

# water as a common good



“ In many parts of the world water is privately owned.

This has not been the Australian experience – but changes now underway apply free-market principles and practice to water entitlements and water allocation. In the face of these changes, and our uncertain water future, we need to be sure that we have legislative and regulatory frameworks in place that not only respect, but also secure, the concept of water as a common good.

*Our concern is that the market will be taken up by those who can afford to get into water speculation, e.g. banks, big business, who have no real stake in how water is allocated. Their motivation is simply making money.*

Kaniva Watermark Australia group

*Don't it always seem to go that you don't know what you've got til it's gone ...*

Joni Mitchell, part of the lyrics to *Big yellow taxi*, 1970

Water has long been managed in Australia as a common good; belonging to all and able to be shared. However, the 1994 COAG adoption of a water-reform framework set in train a number of important developments which have changed the nature and allocation of water entitlements and removed restrictions on water trading, including where trading can occur.

From 1 July 2007 each landholder's water entitlement will be separated from the land title (a process called 'unbundling'). In addition, for the first time in Australia, it will be possible for anyone to permanently acquire a water entitlement (or entitlements) without owning any farmland. The water entitlement itself can now be held in perpetuity. It can be leased, used as collateral, and it can be bequeathed or permanently traded. Water entitlements will now also need to be registered.

**These arrangements bestow a new status upon water – making it a commodity that can be bought and sold in the marketplace.**

In order to grasp the magnitude and implications of this shift, we need to step back

in time and trace the deep and long-standing attachment Australia has to the concept of managing water as a common good.

## MANAGING WATER AS A COMMON GOOD

During at least 40 000 years of habitation, water was woven into the traditions of Australia's indigenous peoples. It was a shared resource. Billabongs and streams were used as gathering places, for spiritual and recreational activity and as sources of abundant food. Rivers provided a reliable way of navigating from inland areas to the coast.

Soon after the arrival of the First Fleet at Sydney Cove, land became private property, but water remained a common good. In December 1803, a notice appeared in the *Sydney Gazette*:

'If any person whatever is detected in throwing any filth into the stream of fresh water, cleaning fish, washing, erecting pig sties near it, or taking water out of the tanks, on conviction before a magistrate, their home will be taken down and forfeit five pounds for each offence to the Orphan Fund!'

Governor Phillip's proclamation clearly defined the colonial administration's stewardship role over water. For the first three decades in the colony, everyone had free access to fresh water, though there were penalties for polluting the resource. As people spread out from Sydney Town, the need for an overall governance structure was identified. The eventual response was the 1886 Royal Commission which established that 'government had a right to divert and control water.'<sup>2</sup>

This recommendation paved the way for the states to take control over water, on behalf of their people. By Federation, each had a Water Act on its statutes. These legal arrangements meant that when the Constitution was drawn up in 1900, water remained the responsibility of state governments, to be managed for the common good.

## Water entitlements

Early attempts by government to regulate water use came in the form of licences issued to control groundwater pumping for irrigation experiments. The next significant raft of water-



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related legislation facilitated the setting up of irrigation schemes by government, to be managed under statutory arrangements. Thus, the *NSW Irrigation Act* of 1912 established the NSW Water Conservation and Irrigation Commission, which immediately embarked on the development of the Murrumbidgee Irrigation Scheme.<sup>3</sup>

State governments set about securing the water necessary to support the growth of towns and cities, agriculture and mining. This approach to water management continued for several decades. Throughout this time, farmers held water entitlements which gave them special access to, as distinct from ownership of, water as common property. These water entitlements were attached to farmland – linked to the property title. When land was traded or bequeathed, the water entitlement went with it as an integral part of the transaction. Within this system, some farmers were able to obtain additional water (at a negotiated price) from others, to assist in times of need. Such arrangements were described as 'water sharing'. This was possible because part of a water entitlement could be leased. However, this temporary trading in water was restricted. For example, water could not be moved out of an irrigation district.

## THE 1970S: A SHIFT BEGINS

The mid-'70s represented a turning point in water policy. The globalisation of trade brought changes in economic thinking. Competition in a global marketplace dictated actions with respect to trade barriers, financial deregulation, the role

and size of government and the operation of state-owned monopolies.

