

# Regulation Impact Statement



## Water Charge (Infrastructure) Rules 2010

Made under the  
*Water Act 2007*

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Final Version

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## Abbreviations

|               |                                                  |
|---------------|--------------------------------------------------|
| ABS           | Australian Bureau of Statistics                  |
| ACCC          | Australian Competition and Consumer Commission   |
| ACT           | Australian Capital Territory                     |
| CICL          | Coleambally Irrigation Co-operative Limited      |
| CIT           | Central Irrigation Trust                         |
| DSE           | Department of Sustainability and Environment     |
| GL            | gigalitre                                        |
| GMW           | Goulburn-Murray Water                            |
| GWMWater      | Grampians Wimmera Mallee Water                   |
| ESC           | Essential Services Commission                    |
| ESCOSA        | Essential Services Commission of South Australia |
| Ha            | Hectare                                          |
| IPART         | Independent Pricing and Regulatory Tribunal      |
| LMW           | Lower Murray Water                               |
| MDB Agreement | Murray-Darling Basin Agreement                   |
| MHC           | Murrumbidgee Horticulture Council Inc.           |
| MI            | Murrumbidgee Irrigation Limited                  |
| MIL           | Murray Irrigation Limited                        |
| ML            | megalitre                                        |
| MRFF          | Macquarie River Food & Fibre                     |
| NFF           | National Farmers' Federation                     |
| NSP           | Network Service Plan                             |
| NSW           | New South Wales                                  |
| NWI           | National Water Initiative                        |
| NSWIC         | NSW Irrigators' Council                          |
| QCA           | Queensland Competition Authority                 |
| RMW           | River Murray Water                               |
| SA            | South Australia                                  |
| SA Water      | SA Water Corporation                             |
| State Water   | State Water Corporation                          |
| VFF           | Victorian Farmers Federation                     |
| Water Act     | <i>Water Act 2007</i> (Commonwealth)             |
| WMI           | Western Murray Irrigation Limited                |
| WPM           | water planning and management                    |

# 1.0 Introduction

## 1.1 Background

### 1.1.1 The Murray-Darling Basin

The Murray-Darling Basin (the Basin) is the catchment for the Murray and Darling rivers and their many tributaries. It covers 1,061,469 square kilometres or 14 per cent of the total area of Australia; it extends from Queensland (north of Roma) and runs through three-quarters of New South Wales (NSW), all of the Australian Capital Territory (ACT), half of Victoria and through to Goolwa in South Australia (SA).

Table 1: Selected agriculture industry variables (2005–06)

|                                  | Number of farms<br>No. | Agricultural land<br>'000 ha | Irrigated agricultural land<br>'000 ha | Gross value of agricultural production<br>\$m |
|----------------------------------|------------------------|------------------------------|----------------------------------------|-----------------------------------------------|
| Murray–Darling Basin             | 61,033                 | 88,828                       | 1,654                                  | 14,991                                        |
| Australia                        | 154,681                | 434,925                      | 2,546                                  | 38,541                                        |
| Basin as proportion of Australia | 39%                    | 20%                          | 65%                                    | 39%                                           |

Source: ABS (2008)

The Basin is Australia’s most important agricultural region containing almost 40 per cent of all Australian farms, which produce wool, cotton, wheat, sheep, cattle, dairy produce, rice, oil-seed, wine, fruit and vegetables for both domestic and overseas markets. It is responsible for about 40 per cent of Australia’s agricultural production, worth about \$15 billion in gross terms in 2005-06. Irrigated agriculture accounts for about a third of this value with the Basin containing 65 per cent of Australia’s irrigated land.

Figure 1: The Murray-Darling Basin



Source: Department of the Environment, Water, Heritage and the Arts

Diversions (water extracted) by irrigation districts represent the vast majority of total diversions from the water bodies of the southern Basin (see Table 3).

Table 2: Major Basin infrastructure operators

| Operator                                     | State | Type of water infrastructure operator | Ownership  | Entitlement (GL) <sup>1</sup> |
|----------------------------------------------|-------|---------------------------------------|------------|-------------------------------|
| State Water                                  | NSW   | Bulk                                  | non-member | 8430.0                        |
| Goulburn-Murray Water (GMW)                  | VIC   | Bulk and Irrigation                   | non-member | 1804.6                        |
| Murray Irrigation Limited                    | NSW   | Irrigation                            | member     | 1615.7                        |
| Murrumbidgee Irrigation Limited              | NSW   | Irrigation                            | member     | 1426.3                        |
| Coleambally Irrigation Cooperative Limited   | NSW   | Irrigation                            | member     | 647.4                         |
| Lower Murray Water (LMW)                     | VIC   | Bulk and Irrigation                   | non-member | 440.0                         |
| Central Irrigation Trust (CIT)               | SA    | Irrigation                            | member     | 159.6                         |
| SunWater                                     | QLD   | Bulk and Irrigation                   | non-member | 138.6                         |
| Jemalong Irrigation Limited                  | NSW   | Irrigation                            | member     | 100.0                         |
| West Cororgan Private Irrigation District    | NSW   | Irrigation                            | member     | 85.9                          |
| Grampians Wimmera Mallee Water               | VIC   | Bulk and Irrigation                   | non-member | 75.6                          |
| The Narromine Irrigation Board of Management | NSW   | Irrigation                            | member     | 64.7                          |
| Trangie Nevertire Irrigation Scheme          | NSW   | Irrigation                            | member     | 63.4                          |
| Western Murray Irrigation Limited            | NSW   | Irrigation                            | member     | 61.3                          |
| Renmark Irrigation Trust                     | SA    | Irrigation                            | member     | 50.7                          |
| Moira Private Irrigation District            | NSW   | Irrigation                            | member     | 39.8                          |
| Tenandra Scheme                              | NSW   | Irrigation                            | member     | 38.2                          |
| Buddah Lake Irrigators                       | NSW   | Irrigation                            | member     | 35.0                          |
| Abercrombie Pumping Association              | NSW   | Irrigation                            | member     | 33.9                          |
| Eagle Creek Pumping Syndicate                | NSW   | Irrigation                            | member     | 17.2                          |
| Coliban Water                                | VIC   | Bulk and Irrigation                   | non-member | 14.7                          |
| SA Water                                     | SA    | Bulk                                  | non-member | 13.5                          |
| Hay Private Irrigation District              | NSW   | Irrigation                            | member     | 13.4                          |

Source: ACCC (2009b)

<sup>1</sup> Estimate of entitlements held by operators and/or customers.

## 1.2 The rural water supply chain in the Basin

The rural water supply chain in the Basin consists of water infrastructure operators and water users (or consumers). Water infrastructure operators (including bulk water operators and irrigation infrastructure operators) provide water services to a range of rural water users. These include irrigators (those in irrigation networks and private diverters), stock and domestic users, and industrial users (in a non-urban location). *Table 2* provides summary statistics for the major water infrastructure operators in the Basin.

### 1.2.1 Bulk water operators

Bulk water operators provide bulk water services to a variety of water users, including irrigation infrastructure operators, irrigators, industry (such as mining and energy) and rural water authorities. The supply of bulk water services can be broadly divided into three types of functions: water harvesting, water storage and water transportation/delivery.

