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Governing water service provision: Lessons from Australia

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ABSTRACT

Using the Australian and institutional policy experience, this paper considers the problems associated with water governance and seeks to draw some general lessons for public policy. The paper is used to specifically explore the governance challenges that arise because of (1) the proclivity to regard water as 'special'; (2) the scope for political opportunism especially in drought; (3) the inherent uncertainty that attends water availability in some settings. We conclude that enhanced governance can be achieved, but diversions from cost recovery pricing can be difficult to reverse.

1. Introduction

The provision of water and related services remains a substantial challenge for public authorities worldwide. In the developing world, supplying clean water and offering adequate sanitation remains a work in progress with the UN estimating that 13 per cent of people in developing countries continue to rely solely on 'unimproved' sources for drinking water. Perhaps even more worrying is that around one third of the population in the developing world, which represents about 2.5 billion people, did not have access to 'improved' sanitation (UN, 2014). Collectively, these figures illustrate the requirement to continue to seek better ways to deliver water and sanitation services in poor nations, regardless of the relative success in meeting the Millennium Development Goals for drinking water.

In more advanced countries it might be expected that most of the problems relating to water and water services are resolved, but this is not strictly the case. Changing community preferences for environmental amenity, pressure on public sector budgets for a range of other services, and climatic uncertainties feature amongst the suite of confounding issues attending the governance of water service provision. Whilst these might legitimately be described as 'first world problems', attempts to resolve conflicts around water in rich countries, like Australia, carry important lessons that can be deployed elsewhere.

In this short paper we focus on some perennial conflicts that attend the governance of water services. We specifically explore how these challenges have been met in Australia and highlight generic lessons that might inform governance elsewhere. We argue that a key element that makes the governance of water problematic is the fact that policy makers conceptualise water differently to many other products and resources, as do communities. This creates political opportunities for some, making sustained pricing reform especially problematic. We also note that in the Australian case there is a tendency to over-price water in cities, to meet a range of political objectives. In this paper we draw attention to the incentives for political intervention in water service provision and consider how these interact with the difficulties of making relatively efficient infrastructure choices under conditions of uncertainty and against a backdrop of drought.

The paper adds to the growing literature on water pricing that deals with the challenges associated with formulating regulated tariffs for monopoly water suppliers. For example, conflicts often arise around the trade-offs between efficiency goals and the aim to achieve universal access and retaining affordability. In this regard Pinto and Marques (2015) and Romano et al. (2015) find that significant trade-offs attend the implementation of the European Water Framework Directive (EU, 2000). In contrast, in the Australian milieu Grafton et al. (2015) note that changes in seasonal supply availability add specific challenges to structuring regulated tariffs. This paper adds to this literature insomuch as it focusses specifically on the political economy of water pricing and the relationships between water and people and how this influences policy makers.

The paper itself comprises four main parts. In section two we deal with the willingness of individuals to regard water as a 'special' good. Our contention is that the 'special' nature of water does not

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always assist in enhancing rational governance arrangements. Section three explores the problem of separating the politics of water from the financing of water services. Section four is then used to highlight how the economics of water is made even more difficult in the face of water scarcity and how the spectre of rising uncertainty can increase political intervention. Finally, we reflect on generic lessons and offer some brief concluding remarks in section five.

2. People and water

As with other analyses in this domain (e.g. Edwards, 2013), we commence with a brief reflection of the Dublin Statement of 1992 where water was described as an economic good. It is important also to appreciate the context of this approach was the increasing realisation of scarcity and the risks that attend it. If we accept that water is an economic good (i.e. use by one individual/sector entails an opportunity cost for others), then a process is required to govern access and use of the resource. In broad terms rationing and allocation can occur in different ways but orthodox economics would usually emphasise the benefits of markets (i.e. price signals). Set against the notion of 'rationing water by price' is the idea that the state could manage scarcity through some form of quantitative controls.

In the Australian milieu, the past three decades have been characterised by a broader reform agenda where markets and price signals have been increasingly encouraged across the economy. Commencing with the competition reforms of the 1980s, significant parts of the economy and society have been progressively liberalised with reduced government intervention and greater use of prices as a means of rationing (see, King and Maddock, 1996; for instance). As noted by Dinar (2000, p. 7), this context is important because successful pricing reform in the water sector is usually accompanied by a broader reform agenda.