**Free-market principles were extolled with ever-greater force. The message was that government bureaucracies were self-serving, slow to respond, insulated from commercial realities and wasteful. Markets can, and will always, do it better.**

## A water market & water trading

This self-confident mantra began to be articulated with respect to water use and management. Water was seen as a commodity that could be bought and sold in an open marketplace. As a secure investment and a tradeable entity, water would become more valuable; and this would in turn promote greater efficiency in its use and management. Instead of its use being geographically restricted, water could be directed to its highest value: water could be moved out of irrigation districts, across state borders, and between rural and urban communities. Other perceived benefits included the removal of barriers to private investment in new water infrastructure, and the breaking of state monopolies over water, thereby introducing healthy competition into the supply of rural and urban water.<sup>4</sup>

A water market came to be seen as an important tool in facilitating structural adjustment within irrigation farming and to assist the orderly transition of agriculture.<sup>5</sup> Farmers could buy additional water entitlements to improve reliability of supply and expand their farm production. With the help of other policy instruments, such as full cost recovery, water

could be reallocated away from inefficient low-value irrigators on unsuitable soils, to efficient high-value irrigators on productive soils.<sup>6</sup> Such reallocations would create more viable farm businesses, increase economic output from the limited resource, provide farm employment and boost local processing and service industries, helping to reinvigorate rural communities and generate environmental benefits.<sup>7</sup> Farmers would also be free to sell their water rights, retire debt and make dignified exits from the land.

**In this schema, permanent trading in entitlements is seen as having advantages over temporary trading. Permanent trades can facilitate long-term structural change because farmers are more likely to make significant financial investments in irrigation infrastructure when they have long-term security and control of the water.<sup>8</sup>**

Some argue that water trading can also bring with it environmental benefits. It can relocate the extraction and application of water away from environmentally sensitive areas – such as badly salinised soils, either in the locality or further afield.<sup>9</sup> Indeed, some agencies with a commitment to environmental sustainability are already identifying and designing initiatives on the assumption that permanent water trading presents a valuable opportunity to address land-degradation issues. Degraded and/or abandoned land can be purchased, rehabilitated, the water infrastructure refurbished, and some native habitat re-established. In this way, the usefulness of the land is enhanced, turning it into a viable and valuable farming enterprise, as well as bringing returns on investment.<sup>10</sup>

Water trading is also seen as a way of opening up options for trade between water-using sectors. For example, urban water utilities could obtain new sources of water at significantly lower cost than alternative options.<sup>11</sup> This view assumes that the vast amounts of water currently used for relatively low-value irrigated agriculture could be transferred to inland urban centres.<sup>12</sup>

In this context, permanent water trading becomes the vehicle for opening up major private-sector investment in infrastructure development, particularly in eastern Australia. The purchase and delivery of rural water to our expanding cities, for example, would require major investment in piping, pumping and water-treatment infrastructure.

The recent paper of the Business Council of Australia provides an important clue as to what various private-sector and think-tank organisations now seek with regard to water trading and the development of a marketplace for urban water. The council calls for an expansion of the National Water Initiative (NWI) to cover urban water issues in the 'same depth as rural ones', and the replacement of physical water restrictions 'with properly functioning urban water markets'. It advocates for allowing 'greater private ownership of disaggregated water utilities'; removing the 'various impediments to water recycling'; and conducting a 'national review of water pricing in cities and towns'.<sup>13</sup>

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Those buying the water rights include managed investment schemes fuelled by city investors taking advantage of tax laws. At a time when growers worry desperately about the water shortage, MIS operators are gobbling up water rights before the tax loophole that spawned them is wound up in a year.

Dan Silkstone and Orietta Guerrera, 'Beneath dry blue skies, growers fear the worst ...', *the Age*, 21 April 2007, p. 7.