There are seven major bulk water operators in the Basin that service rural customers: SunWater in Queensland; State Water Corporation (State Water) in NSW; Goulburn-Murray Water (GMW), Lower Murray Water (LMW) and Grampians Wimmera Mallee Water (GMMWater) in Victoria; South Australian Water Corporation (SA Water) in SA; and River Murray Water (RMW).

The primary source for water harvesting is precipitation or rainfall. The geographic and temporal variability in rainfall in the Basin means that bulk water storage and transportation services have an important function in ensuring reliability of supply for water users by smoothing the supply of water across location and time.

Water storage takes place primarily through the use of lakes, dams and weirs. Dams vary considerably in scale from small farm dams to large public infrastructure. Some water is also stored in the transportation network itself. Due to the variable nature of rainfall in Australia, Australia requires high levels of water storage. The total volume of water storage capacity in the Basin is 35,000 GL, with this water being shared between Queensland, Victoria, New South Wales and South Australia. Water delivery and transportation may involve functions such as the processing of customer orders, determining and implementing storage releases, monitoring water usage, as well as the provision and management of delivery infrastructure such as rivers and channels. In addition, some rural suppliers of bulk water services are also vertically-integrated into irrigation infrastructure operators.<sup>2</sup>

More information on the major bulk water operators in the Basin and their current charging arrangements is contained in [Appendix 1](#).

### *Current regulation of bulk water providers*

Each of the Basin jurisdictions presently has different arrangements for the economic regulation of bulk water service providers.

In NSW, the Independent Pricing and Regulatory Tribunal (IPART) regulates the maximum charges that State Water may levy for delivering bulk water. State Water cannot levy charges that are higher than these maximum charges and can only levy lower charges if it attains the approval of the NSW Treasurer.

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<sup>2</sup> For example, Goulburn-Murray Water.

In Victoria, each rural water business is required to prepare a water plan outlining what services it intends to provide, how it intends to fulfil its legal, environmental and community obligations and its proposed prices (based on estimates of its required revenue) for the regulatory period. This is a requirement for each rural water business under its respective statement of obligations. The water plan is then submitted to Victoria's Essential Services Commission (ESC), an independent economic regulator, for approval. If the ESC is not satisfied with the arrangements proposed in a water plan, it may specify the prices that a business may charge or the manner in which those prices are to be calculated or otherwise determined.

In Queensland, SunWater set its own [2006-2011 rural water irrigation price path](#) in line with the Queensland Government's high level rural water pricing policy and any pricing direction notices issued under Queensland's *Water Act 2000*. SunWater set these charges through a two staged negotiation and communication process involving SunWater customers and industry representatives. If referred by the Queensland Premier or Treasurer, the Queensland Competition Authority (QCA) may investigate and recommend prices charged by a Queensland water business. For the 2011-16 rural water irrigation price path, the QCA has the new role of providing an independent recommendation to the Queensland Government on prices.

In SA, SA Water's charges are determined by the SA government (through the SA Treasury). The Essential Services Commission of South Australia (ESCOSA) does not have any powers to approve or determine charges but does review the processes and principles underpinning the charges. This review, called a transparency statement, assesses the processes followed and principles used by the South Australian Government. SA's Water for Good plan contains the following action: appoint ESCOSA as the independent regulator for monopoly suppliers of urban and regional water and wastewater services in South Australia. This will apply to SA Water's potable and wastewater services in the first instance. The Water Industry Bill is due to be tabled before the South Australian parliament in 2010. This Bill appoints ESCOSA to this regulatory role.

### *1.2.2 Irrigation infrastructure operators*

An irrigation infrastructure operator typically provides two main services to its customers:

- to make available capacity for the delivery of water for use in irrigation; and
- to make available capacity for the drainage of water previously used in irrigation.

Considerable diversity exists in the number, size and ownership arrangements of irrigation infrastructure operators across the Basin. Irrigation networks have been privatised in both NSW and SA, but in Victoria and Queensland<sup>3</sup> the majority of water service infrastructure, including irrigation networks, remains with a small number of government-owned authorities.

Operators in the Basin have varying corporate governance arrangements, with those in Victoria and Queensland substantially different from arrangements in NSW and SA. The types of arrangements with customers also vary within jurisdictions.

Irrigation networks generally either deliver water to individual irrigator customers through a system of interconnected open channels, or through a piped delivery system. Murray

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<sup>3</sup> SunWater provides irrigation delivery services to the majority of Queensland irrigators within the Basin.



Irrigation Limited in NSW, for example, delivers water to 2,389 landholdings over an area of 748,000 ha through 2,954 km of gravity-fed open earthen channels.<sup>4</sup>

More information on the major irrigation infrastructure operators in the Basin and their current charging arrangements is contained in [Appendix 2](#).

### *Current regulation of irrigation infrastructure operators*

In Victoria, the ESC is responsible for making determinations about prices and service standards. The ESC's process is designed to ensure that operators earn a sustainable revenue stream and monopoly rents are avoided. Any community service obligations imposed by government to achieve wider social or environmental policy objectives are transparently reported by water businesses. Where the funding of these obligations is provided by government, the associated expenditure is excluded from the charging base of operators.

In Queensland, SunWater determined the 2006-2011 prices for its water supply schemes in consultation with its customers through a two-tiered negotiation process. SunWater was required to report regularly to the Queensland Government and, if negotiations failed, the government was to intervene to set the level for prices. For the 2011-16 price path, the Queensland Competition Authority has the new role of providing an independent recommendation to the Queensland Government on prices.

In NSW and SA, no substantive government or independent regulatory oversight exists in respect of operators that are privately owned. It is worth noting that for privately owned operators, the nexus between service provider and customer may reduce the incentive to maximise monopoly profits as lower water delivery costs may actually benefit the members' own downstream irrigation operations.

### *1.2.3 Rural water users*

The primary rural water users in the Basin include irrigators, industrial users and stock and domestic users.

Irrigators can be differentiated into those getting water from an irrigation network (i.e. members or customers of an irrigation infrastructure operator), and those who pump their own water directly from rivers, other waterways and underground sources. Irrigators apply water to a wide range of crops using a number of different application systems including surface (flood or channel) irrigation, sprinklers and microjets.

Industrial users of Basin water resources include non-agricultural businesses, such as mining operations.<sup>5</sup> Some of these industrial users get their water supplies from bulk water providers, whilst others build their own water supply infrastructure and may even perform a role as an infrastructure operator for other water users who take water from their network. Irrigators and industrial users that pump water directly from water sources are generally known as private diverters.

While diversions (water extracted) by irrigation networks represent the vast majority of total diversions in the southern Basin, there are a significant number of private diverters. Many

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<sup>4</sup> Murray Irrigation Limited Annual Report 2009.

