Submission to the Productivity Commission Inquiry into National Water Reform 2020

Assessing jurisdictional progress

INFORMATION REQUEST 1

COMMENTS

As a result of the *National Water Initiative*, there has been significant progress with reform in the rural water market over many years. With the objective of improving the productive and efficient use of water resources, shares in many major water resources have been privatised, and the resulting property rights (water access entitlements, water allocation, irrigation rights, and more exotic products, such as rights to airspace in dams) are now trading at market prices in maturing water markets. In light of the reductions in the sustainable diversion limits under the *Murray-Darling Basin Plan*, these market mechanisms are critical to ensuring that scarce resources are put to their most productive and valuable uses.

In addition, a number of irrigation infrastructure operators have been privatised over the years (in NSW, SA and WA and this is now underway in QLD), resulting in reductions in the real cost of water delivery services.

Future reform directions

INFORMATION REQUEST 3

COMMENTS

It is tempting to argue for nationally consistent approaches to various issues requiring reform (or "harmonisation"). This can only be achieved in practice, however, through cooperation between the Commonwealth and States, given the Commonwealth's limited constitutional powers with respect to water. A consistent approach achieved by negotiation between governments could easily lead to poor outcomes as good aspects of policy are traded away in order to reach a compromise acceptable to every jurisdiction. It would also eliminate regulatory competition, which could be highly disadvantageous. In a federation, there is a very strong argument for allowing jurisdictions to choose their own regulatory approaches. It allows for experimentation. What works well will be copied voluntarily elsewhere and what does not work will be abandoned. This is a valuable regulatory dynamic and it should not be abandoned lightly. On the other hand, avoiding duplication or double-handling by different tiers of government is always a worthwhile goal.

Water markets and trading

INFORMATION REQUEST 5

COMMENTS

Some jurisdictions are more advanced than others in defining the private property rights in water resources separately from land and establishing the legal frameworks supporting markets for those rights.

Infrastructure Australia's Australian Infrastructure Plan, February 2016 states: "*Australia's rural productive water markets have been largely a success story. But barriers to efficient trading still exist, or are creeping back, where markets are in place. Large parts of Australia, particularly in the north, are still without secure, tradeable water rights*". Pages 114-116 contain relevant recommendations. It is available at https://www.infrastructureaustralia.gov.au/publications/australian-infrastructure-plan-2016.

Apart from storage capacity, water security in the agricultural sphere is largely dependent on:

- **the extent to which each jurisdiction has a clear legal framework, based on the principles in the *National Water Initiative*, enshrining private property rights in respect of water resources, facilitating trade wherever hydrologically possible (including trade between water sources and jurisdictions), and allowing market determination of prices;**
- **the fullest possible implementation of the market-based approach set out in the *National Water Initiative*, including, for example, unbundling of tradeable water rights from land (in the jurisdictions and water sources where this has not yet been implemented fully);**
- **abolition of all unnecessary trade limits, suspensions and other government embargoes;**
- **efficient processing of those water trades which require governmental approvals;**
- **timely and accurate information flows regarding trading volumes and prices to improve the allocative efficiency of water markets; and**
- **emerging secondary markets (derivatives etc) which enable hedging against risks.**

The price of agricultural water, in the most significant markets, is generally determined by the market, it changes constantly and the changes can be quite volatile, depending on changes in the weather for example. There are typically three prices:

- **the price of a permanent share of a water resource (which generates water allocation each year);**
- **the price of water allocation which is the water actually available for physical delivery or trading; and**
- **the price for having water physically delivered from the water resource to an individual farm through an irrigation infrastructure network owned by an irrigation infrastructure operator (IIO). The IIOs include some that are privatised (in NSW, SA, WA and QLD) or they can be government-owned (as in VIC).**

The first two prices are set by the market and there is no need for these prices to be regulated.

The third price is imposed by the IIO acting in its own self-interest while delivering water to its irrigator customers. To the extent that the IIO is owned by the irrigators themselves, there is no need for these prices to be regulated and, within the Murray-Darling Basin, they are generally not regulated (except to the limited extent required under the *Water Charge Rules* made under the *Water Act 2007* (Cth)).

Where water delivery prices are imposed by governmental agencies or others who are not owned by the irrigators receiving the service, there is arguably a case for the prices to be regulated, due to the service providers' geographic monopolies and high barriers to entry. At the Commonwealth level, relevant charges are regulated by the ACCC under the *Water Charge Rules 2010* (Cth).

The following should be supported:

- **the unregulated determination of prices for water rights themselves in water markets (except perhaps to require disclosure of the prices);**
- **the unregulated determination of prices for having water delivered by IIOs that are owned by the irrigators receiving the services (except perhaps to require the disclosure of the prices); and**
- **the minimum necessary regulation of prices for having water delivered by governmental agencies or other geographic monopolies that are not owned by the irrigators receiving the services.**

Environmental water management

INFORMATION REQUEST 6

COMMENTS

The focus here should be on the environmental outcomes sought and the economic and social costs of taking water out of productive use in rural economies. There is typically a trade-off to be made. Increasing the volume of water being used for environmental purposes should not be viewed as a substitute for achieving actual environmental outcomes. The 'just add water' approach has been much criticised. Actual river health should be monitored rather than focusing predominantly on volumes of environmental water.