## Speeding up market arrangements

The 1994 COAG created an agreed Water Reform Framework that obliged state governments to reform their water management practices, separate water-access entitlements from land titles, separate water-delivery from water-regulation functions and make explicit provision for environmental water. States could be (and have been) financially penalised for failing to comply and meet milestones and for failing to deliver fully on proposed reforms.<sup>14</sup>

A decade later, the COAG meeting of June 2004 reached agreement on the National Water Initiative, recognising the 'continuing national imperative to increase the productivity and efficiency of Australia's water use, the need to service rural and urban communities and to ensure the health of river and groundwater

systems by establishing clear pathways to return all systems to environmentally sustainable levels of extraction'.<sup>15</sup>

Of the eight key elements in the initiative, the first two dealt with water-access entitlements and a planning framework, and water markets and water trading. To establish uniformity across states, the NWI reinforced the concept of permanent water trading, arguing that the 'consumptive use of water will require a water-access entitlement, separate from the land, to be described as a perpetual or open-ended share of the consumptive pool of a specified water resource, as determined by the relevant water plan'.<sup>16</sup>

**The now-separated water entitlement will be exclusive, able to be traded, given, bequeathed or leased, subdivided or amalgamated. They will be 'mortgageable' (and in this respect have similar status to freehold land when used as collateral for accessing finance). The parties holding these now-separated entitlements will be 'recorded in publicly accessible reliable water registers that foster public confidence and state unambiguously who owns the entitlement, and the nature of any encumbrances on it'.<sup>17</sup>**

The NWI stressed that these water-access entitlements had to operate within a statutory water-planning framework. At the state and territory level, water plans will provide for 'secure ecological outcomes by describing the *environmental and other public benefit outcomes* for water systems and defining the

appropriate water management arrangements to achieve those outcomes; and resource security outcomes by determining the shares in the consumptive pool and the rules to allocate water during the life of the plan'.<sup>18</sup>

The recent sharpened sense of a water crisis has stepped up pressure on governments to work out these market arrangements within the agreed time frame. In November 2006 a hastily convened meeting of heads of government resolved that trading, temporary or permanent, could begin across state borders as early as January 2007; and as recently as March 2007, the federal minister for the environment and water resources announced \$5.6 million to accelerate the development of water trading in Australia.<sup>19</sup>

## Legislating for a national water market

Running in parallel with this national reform agenda, and in order to facilitate the creation of a water market and permanent trading, individual states made significant amendments to their Water Acts and regulations. Reforms in Victoria serve as a good example of this change in direction. Here are the key legislative developments within the last two decades:

- In 1987 amendments to the Victorian Water Act (1958) were made legalising the temporary transfer of water rights.
- Two years later, a new *Victorian Water Act* (1989) was passed in the Victorian Parliament. Temporary trading remained in place. It also provided for the permanent

transfer of water rights and licences. Trade was only allowed for gravity irrigation districts, and only within them.

- In 1994 an amendment to the *Water Act* (1989) enabled water rights to be traded from within an irrigation district, to any land.
- In December 1997, further amendments to the *Water Act* (1989) allowed permanent interstate trade in water rights and licences.<sup>20</sup>

**As a result of these legislated changes, from 1994 onwards, temporary and permanent water trading took off in Victoria. In the ensuing six years, the volume of water in temporary trades ranged between 3% and 8% of total water use. In the 10 years to 2000–01, a volume of water equal to 6% of the total entitlement to farmers was permanently traded.<sup>21</sup>**

Increased activity in both temporary and permanent water trading is reflected nationally. In 2004–05, across Australia, there were 223 556 water-access entitlements that accounted for 29 832 GL. Approximately a third of these were entitlements to surface water. The rest were entitlements to groundwater. There were 13 456 temporary water trades (representing 1053 GL) and 1802 permanent water trades (representing 248 GL).<sup>22</sup>

## NOT EVERYONE IS CONVINCED

There is strong support for the development of a water market and permanent water trading in certain quarters of government and the private sector, and among land/



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water specialists and various interest groups. But the policy framework behind the NWI and the introduction of permanent water trading are not universally welcomed and have come under sustained attack from parts of the irrigation and agricultural sector. Limited national media coverage means that the degree of anger and hostility to these changes is not readily apparent.