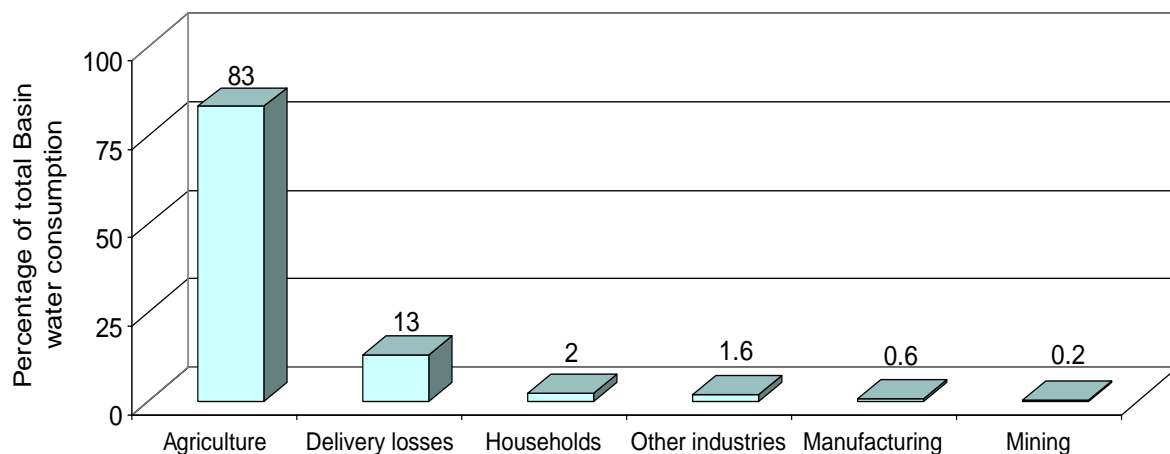
<sup>5</sup> Water is used in mining operations to facilitate the transport, flotation, grinding and separation of minerals as well as dust suppression (ABS 2008).

private diverter operations are relatively small, but some are very large, especially those associated with cotton growing, with on-farm storages as large as many reservoirs.

All Basin states also make provision for stock and domestic water use by rural households and properties. Domestic use generally means the taking of water for ordinary household purposes and includes the watering of a garden used in conjunction with a dwelling. Stock use generally means the provision of drinking water for stock and does not include sufficient water to enable intensive livestock production uses (such as feedlot production). Stock and domestic water is provided in a number of ways including through irrigation networks, other water reticulation systems, or direct pumping from watercourses or groundwater.

Total water consumption (rural and urban) in the Basin in 2004-05 was largely used for irrigated agriculture (*Figure 2*). Households, manufacturing, mining and other industrial users made up a very small proportion of overall Basin water consumption.

*Figure 2: Water consumption in the Basin, 2004-05*



Source: ABS (2008)

### 1.3 Water charge rules

#### *Water Act 2007*

The *Water Act 2007* (the Water Act), which came into effect on 3 March 2008, creates new institutional and governance arrangements to address the sustainability and management of water resources in the Basin. The Water Act builds on earlier reform initiatives, including the National Water Initiative (NWI) and the Murray-Darling Basin Agreement (MDB Agreement).

A key element of this reform is a consistent approach to pricing across the Basin to promote the efficient use of, and investment in, water infrastructure and to facilitate the efficient operation of water markets.

The Water Act provides for the Commonwealth Minister for Sustainability, Environment, Water, Population and Communities (the Minister) to make water charge rules to apply in the Basin. The Water Act requires the Minister to obtain and have regard to advice from the Australian Competition and Consumer Commission (ACCC) in making the water charge rules. The Water Act further provides for the ACCC to monitor compliance with, and to enforce, the water charge rules.

The ACCC has undertaken an extensive consultation process in developing its advice to the former Minister (for Climate Change, Energy Efficiency and Water) on the water charge rules, consulting on an issues paper, a position paper and then draft advice.

The ACCC has developed its advice in three tranches:

- **water charge (termination fee) rules** dealing with fees or charges for terminating access to an irrigation infrastructure operator's network
- **water infrastructure charge rules** dealing with fees or charges payable to infrastructure operators, including bulk water operators and irrigation infrastructure operators; and
- **water planning and management (WPM) charge rules** dealing with fees and charges payable primarily to state agencies for the provision of WPM services.

Under the Water Act, the ACCC's regulatory role does not extend to urban water supply activities beyond the point at which the water has been removed from a Basin water resource.

The Water Act was amended by the *Water Amendment Act 2008* (the Water Amendment Act) which commenced operation on 15 December 2008. The Water Amendment Act strengthens the role of the ACCC by:

- providing for the water charge rules to apply to all water service providers and transactions, not just those within the Commonwealth's constitutional powers (mainly corporations); and
- extending the existing powers of the ACCC to determine or approve – or accredit arrangements for - some water charges to all regulated non-urban water charges.

The Water Amendment Act also provides for the geographic scope of the ACCC's regulatory role to be extended across Basin States, if individual states choose to do so.

#### *Regulations extending the scope of the rules*

The *Water Amendment Regulations 2010* (the regulations), which came into legal effect on 11 May 2010, extend the scope of the water infrastructure charge rules by:

- expanding the definition of a bulk water charge to encompass charges for the storage or delivery of water to a person who diverts water directly from a watercourse for their own use, including for agricultural or industrial purposes, irrigation, or stock and domestic purposes; and
- extending the list of regulated water charges (to the extent they do not relate to an irrigation network, an urban water supply network and are not bulk water charges) to include fees and charges payable to an infrastructure operator for access, changing access, and terminating access to the operator's water service infrastructure - this will include charges for drainage services for example where these are not provided through an irrigation network.

#### *Subject of this regulation impact statement*

This document is the regulation impact statement for the proposed *Water Charge (Infrastructure) Rules 2010* (the water infrastructure charge rules).

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## 2.0 Assessing the problem

### 2.1 The need for intervention

In determining the form of regulation to apply to operators in developing its advice to the Minister, the ACCC first considered the extent of the market failure, including whether any existing mechanisms effectively address any potential inefficiencies.

The primary market failure justification for regulatory intervention in the rural water sector arises from the natural monopoly characteristics of water infrastructure and the lack of scope for conventional competitive forces. In particular, the infrastructure exhibits substantial economies of scale and consequently it is more economically efficient for there to be a single network servicing a geographically connected area (rather than several networks).

In addition, water storage and delivery infrastructure involve large and lumpy capital investments in long-lived assets.<sup>6</sup> These assets tend to have few alternative uses and the investment, once made, is largely sunk. These characteristics can serve as a barrier to entry (and exit), deterring new entrants from entering the market and creating competition.

Taken together, these natural monopoly characteristics mean that direct competition is unlikely to develop between operators. In the absence of competition, water providers hold market power, which can result in prices, quality, service levels or innovation diverging from competitive levels.

In addition, as customers are not able to change service providers without incurring substantial transaction costs,<sup>7</sup> natural monopolies have the ability to engage in discriminatory behaviour against their customers, certain customer types or potential customers. Such discriminatory behaviour would undermine the efficient use of water resources and water infrastructure.

In this context, economic regulation can serve as an alternative mechanism to constrain the scope for monopoly pricing and to maintain incentives to provide an adequate quantity and quality of service. In particular, effective economic regulation should foster efficient pricing, investment and operating practices, and ensure quality of service in the provision of water storage and delivery services.

### 2.2 Non member-owned operators

The benefits of independent economic regulation of non member-owned<sup>8</sup> rural water providers have been recognised by State governments. Victoria and NSW have more robust regulation than Queensland and South Australia (see Section 1.2 for more detail). State Water, the NSW government-owned bulk water service provider, is subject to price determinations by IPART. Similarly, Victorian rural water businesses have their revenue capped by the ESC.

