses, new technologies, institutional innovations – if Australia also wants to maintain the security of water supply necessary to grow its economy, to build its population, and to sustain and develop its agricultural sector.

These are priority issues for Australia, and the results of the Australian journey will matter a lot for the world: for advanced nations like the United States and Spain, and also by the coming powers such as China, India and Brazil.

Traditionally water has been the business of governments and water utilities, with academics and NGOs also involved. But now, the business world has started to engage – either because water scarcity and declining water quality constitutes “a threat to the social licence to operate”, or because new technologies (such as biotechnology, materials and information technologies) offer new frontiers for enhancing productivity of water in agriculture, industry and household uses.

Water in Australia has become everybody's business. Over the last three years the 900 private and public institutions that are members of the **Committee for the Economic Development of Australia** have rated “water policy” as the number one issue.

Now, CEDA, Harvard University and Uniwater (Monash and Melbourne Universities, led by Prof John Langford, former head of the Rural Water Corporation) have launched the Australian Water Research Project.

We met initially a wide variety of public and private actors in multi-stakeholder meetings in Sydney, Melbourne, Brisbane and Adelaide. As the project proceeds, we want partners from government, industry and local/regional associations to contribute their ideas.

One lesson from the public and political backlash to the recent release of the guide to the Murray Darling Basin Plan is that government and authorities need to keep communities engaged; making vital decisions about water use behind closed doors will only create scepticism and negativity about what might be seen as arbitrary outcomes.

In coming decades the demand for agricultural products is going to rise, as are prices. A vibrant agricultural sector is going to be a vital element of Australia's economic future. What is clear is that if farmers are to play this role, they need to be reassured that, despite significant cuts to irrigation entitlements, they will still have sufficient and secure water to meet their aspirations to

be major exporters of food to the huge markets of Asia.

Critical to the future viability of agriculture is greater certainty. Reductions in water entitlements can have a very direct and deleterious impact on farm and house valuations in the river communities, and make risk-capital more expensive. We need also to understand how introducing smart environmental and metropolitan water management can help ameliorate these concerns.

There is also an important challenge in assuring water security for cities, which can no longer rely on water from dams and local catchments. The responses to the drought – restrictions and taking out insurance by building desalination plants – were both understandable, and costly to the treasury and households.

During the worst of the drought, much of the consumption demand for water was controlled by regulation, be it water restrictions in the cities or cuts to irrigation in the river basins. How do we ensure more realistic pricing signals are established that will allow markets to do their job, and distribute water to its best and most cost-effective uses?

These and many other questions fundamental to water supply will be the focus of the Australian Water Research Project. Our aim is to bring together an agenda for reform that will seek to lift to world-leading standards Australia's water productivity and to remove water scarcity as a risk to continued growth and prosperity.

John Briscoe is a professor of environmental health at Harvard University, and former lead adviser to the World Bank on water. Dr Michael Porter is national research and policy director at the Committee for Economic Development of Australia.

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Contribute to the Conversation

John Gordon wrote:

Nice article (See ***Why water is everybody's business***, November 23). It seems quite bizarre that we talk about water scarcity yet 80 per cent of the planet is covered by water.

Water quality should never really be an issue anywhere. With technology tertiary treatment of sewage/run off would provide ample quality water for all. Combined with desalination this should be a non-issue everywhere once people get over the cost and stigma issues – something that is inevitable in the medium term.

23 Nov 2010 8:31 AM

Carl Chapman wrote:

"Now climate change creates an additional layer of stress and uncertainty," (See ***Why water is everybody's business***, November 23).

You lost me at that point. The British government commissioned a PR firm to help sell Global Warming (later Climate Change, now Global Climate Disruption: you're behind the times). The PR firm said to talk about it as if it were an established fact. You've fallen for it, and you're continuing it.

The green analysis is that letting water run out to see, from the driest continent on earth is a good thing. It's madness.

23 Nov 2010 11:55 AM

John Flett wrote:

It is of considerable concern that this article states that the "50 per cent reduction" in water availability caused very little damage to a water dependent economy (See ***Why water is everybody's business***, November 23).

The value of production in the Murray Darling Basin did not drop significantly due to unusual economic factors such as record prices for dairy products. Actual production fell by more than 50 per cent and producers' debts rose by a huge amount that no-one has yet attempted to quantify as they struggled to hold on to their businesses – and this despite help from the Exceptional Circumstances Government assistance.

The current proposals for the Basin will have the effect of creating an artificial drought which will not be supported by Government EC help.

23 Nov 2010 11:58 AM

Gordon Champion wrote:

Chapter IV section 100 of the Australian Constitution states: "The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation."

I wonder if this clause will be conveniently ignored for the sake of the Murray? (See ***Why water is everybody's business***, November 23).

23 Nov 2010 12:25 PM

<http://www.businessspectator.com.au/bs.nsf/Article/water-infrastructure-Uniwater-drought-climate-chan-pd20101122-BF3J9?OpenDocument&src=rot>