At the time of writing, a formal resolution is being forwarded to the Water Resources Committee of the Victorian Farmers' Federation calling for the process of 'unbundling' to be immediately terminated, and for a complete halt to permanent water trading between different districts and states until a 100% water allocation is restored throughout the state. A resolution of this nature suggests the issue is causing unease and real angst in farming communities.<sup>23</sup>

## Lack of fairness

The overriding concern is that water-market mechanisms, on their own, are not fair or acceptable processes for allocating and reallocating water. There is a strong sense that unregulated water trading will price farmers out of business, causing huge write-downs of farm assets.<sup>24</sup>

If irrigation water is lost to other uses, the shortage of water in a tight market will substantially force up the price of irrigation water. There is also great concern that the trading of water and departures from farms will leave stranded assets – dams

and diversion works, major channels and diversion infrastructure, local channel and delivery works, on-farm delivery systems, and other on-farm infrastructure assets associated with irrigation delivery.<sup>25</sup>

**A central concern rests with big non-land holders getting in on the act. With the separation of water entitlements from land ownership, parties can now acquire substantial rights to water, causing price spikes that will be difficult for many farmers to contend with.**

The fear is that an open water market will allow 'water barons' to buy water and manipulate supply in a tight market – pushing prices to high levels, particularly in times of drought. In an open water market, city water retailers will always be able to outbid farmers, as urban authorities can spread their costs over businesses and across households.<sup>26</sup>

## Flawed economic models

The economic modelling that underpins water trading and predicts its impacts is perceived as far too narrow. It is seen as ignoring important economic, social and environmental dimensions to farming, and the dynamics that build economic and social cohesion in rural communities. At issue is whether permanent water trading will damage rural communities. One early estimate is that the loss of 150 000 ML of irrigation water from northern Victoria has resulted in farm-gate losses of \$150 million annually, the loss of \$600 million from the regional communities annually, and a total write-down of \$210 million in farm assets.<sup>27</sup>

Those who challenge permanent water trading also argue that the concept of 'low-value use' versus 'high-value use' is fundamentally flawed. They say that the value of a farm product is not measured by the farm-gate price alone. Important economic and social objectives are served by 'low-value' irrigated agriculture. These include the provision of reliable, safe, low-cost food and fibre for both domestic enjoyment and export earnings. There is also the employment generated in rural Australia in the handling, transport, processing, manufacturing and marketing of these products.

The flaw in judgements about 'low-value' versus 'high-value' products is that valuations can change rapidly. Take grapes, for example. Substantial amounts of water have been traded to corporate wine-grape farms financed by large managed investment schemes, yielding substantial tax breaks to investors. This has led to a significant oversupply of a number of wine-grape varieties, with prices falling from \$600 to \$800 per tonne, to \$150 to \$200 per tonne in 2006.<sup>28</sup> This outcome not only affected corporate grape growers – it affected *all* grape growers.

**When permanent water trading is simply described in terms of 'high-value' use and profitability, it ignores the issue of public accountability.**

In a managed irrigation district, the water authority is accountable to the parties it supplies. If, for example, loss rates are judged to be high, the parties can demand that the authority respond and fix the infrastructure

to reduce these losses. In contrast, when water is permanently traded out of a district, and stored on the corporate farm, no-one else knows what is actually happening to the water. The new owners of the entitlement are accountable only to their shareholders. Provided they stick to their licence agreement, there is little oversight and limited opportunities for public scrutiny.

Finally, the anger over permanent water trading spills over to the policy makers. They are seen as having neglected important issues, including the amount of water lost in transmission when traded over long distances, the benefits to farm areas gaining water and the costs to farm areas losing water, the full cost to farmers and water-supply authorities resulting from the stranding of assets, and the economic losses and gains when water is traded from one region to another.<sup>29</sup>

## Negative impacts of managed investment schemes

Those opposed to permanent water trading have special concerns about the local impacts of managed investment schemes (MISs). They see that permanent water trading is open to capture by the MIS, with consequential distortions of rural investment, agricultural markets and water allocations.<sup>30</sup>

In this regard, it's worth noting that most water trade in agriculture has been directed to MISs. According to an investigation conducted by the *Age* newspaper, in 2005, MISs were responsible for 85% of the secure water traded out of Victoria's largest water authority – Goulburn-Murray Water. In 2006 water brokers estimated

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that 75% of the Goulburn-Murray water sold out of the catchments, and up to 100% of Lower Murray water, has been traded to just three MISs: Timbercorp, SAI Teys McMahon and Macquarie Agribusiness.<sup>31</sup>