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<sup>6</sup> The asset value of operators varies a great deal across the Basin. For example, GMW in Victoria has an asset value of about \$2.2 billion. In NSW, MIL has an approximate asset value of \$771 million, while WMI has an asset value of about \$41 million.

<sup>7</sup> To change providers, irrigators would need to move their business to a different location serviced by a different operator. This is likely to be a costly exercise.

<sup>8</sup> Government or privately owned.

There is, however, no common approach to pricing across the Basin since each jurisdiction conducts determinations/ approvals subject to different state legislation.<sup>9</sup> Inconsistent pricing across interconnected markets can create trade distortions leading to an inefficient market with ramifications for the economically efficient and sustainable use of water resources and water infrastructure assets.

### 2.3 Member-owned operators

Economic regulation is not the only mechanism for constraining monopoly pricing. Others include joint or 'club' ownership of natural monopoly facilities. Joint or club ownership by irrigators of the irrigation facilities is common in the Basin, mainly in NSW and SA (see Section 1.2.2 for more detail). Many irrigation infrastructure operators are structured under cooperative or trust arrangements whereby the irrigators collectively own and operate the irrigation facilities; these are member-owned operators.

While an a priori argument for economic regulation of member-owned operators remains (i.e. these businesses are natural monopolies), the incentive structure they face to pursue efficiency are different to non member-owned operators. This is because boards of member-owned operators are directly accountable to member customers who are likely to expect efficient pricing and investment and an appropriate level of service. This accountability creates incentives for member-owned operators to pursue efficiency in respect of these aspects of service delivery.

Member-owned operators in NSW and SA tend to be non-profit organisations, either explicitly through their constitutions or inherently in the way they operate their businesses. This, along with the fact that member and operator incentives tend to be aligned, means that member-owned operators are less likely to exercise their market power to extract monopoly rents from their member customers.

Member-owned operators have the ability to engage in unfair discriminatory conduct against non member customers, as this could result in lower prices for members. Non member customers have no voting rights and no ability to influence the actions of the operator or to vote the board out. Furthermore, (as is the case for all customers) non member customers cannot have their service provided by another operator without moving the location of their business and incurring substantial costs, which means the operator retains its market power.

Discriminatory conduct against non members has not been a major concern in the past as there have been few instances of non member customers of member-owned operators. However, as the changes underway in the Basin progress, including the introduction of the water market rules<sup>10</sup> under the Water Act, the opportunity and incentives for such behaviour has the potential to increase.

The water market rules give irrigators, should they so choose, the right to 'transform' their irrigation right against their operator's 'group' water licence to an individual entitlement that can be freely traded without seeking the operator's approval. The water market rules also give irrigators the right to continue to have water delivered post-transformation. As

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<sup>9</sup> In Victoria the relevant legislation is the *Water Industry Regulatory Order 2003*. In NSW, IPART determines maximum prices in accordance with the *Independent Pricing and Regulatory Tribunal Act 1992*.

<sup>10</sup> The *Water Market Rules 2009* came into effect on 23 June 2009, with a transition period for existing arrangements until 31 December 2009. The water market rules prevent operators from unreasonably restricting or delaying transformation arrangements or the subsequent trade of any entitlement.

membership is derived from being part of the operator's group licence, the water market rules are likely to increase the number of non member customers as irrigators choose to transform (and remain connected to the network). Murray Irrigation Limited, for example, is seeking to replace its existing constitution in part to enable it to do business with non member customers.<sup>11</sup>

Member-owned operators have the ability to discriminate against non member customers. This could discourage member irrigators from transforming their entitlement which in turn could give rise to inefficiencies and potentially distort outcomes in downstream markets.

Furthermore, member-owned operators could decide to change their constitutions or business practices to allow member customers to benefit at the expense of non member customers. In particular, member-owned operators could pay distributions (dividends for example) to their members as another form of discriminatory behaviour. This argument was put forward an irrigator, in a submission on the position paper:

*"Dividends are a tool that could cause undue discrimination and are more likely to lead to monopoly rents."*<sup>12</sup>

State Water also raised the issue of dividends as a potential means of discrimination in relation to operators giving 'water savings' back to their members in proportion to their members' irrigation rights.<sup>13</sup>

Payment of distributions to investors is not, of itself, a concern. The water charging principles of the Water Act include that water charges should move toward upper bound pricing - that is, a level that provides for full cost recovery, including the cost of capital, but avoiding monopoly rents - where practicable. However, a move to a for-profit business model creates the opportunity for operators to set their charges at levels greater than those consistent with full cost recovery and for monopoly rents to be returned to members in the distribution of profits.

Asymmetric information occurs where parties to a transaction or decision cannot make fully informed decisions due to a lack of information, which often exists when there is market power. Usually the monopoly provider has better information than the customer.

In the case of member-owned operators, there is the potential for asymmetric information in relation to the determination of the level of service and investment and the associated expenditure and customer charges. A lack of transparency in this regard has the potential to undermine informed decision making and discourage efficient investment and water trade.

In summary, the ownership and governance arrangements of member-owned operators make it less likely that these operators will make inefficient charging, service and investment decisions for their member customers. However, these operators still hold market power by the nature of their natural monopoly infrastructure and have the ability to misuse this market power to discriminate against non-member customers. Furthermore,

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<sup>11</sup> MIL presentation Adoption of a new Constitution: Murray Irrigation Limited, Member customer information sessions, November 2009.

<sup>12</sup> Cameron, M, Submission to the ACCC water charge rules position paper, November 2008, p.1.

<sup>13</sup> Summary of discussion, ACCC public forum on water infrastructure charge rules, April 2009, p.5.



member-owned irrigation infrastructure operators in NSW and SA are not subject to any substantive state government or independent economic regulation.

In addition, as for non member-owned operators, there is no common approach to pricing across the Basin by member-owned operators. This leads to trade distortions, inefficient markets with ramifications for the economically efficient and sustainable use of water resources and water infrastructure assets.

## 2.4 Significance of the problem

In 2004-05 industries and households in the Basin accounted for more than half (52%) of Australia's total water consumption. The agriculture industry accounted for the vast majority of this water use – some 83% – or even higher if irrigation water supply losses are included. In 2005-06, 7,720 GL of water was consumed for agricultural production in the Basin, representing 66% of Australia's agricultural water consumption.

Given the magnitude of the total and rural (primarily agriculture) water use in the Basin in the national context, the current inconsistent approach to rural water infrastructure pricing – with its ramifications for the economically efficient and sustainable use of water resources and water infrastructure assets - is of national significance.

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## 3.0 Objectives of the regulatory proposal

Section 92(1) of the Water Act provides for the Minister to make water charge rules. The water charge rules aim to ensure full, but not excessive, cost recovery and may apply to “regulated water charges”, that is:

- (a) fees or charges payable to operators for access, changing access, or terminating access to their irrigation network, including for surrendering a delivery right;
- (b) bulk water charges;
- (c) water planning and management charges; and
- (d) fees or charges that relate to access, services provided in relation to or through the operation of water service infrastructure, or taking of water from a water resource, and prescribed by regulations.