Nonetheless, even in a country where scarcity of all resources is generally now managed through price controls, deference to quantity controls, in the form of water-use restrictions is common practice in all Australian cities. For example, in the major drought that occurred across most of Australia at the beginning of this century (sometimes called the Millennium Drought), almost every major city limited how households could use water outside the home. By and large, these types of restrictions gained widespread support from the community and continue to attract praise (see, Department of Industry Innovation and Science, 2016).

Questions thus arise about the relationship between communities, individuals and water. For example, why are communities willing to self-police water use in drought while accepting higher fuel prices as a function of scarce supply? Why do individuals appear happy to comply with mandated restrictions on water use while resisting restrictions on a range of other products and resources? Notably, food, electricity and fuel might be regarded as equally essential for life and yet the imposition of government-formulated restrictions on access to these goods is generally resisted by communities, while restrictions on water use applauded. We contend that these illustrations point to unique governance challenges because water assumes a special place in the human psyche and this, in turn, offers political actors extraordinary opportunities.

A detailed analysis of the links between water and the human psyche is beyond the scope of this paper, but clearly access to water affects the quality of life for people in every part of society, from physiological survival to psychological health and spiritual provisions. The seminal works of Jung (1920, 1954) presents psychological theories that often refer to water imagery. Syme and Nancarrow (2011) suggest that many of Australia's cultural icons relate to our relatively early history and rural environments. For water, our images are associated with drought and flood in the early settlement of the regions (see, Syme and Nancarrow, 2011). From a social engineering perspective, water is also emphasised by iconic roles such as the development of irrigation systems and soldier settlements. Evidently, water resources underpin a range of human functioning, such as economic development, protecting health, facilitating recreation and spiritual values. Accordingly, complex needs such as cultural, spiritual, moral or aesthetic requirements must be given at least some consideration when governing water.

In Australia, there is increasing evidence that residential consumers' attitudes to water conservation have become more positive and this change in attitudes is paralleled by behavioural shifts in water use (see, for instance, Beal et al., 2011; Willis et al., 2011; Millock and Nauges, 2010). For instance, Australian communities have frequently adopted water saving technologies, invested in water efficient gardens, and widely accepted restrictions on their water use behaviour, even without direct incentives from government (see, ABC, 2015).

However, the extensive adoption and acceptance of water-use restrictions in Australia means that urban water prices have consistently not reflected the opportunity cost of water (Edwards, 2011). Criticisms of this form of regulation are not only based on efficiency grounds, but also raise broader social welfare concerns. However, whilst criticised from an economic efficiency perspective, restrictions on urban water and the enforcement regimes used to invoke them have been remarkably well-accepted by the Australian community and are viewed by some as a means of collectively dealing with a problem in a socially responsible and politically acceptable manner (see, for instance, ABC News, 2008; ACTEW, 2010; Gadd, 2009). Subsequently, urban users have intentionally and willingly limited their own water consumption with the view that they will 'free up' water for environmental and agricultural use.

In a practical sense, the widespread acceptance of water restrictions in Australian cities can be explained by the extensive political pressure directed at households, particularly in metropolitan cities, to adopt and meet conservation norms. During the period of the Millennium Drought, it was common for politicians and the media to portray restrictions as a moral duty and to appeal to metropolitan residents to 'share the burden' of rural districts and irrigation communities by restricting their water usage (Cooper et al., 2012). Extensive investment in media campaigns, accompanied this approach. Accordingly, the social stigma associated with not complying with water restrictions in the metropolitan cities became prominent, with numerous instances of social punishment, such as threats, vandalism and even violence if individuals failed to comply with water restrictions (ABC News, 2008).

Notwithstanding the common acceptance of restricting urban water consumption, potable water is ostensibly a private good and arguably should be priced accordingly. In addition, many of Australia's cities are hydrologically isolated from agricultural and other water uses, such that 'savings' by households make little difference to the quantum of water available to other sectors. However, the common perception that potable water is unique to other private goods means that it is often not priced to achieve full cost recovery. For instance, the notion that water is supplied by nature and is essential for human survival has led some to believe it should not be priced like other private goods. Alternatively, many have been keen to portray its use as having significant environmental consequences (see, for example, DSE, 2004). Accordingly, individuals commonly perceive their water consumption as having a direct impact on environmental health and future generations (see, for example, Goulburn Valley Water, 2010). Thus in rich countries over-

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