These investments are perceived as responding to government-sponsored tax breaks rather than being driven by market forces. In a snowballing effect, the purchase of multiple water entitlements in an area can lead farmers to exit the industry. Their irrigation channels then become uneconomic, causing the stranding of water-infrastructure assets and the assets of other farmers. In turn, other farmers go out of business.<sup>32</sup>

## TROUBLED WATERS

It's hard to argue against the provision of opportunities to move water from different parts of agricultural production to others. After all, it makes sense to secure additional water to cover shortfalls, adverse seasonal situations and to expand production. All of this can be achieved with the temporary trades in water that have been occurring between irrigators in Australia for many years.

**A key feature of this approach was that the water being temporarily traded always remained available as part of the pool.**

Some would argue that it is too late to reverse institutional changes now underway. We note that there appears to have been no specific democratic mandate, either sought or granted, to introduce permanent water trading, though it dramatically changes the nature of water

**Water trading sounds complicated and, no pun intended, dry. Country people perceive themselves as facing the problem alone, and they don't like it. They believe they are slowly being strangled. They want the attention of urban Australians.**

Dan Silkstone and Orietta Guerrera, 'Beneath dry blue skies, growers fear the worst ...', *the Age*, 21 April 2007, p. 6.

entitlements, the distribution of rural water and the relationship between water sectors. There is a strong case, therefore, for bringing to light a number of troubling issues, so that debate can take place that might inform future developments regarding the operation of a water market – both rural and urban.

## Water & the environment

Across the country there is compelling evidence that too much water has already been removed from the natural environment. Reversal of damage to our freshwater ecosystems will require us to replenish our rivers and streams, provide seasonal flooding of wetlands and provide a mechanism for aquatic species to migrate along waterways. In addition, if water leaves districts permanently, land without water has little value and can

be left in a state of serious disrepair. This will compound existing problems of land degradation and the costs of restoration.

**Water for the environment was accorded legal recognition by COAG in 1994. Yet, despite this advance, little additional water has been allocated for environmental flows – in part due to the protracted drought.**

Our earlier section on surface water showed flow predictions for Victoria's river systems. All but one are predicted to have reduced flows. In a later section of this document, we outline a fundamental principle regarding river health: that to maintain our rivers and streams as living entities, they need the first drink.

If permanent water trading continues to expand, the broader community will need to be confident that the environment can compete, in respect of environmental flows and land repair, with the interests of for-profit shareholders and individuals who trade in water.

## Potentially adverse economic outcomes for the community

The rhetoric accompanying the introduction of permanent water trading, and the development of a national water market, is that water can be moved and put to its highest-value use. In this context, high-value use is an economic construct to do with productivity and profitability. Such a concept does not intrinsically reflect other values, such as environmental and ecological integrity, social equity, the welfare of rural communities,

and social cohesion between rural and urban dwellers. Indeed, it's usually because of the inability of the marketplace to account for such values that, from time to time, and in various circumstances, market failure occurs.

Australians need to feel confident that the push to create a national marketplace for rural, and possibly urban, water does not further impact negatively on freshwater ecosystems or the welfare and water-security of rural Australians. This is especially so if, and when, there is market failure.

As detailed earlier, from 1 July 2007 state governments, in their pursuit of the COAG 'water reform' agenda, will amend water legislation so that any party or person will be able to purchase water entitlements or 'water shares'. When water can be bought and sold in an open marketplace, those with a financial and institutional capacity to pay have an intrinsic advantage.

Water is an appreciating 'asset', a fact illustrated in a recent promotion (dated 16 April 2007) by Macquarie Private Wealth/Macquarie Equities Ltd (a member of the Macquarie Banking Group). Potential investors are being encouraged to purchase units in 'the Credit Suisse PL100 World Water Trust'.<sup>33</sup>

**We are glad the Snowy is in public hands and not, as far as we know, having profit wrung out of it for private investors.**

Ivanhoe Watermark Australia group



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The promotion draws on evidence from the United Nations predicting that, if present rates of water consumption are maintained, by 2025 5 billion of the world's 7.9 billion people will live in areas where safe water supply is uncertain (including areas of eastern Australia and most of China and India). In the US alone, water demand has tripled over the last 30 years but the population has grown by only 50%.