The regulatory proposal relates to fees and charges payable to operators for access or changing access to an operator’s irrigation network, bulk water charges, and fees or charges that relate to access, services provided in relation to or through the operation of water service infrastructure, or taking of water from a water resource, and prescribed by regulations (see Section 1.2 for more detail).

### *Water charging objectives and principles*

The Water Act requires that the water charge rules contribute to achieving the Basin water charging objectives and principles contained in Schedule 2 of the Water Act.<sup>14</sup>

These objectives are to promote the efficient use of, and investment in, water infrastructure and to facilitate the efficient operation of water markets across the Basin. Water charge rules that encourage full cost recovery for water services will contribute to achieving an economically efficient and sustainable use of water resources and water

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<sup>14</sup> See Appendix 3.

infrastructure assets. Water charge rules applied consistently and transparently across the Basin will facilitate the efficient functioning of water markets by removing distortions to trade and by sending signals about efficient investment in water infrastructure assets.

In giving advice to the former Minister on water charge rules, section 93(3) of the Water Act also requires the ACCC to have regard to the governance, and current and historical charging arrangements of water infrastructure operators.

The water charge rules do not apply to charges in respect of urban water activities beyond the point at which the water has been removed from a Basin water resource.<sup>15</sup>

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## 4.0 Options that may achieve the objectives

The ACCC provided its final advice to the former Minister, including draft rules, on the water infrastructure charge rules on 26 June 2009. In its final advice, the ACCC proposed that it be the sole regulator to undertake price determinations for all Tier 3 operators<sup>16</sup> under the water infrastructure charge rules. As such the draft rules did not contain provision for the accreditation of state regulators<sup>17</sup> by the ACCC. In September 2009 the former Minister requested the ACCC to provide further advice on the accreditation of state regulators under the rules. The ACCC provided this further advice on 19 February 2010.

The 5 options set out in this section are constrained by the provisions of the Water Act.

### Coverage

In order to be subject to the water charge rules, an operator must meet the definition of an infrastructure operator for the purposes of the Water Act. An infrastructure operator is defined as any person or entity that operates water service infrastructure for the storage, delivery or drainage of water for the purpose of delivering water to another person. Where the primary purpose of the water infrastructure is delivering irrigation water, the operator is an irrigation infrastructure operator.<sup>18</sup>

### 4.1 Option 1 - The ACCC's recommended approach

The ACCC's recommended approach to making the water infrastructure charge rules is set out in its June 2009 advice to the former Minister. In summary, the ACCC recommends a three-tiered, increasingly rigorous, approach to the regulation of the various types of water infrastructure operators. The three tiers are to apply to operators depending on the type of market failure and the materiality of any resulting inefficiencies. This approach was assessed by the ACCC as delivering the greatest net benefit compared with other regulatory models.

#### Tier 1 rules

The primary purpose of the Tier 1 rules is to improve the transparency of fees and charges and address the issue of discriminatory pricing practices.

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<sup>15</sup> Section 91(3) of the Water Act.

<sup>16</sup> Large non member-owned operators including State Water in NSW, and Goulburn-Murray Water and Lower-Murray Water in Victoria.

<sup>17</sup> Such as IPART in NSW and the ESC in Victoria.

<sup>18</sup> Section 7 of the Water Act.



Under the proposed publishing requirements, all operators will be required to:

- provide a current schedule of regulated fees and charges to their customers before the end of the three-month transitional period after the rules are registered;
- provide a schedule of regulated fees and charges to their customers within certain timeframes whenever there are changes to those fees and charges;
- provide a schedule of regulated fees and charges to any new customers when they become a customer;
- provide a copy of their current schedule of fees and charges to any person who requests it in writing within 20 business days of receiving the request.

Where the total volume of entitlement to which an operator and its customers are entitled exceeds 10 GL, that operator will also be required to publish its schedule of fees and charges on its website, in a newspaper (or newspapers) circulated in its area of operations or in the Commonwealth of Australia Government Notices Gazette. These operators will be required to do this each time changes are made to their fees and charges. This provision is expected to apply to approximately 23 operators across the Basin.

The Tier 1 rules also provide for an exemption from publication for regulated water charges contained in certain contracts. The ACCC can grant an exemption where an operator and customer jointly, or a customer on its own, apply to the ACCC demonstrating a material and adverse impact on both the operator's and customer's businesses, or the customer's business, if the details of the regulated charges are disclosed.

The Tier 1 non-discrimination rules will apply to regulated water infrastructure charges levied on customers of all member-owned operators. These rules will prohibit differential charging towards non-member customers of member owned operators except where differentials reflect differences in actual costs necessarily incurred.

Member-owned operators could also discriminate against their non-member customers through the payment of distributions or otherwise provide a financial benefit to their members. For these operators, the rules provide for the ACCC to approve or determine charges by considering the rate of return used by the operator to set the level of charges. This provision only applies to larger member-owned operators (servicing more than 10GL of entitlement).

### *Tier 2 rules*

The Tier 2 rules will apply to:

- member-owned operators where the total volume of entitlement to which the operator and its customers are entitled within the MDB exceeds 125 GL
- non-member owned operators where the total volume of entitlement to which the operator and its customers are entitled within the MDB exceeds 125 GL but is less than 250 GL.

Under current arrangements, Murrumbidgee Irrigation Limited, Murray Irrigation Limited, Coleambally Irrigation Cooperative Limited, Central Irrigation Trust and SunWater are expected to be subject to the Tier 2 rules.

The proposed rules will require operators to:

- develop and consult on a network consultation paper (NCP) that details options for the operator's network over a five-year period;
- develop and provide to customers a network service plan (NSP), based on the outcomes of the NCP consultation process, which details major capital works and associated expenditure and provides estimates of charges over a five-year period;
- provide their NSP to the ACCC for review by an external engineering consultant and provide this review to customers;
- publish a schedule of fees and charges before they come into effect; and
- develop and provide customers with a copy of an information statement that outlines and explains any changes from those anticipated in the NSP each time charges are to change.

The development of an NCP and NSP should occur at least every five years but may occur more often at the discretion of the operator - for example, if there are unexpected changes in expenditure that require the NSP to be completely revised.

Operators will also be able to change charges (even where changes do not completely align with those proposed in the NSP) without needing to revise the NSP. In such circumstances, Tier 2 operators will be required to publish the new schedule of fees and charges in line with the tier 1 requirements and to develop and provide to customers an information statement. The information statement must explain any changes and the reasons for those changes, including reasons for differences between the published fees and charges and those proposed in the NSP.

### *Tier 3 rules*

The Tier 3 requirements - price approvals or determinations - are to apply to non-member owned operators where the total volume of entitlement to which the operator and its customers are entitled within the Basin exceeds 250 GL. Under current arrangements, this threshold is expected to capture State Water in NSW, and Goulburn-Murray Water and Lower Murray Water in Victoria.

Tier 3 operators will be required to seek regulatory approval (or determination) for their charges over a defined regulatory period from the ACCC. For most operators, the regulatory period will be three years initially and four years for all subsequent periods. However, where an operator is also subject to price regulation in respect of its urban water supply activities, the regulator may approve a period of a different length so as to align these two processes.

Through the approval or determination process the regulator will assess the operator's proposed charges for the period and will approve or determine the charges for each year of the regulatory period. Charges in the second, third and fourth years of a regulatory period will also be adjusted before the commencement of each year to allow for updated demand (or consumption) forecasts to be used in determining charges.