Measures like carp control, feral animal control in wetlands, and fish migration facilities may produce significant environmental outcomes with lower economic and social costs compared with taking water out of productive use in rural economies.

The introduction and ongoing implementation of the Murray-Darling Basin Plan has been a major reform. It is a plan to reduce the water used for agricultural purposes. All else being equal, this reduction in water supply for productive purposes will increase the market price for water rights. From this perspective, the water buy-backs were more harmful, in an economic and social sense, than the subsidies for infrastructure works which were designed to produce water savings. The Murray-Darling Basin Authority's report on economic, social and environmental outcomes from water recovery in the northern basin is available at https://www.mdba.gov.au/publications/mdba-reports/northern-basin-review-report.

Water services / Investment in new water infrastructure

INFORMATION REQUESTS 8 - 12

COMMENTS

Urban water

Lack of competition

Tap water is typically provided by government monopolies.

The price of water in urban markets is typically determined by government regulatory intervention. Without a functioning price signal, an economically efficient allocation of resources is very difficult. For example, when water is in short supply, the price does not rise sufficiently to signal suppliers or potential suppliers to augment supply, or to signal consumers to reduce consumption. This leads to under-investment in supply, over-consumption and, sooner or later, water shortages.

The Competition Policy Review Final Report, March 2015 (Harper Review) addressed how to promote competition and cost-reflectivity in urban water pricing, which should improve water security. According to the Harper Review, "*Pricing that better reflects the cost of provision may address these concerns by increasing incentives for the private sector to invest in water infrastructure. This would allow the market to better address issues related to meeting increased demand*". It is available at https://treasury.gov.au/publication/p2015-cpr-final-report.

Some suggestions appear below on how to introduce more competition, better price-signalling and more investment in new water supplies so as to reduce the risk of water shortages and improve water security.

Reducing the regulatory barriers to new competition

The *Water Industry Competition Act 2006* (NSW) and the extent to which the private sector is participating in the market are noteworthy.

As a general rule, however, existing regulatory regimes make it difficult to set up water businesses in competition with the incumbents. Less red tape would remove barriers to entry and encourage competition.

Generally, regulatory and approval processes for water service infrastructure are costly, lengthy and inefficient. They are a high barrier to entry and significantly inhibit private sector investment. A useful step that could be taken to encourage the development of private sector investment in new water infrastructure is to simplify the relevant legal and regulatory framework to make it more conducive to business.

To encourage private sector investment in new water infrastructure, governments should avoid prescriptive or interventionist approaches to water planning and should focus instead on creating the right climate to maximise private risk-taking, innovation and investment.

The following should be supported:

- **reducing and simplifying regulatory burdens to the maximum extent possible in light of other policy objectives, and taking into account the cost and effectiveness of each regulatory burden;**
- **ensuring that any particular regulation represents the most efficient and effective way of achieving the desired outcome; and**
- **ensuring that regulation is based on an effective arrangement between Commonwealth and State governmental agencies, avoiding duplication or double-handling by different tiers of government.**

Third party access to monopoly infrastructure

In some cases, water distribution networks may be natural monopolies. Requiring water utilities to allow third parties access to water and wastewater infrastructure, in return for payment of an access fee, could encourage competition in water markets. For example, opening up access to infrastructure that is too costly to duplicate could attract private investment in water supply projects that would not otherwise be commercially viable.

Breaking up the monopolies

Water utilities could be split into separate bulk water suppliers and retailers in order to allow greater competition, as occurred in the United Kingdom.

Removing cross-subsidisation

Urban water prices are distorted by cross-subsidisation. Under postage stamp pricing, consumers serviced by a particular water utility pay the same price for the delivery of water irrespective of the actual cost. This distorts the market because some consumers are cross-subsidising others. For example, consumers who live closer to the supply of water are, in effect, paying a subsidy to consumers who live in a location to which delivery is more costly. Postage stamp pricing operates as a barrier to entry for potential competitors who could compete effectively on the periphery but for the cross-subsidisation. Cost-reflectivity in the pricing of water delivery services would remove this barrier to entry.

Price signalling

Allowing water utilities to set their own prices would enable prices to reflect fluctuating supply and demand. It is, however, difficult to achieve this unless other policy reforms have introduced some level of competition. It could be done in any market where effective competition, or at least the threat of it, exists. Where a monopoly exists, and there are high barriers to entry, a suitable form of price regulation may be required. For example, a regulator could utilise comparative competition to instil market discipline into water utilities and prevent the abuse of monopoly power.

Attracting private investment

Most governments in Australia face difficult budget choices in an era in which, in order to improve water security, urban water infrastructure needs significant capital expenditure for upgrades and expansions.

There is considerable scope for attracting more private sector investment in the water sector. Many different methods are currently being used (or could be explored):

- **water infrastructure bonds issued by governments could provide institutional investors with a risk-weighted return specific to the water infrastructure;**
- **management contracts, under which the private operator operates the infrastructure for a fee;**
- **lease arrangements, where the government constructs the infrastructure and leases it to a private operator, to instil commercial rigour into the management and running of the water infrastructure;**
- **mixed public/private ownership, under which the private operator takes a minority stake but may have management responsibility;**
- **concessions, under which the private operator runs the entire system over a long period; and**
- **full privatisation of government-owned water utilities, as was done in the United Kingdom in 1989 (and recommended in Infrastructure Australia's Australian Infrastructure Plan, February 2016).**

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