The promotion suggests that with 'demand for water increasing globally, PL100 World Water may present an attractive investment opportunity'. Some of the key benefits include 'exposure to a basket of international water stocks', 'investment loans ... available to approved applicants', 'Australian dollar returns' and '5-year terms'. Macquarie Private Wealth is clearly a canny investment outfit. They rightly appreciate the dire water circumstances facing eastern Australia, as noted in the UN appraisal. As if to underline this uncertainty, just four days after the mail-out to potential investors, the Australian prime minister and the minister for the environment and water urged Australians to 'pray for rain'.<sup>34</sup>

**In order to prevent too much water from leaving a particular irrigation district, caps have been placed on the amount that can be permanently traded in any year.**

Even allowing for the application of these caps on the amounts of water traded, water trading provisions now open the door for private parties, and especially those with substantial financial resources at their disposal, to acquire

significant volumes of water over time. While we appreciate that an asset such as water will only realise its value if used to create income, there will need to be anticipatory and effective regulation that prevents water hoarding and market manipulations that hurt genuine farming enterprises.

In addition, these caps and constraints reflect the policy imperatives of the times. Incremental creep is not restricted to tax brackets. Interest groups often lobby hard to promote their interests and, as we know, governments come and go with great regularity. There can be significant policy changes every time there is a change of personnel on the parliamentary front benches. We note that up until July 2006, the cap in Victoria was set at 2%. A year later, this was increased to 4%. In this context, people in the broader community need to feel confident that these caps will not be detrimentally raised at regular intervals, by different parties in power, responding to different constituencies.

When large investments are made, they are made with an eye to security and satisfactory returns on capital. One of the key issues various water interests want to progress with governments is the question of financial compensation. There are two major aspects here. The first concerns the possible failure of the owner of the water share to receive the full volume of water purchased because of general water scarcity. The second is what happens if a government is forced to take some of the private entitlements to water to meet a community need or crisis.

Once trading is permitted, it may be harder to reduce water users' rights without compensation when rivers are subsequently found to need greater flows.<sup>35</sup> Taxpayers could potentially be exposed to a significant risk of paying out large sums by way of compensation to owners of water shares who will argue their entitlement is secure.

## Water & energy

Water and energy are inextricably linked. This link is even more critical as we face the problem of increased greenhouse-gas emissions. From now on, when we look at different options for augmenting supply we are going to have to very carefully consider the energy implications.

Huge amounts of water are used to generate hydroelectric power, particularly at times of peak demand. With private parties able to accumulate significant amounts of water, the stage is set for power companies to purchase water and use it to meet peak demand. Into the future, more of these peak periods will occur during summer months. Hotter daily temperatures will cause people to use more power (and embodied water) for cooling homes and workplaces – unless, that is, we redesign our housing and reassess our consumer and lifestyle preferences.

**At the present time, our patterns of energy use and levels of demand work against the provision of adequate water for environmental flows.**

Part of the reason why the Snowy River hasn't received anywhere near the agreed 28% of

environmental flow promised it, is because water is being held to generate power rather than being released to restore it to health.

## Risking the common good

Australia is at a critical juncture with respect to its water future. There are some very difficult issues before us as a nation, including the significant readjustments that will need to be made in parts of the irrigation sector, achieving substantial increases in water efficiency in all water-use sectors (including industry and households), and determining what population targets are feasible in an era of water scarcity and climate change.

**The creation of a national water market, and in particular permanent water trading, may well meet many of the stated objectives regarding structural adjustment in irrigation and efficiency in the allocation of water among competing users. At the same time, however, there are also risks that go way beyond those defined in capital markets and free-trade thinking.**

The central one is to do with the concept of water being managed as a common good – belonging to us all and shared by us all. We need to be confident that the new water trading arrangements don't seriously compromise or threaten the management of water as a common good.

With land and water now disassociated into independent assets, it's possible for parties to

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buy and sell water entitlements. Technically, they do not own the water. So, in this sense, water itself is not privatised.