The draft rules establish transitional arrangements which provide for the NSW Independent Pricing and Regulatory Tribunal to be responsible for undertaking the next determination for State Water. In addition, current determinations made by the Essential Services Commission in Victoria will remain in force until their expiry.

#### *No provision for accreditation of state regulators*

Under section 92 of the Water Act, the Minister may make water charge rules that provide for the ACCC to:

- approve or determine regulated water charges, and/or
- accredit arrangements under which regulated water charges are determined or approved by agencies of the states (instead of by the ACCC).

In its June 2009 final advice, the ACCC recommended that any approvals or determinations under the rules (under Tiers 1 and 3) should be undertaken by the ACCC rather than by accredited state agencies. This was on the basis that the Basin water charging objectives and principles would be best achieved by a single regulator being responsible for approvals or determinations across the Basin. In particular, this approach would be best able to ensure a consistent approach to setting charges across the Basin.

In turn, this would facilitate freer water markets and more efficient use of water resources and investment in water infrastructure. It would also benefit the monitoring and enforcing of the rules. Further, a national regulator would be better able to act in the interests of the Basin as a whole rather than in the interests of a particular jurisdiction.

#### **4.2 Option 2 - Multiple regulators and broader publication exemption provisions**

The second regulatory alternative adopts the ACCC's approach set out in option 1, but provides for the accreditation of state regulators rather than having the ACCC as the sole regulator, and contains some changes to the ACCC's Tier 1 publication exemption provisions.

#### *Providing for accreditation of state regulators*

This option provides for state regulators, such as the NSW Independent Pricing and Regulatory Tribunal or the Essential Services Commission in Victoria, to apply to the ACCC to accredit arrangements under which they would determine or approve regulated charges under the water infrastructure charge rules.

The details of the accreditation framework are set out in the ACCC's February 2010 advice on accreditation. The framework has three parts:

- an application process;
- a set of criteria to be met by the state agency prior to application; and
- a number of terms and conditions the accredited agency will be required to follow once accredited.

In developing its further advice on accreditation at the request of the former Minister, the ACCC's key objective was to formulate an accreditation framework that would contribute to achieving the water charging objectives and principles of the Water Act, in particular by ensuring a consistent approach to charging across the Basin with multiple regulators undertaking approvals or determinations. The accreditation framework was also designed to maximise transparency and regulatory certainty while minimising compliance and administrative costs for stakeholders.

### Broader publication requirements

Option 2 also provides for broader and simpler publication exemptions than provided in option 1. The broader publication exemption includes an exemption for existing commercial-in-confidence contracts and for new contracts, allows a customer to apply by itself to the ACCC for a publication exemption. The exemption is also made simpler to apply by amending the definition of material and adverse effect.

### 4.3 Option 3 - Maintain status quo

The Water Act provides that the Minister may make water charge rules. A third alternative is for the Minister not to make rules and continue with the status quo. The status quo can therefore be considered as a reasonable alternative and as a baseline against which the regulatory options can be considered. The status quo is described in Section 2. It is characterised by varying levels of economic regulation under different state regimes leading to a lack of consistency in charging across jurisdictions where water can be traded. Where Basin jurisdictions pursue different charging practices, this can distort the signals about the efficiency of water storage and delivery infrastructure, resulting in trade distortions and an inefficient market.

### 4.4 Option 4 - Approval or determination of all water charges

A fourth regulatory option would be for the water charge rules to require that all regulated water charges be subject to determination or approval from the relevant independent economic regulator, irrespective of the size or governance arrangements of the operator levying the charge.

In assessing this option against other options, the approval or determination of water charges appears the most likely to constrain market power, result in consistent water charging practices across the Basin and encourage transparency. Therefore, this option could have the highest benefits compared with other options.

This option also has the advantage of providing certainty for regulated operators. Once the regulator makes its pricing decision, the operator knows the prices it can levy over the regulatory period. By contrast, the detailed pricing rules option (Option 5), and other ex-post regulatory models leave considerable uncertainty for the operator. In these models, the regulator's decisions on compliance with the rules are made after the operator has made its pricing, operating and investment decisions.

This assessment was supported by the Victorian Farmers Federation:

*... a price approval/determination framework could deliver the best outcome and achieve the water charging objectives and principles as outlined in the Water Act.*<sup>19</sup>

Similarly, Murray Irrigation Limited noted a *price determination framework will provide certainty in terms of prices and should also provide transparency.*<sup>20</sup>

However, this option is relatively time-consuming, intrusive and the compliance costs are relatively high. Moreover, in developing its advice, the ACCC was required by the Water Act to have regard to the governance, and current and historical charging arrangements of

<sup>19</sup> VFF submission, to the ACCC water charge rules for charges payable to bulk water operators, July 2008 p. 6.

<sup>20</sup> MIL submission to the ACCC water charge rules for charges payable to bulk operators, July 2008 p. 5.

operators. In doing so it came to the view that the best framework is a three-tiered increasingly rigorous approach to match the type of market failure and materiality of any resulting inefficiencies.

In light of these arguments, a blanket price approval/determination framework is not supported.

Nevertheless, as discussed above, options 1 and 2 recommend this option for larger operators that have governance arrangements that do not limit the potential for market power (i.e. large non-member owned operators). In such cases, the benefits of this rigorous approach outweigh the regulatory costs. In this regard IPART noted:

*... the bulk water charge rule[s] should require that regulators explicitly determine prices for larger entities (such as State Water), which have significant market power and a large number of diverse customers. The benefits of this process significantly outweigh the regulatory costs (which, as noted above, are unlikely to be significantly different to the costs of a principles and monitoring framework in any case).<sup>21</sup>*

#### 4.5 Option 5 - Detailed pricing rules

A fifth regulatory alternative would involve all operators being subject to detailed pricing rules covering, for example, the form of price control, service standards and obligations, expenditure, capital financing, revenue requirement, pricing, and demand forecasting. This approach would require rules that are prescriptive enough to provide some guidance and certainty of outcomes while trying to allow for some flexibility to accommodate the different supply scenarios for operators across the Basin jurisdictions and any unforeseen events.

Compared to the approval or determination of charges, it is less clear whether detailed pricing rules would effectively contribute to achieving the Basin water charging objectives and principles. The effectiveness of this approach would depend on the content of the rules, its enforcement and its scope for interpretation. Therefore, there is uncertainty around the likely benefits. It is also unclear whether the compliance costs of this alternative would be lower than those associated with approvals or determinations. Monitoring compliance with detailed pricing rules would require similar assessments to those made in assessing a pricing proposal.

In addition, regulated businesses operating under detailed pricing rules would have to undertake expenditure and investment in an environment of regulatory uncertainty. Compared with an approval or determination framework, the monitoring and enforcement of the detailed pricing rules would be assessed after they have been put in place (ex-post). A business could not be certain that the actions it had already undertaken would be approved by the regulator. This could create uncertainty for the regulated businesses and its customers and would result in less timely outcomes compared with an approval or determination framework.

It is for these reasons that option 5 is not supported.

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<sup>21</sup> IPART submission to the ACCC water charge rules for charges payable to bulk water operators, July 2008 p. 53.