However, when water is permanently allocated from the broader consumptive pool; when its use is controlled by private parties with limited transparency, oversight and public scrutiny; when the benefits of its use are confined largely to private parties for their own gain, and where there are no attendant social and environmental responsibilities; it could be argued that water trading privileges private users, rather than serving community interests. Under these circumstances, the common good is effectively denied.

There are further ambiguities and dilemmas pending which may impinge on, and perhaps alter significantly, the management of water as a common good. As it stands now, the ownership of water remains with the people. The Crown (i.e. each state government) has the title to water which it manages within its territorial boundaries for the good of the people. However, existing Water Acts focus primarily on water flowing in rivers, rather than on the water stored below the ground. The ownership of water below the ground appears to be less certain, and may well be contested over coming years.

For example, feasibility studies are being conducted into the storage of suitably treated stormwater and/or wasted water into existing, shallow aquifers. If private parties are allowed

to do this, will they then own the water in the aquifer and be able to sell it in the marketplace?

Another potential uncertainty concerns the treatment of effluent. Our eastern seaboard cities will have to respond to the predicted decline in surface-water availability by significantly expanding the capture, treatment and use of wasted water. No doubt private sector interests will want to play a part – perhaps in the building and operation of facilities to treat effluent. The treating of effluent turns something of little value into a product of real value. In this case, are private operators simply providing a contracted service? Or can they claim that because they have cleaned the water, it now belongs to them and can be sold back into the marketplace?

As we move into a less certain water future, we need to have in place legislative and regulatory frameworks that not only respect, but also secure, the concept of water as a common good. It may well be that this pivotal question will need to be further clarified under constitutional law.

We all have to recognise that water is not a public good ...

Malcolm Turnbull, in a speech to the Australian Water Association Symposium on Recycling, 22 March 2006

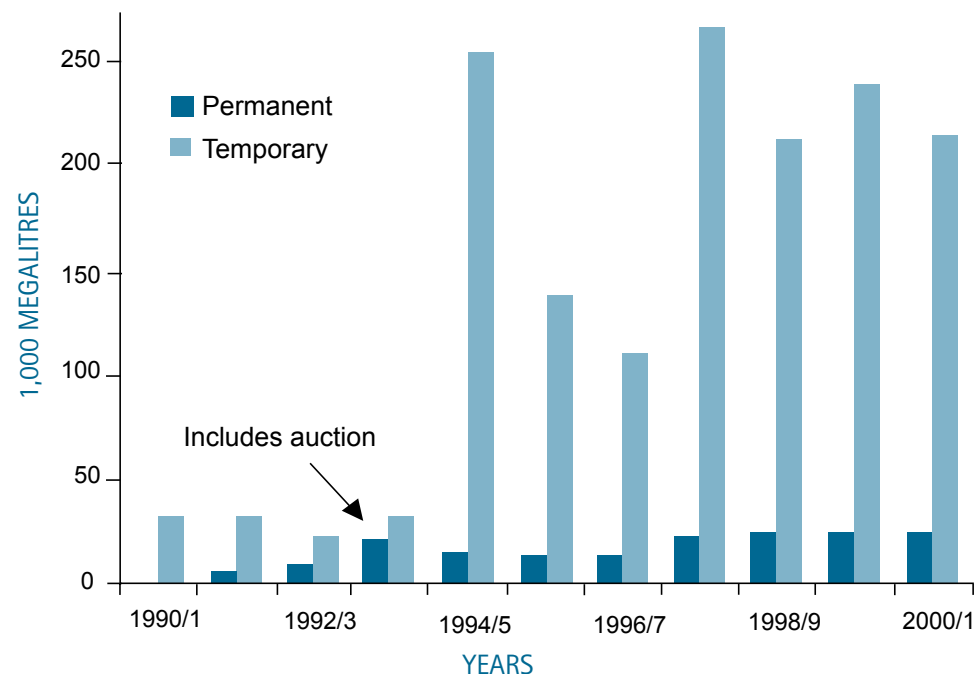


Figure 1. Growth in water trading in Victoria 1990–01 to 2000–01

With permanent water trading, the volume of water that is becoming privately owned is accumulating year by year. Temporary trading is usually only an annual transfer of the water.

Source: Department of Natural Resources and Environment, *The value of water – A guide to water trading in Victoria*, DNRE, 2001, p. 12.

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