## 4.6 Conclusion on regulatory options

For the reasons outlined in this section, options 3, 4 and 5 are not supported. Options 1 and 2 are considered viable and worth further evaluation in terms of their impact on stakeholders in Section 5.

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## 5.0 Impact analysis

This section evaluates the impact of options 1 and 2 against the “do nothing” alternative of maintaining the status quo (option 3). The costs and benefits of options 1 and 2 on the Murray-Darling Basin and the broader economy are not amenable to a quantitative assessment and will be assessed on a qualitative basis.

The analysis in this section recognises that the two regulatory options have a large common element, with option 2 differing from option 1 in respect of providing for the accreditation of state regulators and changes to the publication exemption provisions. As the common elements have the same costs and benefits these are not repeated in the analysis.

### 5.1 Option 1 - The ACCC’s recommended approach

#### 5.1.1 Form of regulation

In line with the Office of Best Practice Regulation requirements, in developing its advice on the water infrastructure charge rules, the ACCC sought to ensure that the benefits that accrue from regulation outweigh any associated costs - including compliance and administrative costs - and, moreover, that the chosen form of regulation offers the highest net benefit compared with all other available options.

To this end, option 1 envisages a tiered, increasingly rigorous, approach to regulation that takes account of the underlying market failure, the governance arrangements of operators and the size of operators. A number of stakeholders expressed support for the preferred option on the grounds of its practicality, cost-effectiveness and avoidance of undue regulatory burden.

Western Murray Irrigation (WMI) thought that the tiered approach would satisfy its recommended objectives:

*WMI had three core objectives for the Water Charge Rules as noted in its original submission:*

- *Inappropriate regulation should not be established ...*
- *The Rules should not interfere with an infrastructure operator’s right to conduct the business of irrigation management ...*
- *The Rules should be flexible to allow external factors to be considered.*

*WMI believe the ACCC in its position paper have dealt with each of these objectives in a positive way through its introduction of a tiered approach and respecting processes that are already in place.<sup>22</sup>*

The National Farmers Federation (NFF) noted:

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<sup>22</sup> WMI, Submission to the ACCC water charge rules position paper, November 2008, p. 2.



*... the approach taken by the ACCC in this issues paper is practical, cost effective and not unduly prescriptive, particularly for small operators – thus allowing this group in particular to put in place some changes to ensure greater pricing transparency. NFF welcomes the proposal for a three-tiered approach ...*<sup>23</sup>

Macquarie River Food and Fibre (MRFF) was also supportive of the proposed regulatory approach:

*MRFF commends ACCC on its consideration of the issues of size, need and capacity of operators in determining the appropriate level of regulation.*<sup>24</sup>

The New South Wales Irrigators Council (NSWIC) stated the following:

*NSWIC concurs with the three tiered approach. It recognises that infrastructure operators cannot be excused, but at the same time notes the significantly varying nature, size and scope of operators across the Basin.*<sup>25</sup>

State Water generally supported the proposed regulatory approach:

*State Water is generally supportive of the three tier approach to the rules, to avoid undue regulatory burden on smaller, not for profit irrigation infrastructure operators.*<sup>26</sup>

The Victorian Government noted:

*The ACCC recognised the need for the chosen form of regulation to offer the highest net benefit compared with all other available options. The Victorian Government supports this approach, including the adequate and objective assessment of the costs and likely benefits of the ACCC's proposals, as well as comparisons to the existing State-based regulatory regimes.*<sup>27</sup>

### 5.1.2 Stakeholders

The major stakeholders likely to be impacted by option 1 are:

- the Australian Government, particularly:
  - the Department of Sustainability, Environment, Water, Population and Communities (the Department)
  - the Australian Competition and Consumer Commission
- Basin State governments, including:
  - relevant state departments such as NSW Office of Water and Department of Sustainability and Environment in Victoria
  - regulatory bodies in each Basin State such as IPART in NSW and ESC in Victoria

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<sup>23</sup> NFF, Submission to the ACCC water charge rules position paper, December 2008, p. 4.

<sup>24</sup> MRFF, 'Submission to the ACCC water charge rules position paper', November 2008, p. 2.

<sup>25</sup> NSWIC, Submission to the ACCC water charge rules position paper, November 2008, p. 3.

<sup>26</sup> State Water, Submission to the ACCC water charge rules position paper, November 2008, p. 2.

<sup>27</sup> Victorian Government, Submission to the ACCC water charge rules position paper, January 2009, p. 1.

- water infrastructure operators – bulk water operators and irrigation infrastructure operators – subject to the provisions of the Water Act, operators across the Basin will be required to comply with the water charge rules
- rural water users – irrigators in irrigation networks and private diverters, industrial and stock and domestic for example
- industry representative bodies e.g. National Farmers Federation, Minerals Council of Australia, NSW Irrigators' Council
- other water market participants – e.g. organisations using water for environmental purposes.

### 5.1.3 Costs

This section discusses the major incremental costs that stakeholders are likely to incur as a direct result of option 1.

#### Australian Government

The primary costs to the Australian Government will be the implementation, monitoring and compliance costs associated with the water infrastructure charge rules incurred by the ACCC.

There will also be smaller policy related costs associated with reviewing the rules. These tasks will largely be performed by the Department.

#### Infrastructure operators

##### Tier 1 rules

The two levels of publishing requirements are intended to balance the compliance costs of broader publication of fees and charges with the increased benefit of making market information more widely available.

The first level, which applies to all operators, and requires the provision of schedule of fees and charges to customers, is unlikely to have any significant incremental cost impacts as this information is likely to be readily available to operators.

A number of submissions noted that many operators' current practices comply with this requirement. Western Murray Irrigation (WMI) advised:

*The current format of the WMI schedule complies with the ACCC requirements and is publicly available. It is also provided to every customer of WMI.<sup>28</sup>*

Murrumbidgee Horticulture Council Inc. noted:

*... the level of information requested should be readily available to operators and that consequently providing this information to their customers should not be a major cost burden.<sup>29</sup>*

In an effort to minimise operator costs associated with the broader Tier 1 publishing requirements – that are expected to apply to an estimated 23 operators servicing more than 10GL of entitlement – the ACCC changed its initial position to allow operators the

<sup>28</sup> WMI, Submission to the ACCC water charge rules position paper, November 2008, p. 2.

<sup>29</sup> MHC, Submission to the ACCC water charge rules position paper, November 2008, p. 1.



more cost-effective option of electronic publishing as an alternative to print media publishing.<sup>30</sup> As such the incremental compliance costs of the broader requirements are expected to be low as most of these operators already provide their schedule of fees and charges on their website.

The incremental compliance costs of the Tier 1 non-discriminatory pricing rules are likely to be negligible for operators that do not engage in discriminatory pricing.

### Tier 2 rules

The incremental compliance costs of meeting the Tier 2 network planning and consultation requirements by the relevant operators are not expected to be onerous as many of these operators already undertake similar processes in determining their asset investment, service levels and associated charges.

In submissions to the ACCC's consultation process, a number of stakeholders commented on the Tier 2 rules. Central Irrigation Trust (CIT) provided details of its price setting procedures that it considers would be compliant with the Tier 2 rules contained in the position paper. In particular, CIT noted that it:

*...undertakes extensive consultation with its grower owners prior to establishing its water charges.*<sup>31</sup>

Similarly, Murrumbidgee Irrigation Limited noted that it:

*... liaise[s] closely with customers regarding any changes to servicing in response to seasonal conditions and industry needs, such as season duration and areas of supply restriction due to drought.*<sup>32</sup>

On the capacity of operators subject to Tier 2 rules to meet the requirements, the National Farmers' Federation considered that:

*... many operators that fall under tier 2 may need little further work to comply with this tier.*<sup>33</sup>

In an effort to further minimise compliance costs, the ACCC changed its initial position that required Tier 2 operators pay for their NSP to be externally reviewed by an independent engineer to the ACCC paying for the review.<sup>34</sup>

### Tier 3 rules

All Tier 3 operators are currently subject to state-based price determination processes. The Tier 3 rules are similar in process and are not expected to generate any substantial incremental compliance costs. In essence the Tier 3 rules are largely a machinery of government change, with the current State economic regulatory regime being substituted by Commonwealth legislation.

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<sup>30</sup> See Section 6.3 for more detail.

<sup>31</sup> CIT, submission to the ACCC water charge rules position paper, November 2008, p. 1.

<sup>32</sup> MI, submission to the ACCC water charge rules position paper, November 2008, p. 7.

<sup>33</sup> NFF, submission to the ACCC water charge rules position paper, November 2008, p. 4.

<sup>34</sup> See Section 6.3 for more detail.

## Guidelines

The ACCC has committed to providing assistance to operators, including developing guidelines, to minimise compliance costs across all tiers. Tier 1 guidelines will detail the options and the measures operators should follow to ensure all customers receive their schedule in compliance with the rules, and will assist operators to comply with the non-discrimination rules when determining their regulated water charges.

The ACCC will develop guidelines and templates to assist Tier 2 operators to meet the Network Service Plan requirements to ensure that it provides sufficient detail for an informed assessment of the options proposed by the operator and presented in a manner accessible to the intended customer audience.

To assist operators in complying with Tier 3 requirements, the ACCC will develop information guidelines and templates in consultation with interested parties. These guidelines and templates will provide detail on the specific information required from operators as part of their application to have their charges approved or determined by the regulator.

The development of guidelines to reduce the regulatory burden on operators was recognised by the Murrumbidgee Horticulture Council Inc. (MHC):

*MHC supports the development of tiered rules as a means of regulating operators of different scale and type and notes the recommended steps to reduce the regulatory burden on operators (particularly phase in periods and development of guidelines).<sup>35</sup>*

## State regulators

State regulators that currently regulate Tier 3 operators in NSW and Victoria will save the costs previously associated with this function, as under option 1 the ACCC will undertake all approvals or determinations under the rules.

### *5.1.4 Benefits*

The primary benefits of option 1 are more efficient use of and investment in water infrastructure and are derived from implementing a more consistent approach to setting rural water charges across Basin jurisdictions.

The main objectives of the National Water Initiative and the Water Act are to promote the efficient use of, and investment in, water infrastructure and to facilitate the efficient operation of water markets. Water infrastructure charge rules that encourage full cost recovery for water services will contribute to achieving an economically efficient and sustainable use of water resources and water infrastructure assets. Water charge rules applied consistently and transparently across the Basin will facilitate the efficient functioning of water markets by removing distortions to trade and by sending signals about efficient investment in water infrastructure assets.

To evaluate these benefits in the national context, in 2004-05 industries and households in the Basin accounted for more than half (52%) of Australia's total water consumption. The agriculture industry accounted for the vast majority of this water use – some 83% – or even higher if irrigation water supply losses are included.

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<sup>35</sup> MHC, Submission to the ACCC water charge rules position paper, November 2008, p. 1.

Given the magnitude of the total and rural (primarily agriculture) water use in the Basin in the national context, the benefits of a more consistent approach to rural water pricing – in terms of improving the economically efficient and sustainable use of water resources and water infrastructure assets - is of national significance.

### *Tier 1 rules*

The primary purpose of the Tier 1 rules is to improve the transparency of fees and charges and address the issue of discriminatory pricing practices.

The publishing requirements will contribute to achieving the Basin water charging objectives and principles by making market information readily available to market participants and by promoting pricing transparency for water storage and delivery services.

Making information on operators' fees and charges readily available to irrigators will also allow irrigators to compare fees and charges across districts. While direct comparisons cannot always be made, this could provide discipline for operators to ensure their charges are appropriate because their irrigator members could question their board about why their charges differ from those of operators in other areas.

The non-discrimination rules will prohibit differential charging towards non-member customers of member owned operators except where differentials reflect differences in actual costs necessarily incurred. The benefit of these rules derives from what they will prevent. Discriminatory charging against non-member customers is likely to violate a number of the Basin water charging objectives and principles. In particular, it could deter transformation and/or trade, distort trade<sup>36</sup> or result in operators moving away from user-pays charging.

### *Tier 2 rules*

The primary purpose of the Tier 2 rules is to provide customers with information on how operators determine the level of service and investment and the associated expenditure and charges. The benefits of these rules derive from improved transparency, more informed decision-making and more efficient investment and water trade. More specifically, effective implementation of the Tier 2 rules will have the following benefits:

- economically efficient and sustainable use of water resources and water infrastructure assets - the Tier 2 rules will ensure that there is rigour around an operator's asset planning processes, including an external engineer's review of the Network Service Plan (NSP) - this should contribute to achieving efficient investment in water infrastructure assets - in addition, customers will have access to more information and will be better able to make decisions about efficient water use and complementary 'on farm' investments;
- sufficient revenue streams to allow for the efficient delivery of the required services - requiring operators to revisit asset planning and charges at least every five years will ensure these businesses are constantly updating their estimates to reflect current market and other conditions - this should ensure that operators continue to recover sufficient revenue even under changing market conditions - in addition, because an external engineering consultant will review the operator's NSP, this should identify whether the operator is likely to recover sufficient revenue;

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<sup>36</sup> One of the Basin water charging objectives is to facilitate the efficient functioning of water markets - this requires irrigators to be able to transform and trade entitlements with minimal deterrents or distortions.

- a more efficiently functioning water market - an efficient market relies on adequate information being readily available to market participants - the Tier 2 requirements will increase and improve the information made available to customers of Tier 2 operators;
- pricing transparency in respect of water storage and delivery in irrigation systems - the NSP and information statement will improve pricing transparency of Tier 2 operators - this information will allow customers to understand the reasons for the levels of charges, including any price differentials and reasons for those differentials;
- avoiding perverse or unintended pricing outcomes - ensuring customers are consulted in the development of a NSP should limit the potential for perverse or unintended pricing outcomes resulting from an operator not representing its customers' preferences - in addition, the information statement will explain the level of charges, which should limit the number of complaints received in relation to the non-discriminatory pricing rules.

### *Tier 3 rules*

The approval or determination of water charges is most likely to constrain market power, result in efficient water charges and consistent water charging practices across the Basin, and improve pricing transparency. Therefore, it is likely to have the highest benefits compared with other - less rigorous - regulatory options.

More specifically, the Tier 3 rules will promote the efficient and sustainable use of water resources, by ensuring that charges:

- reflect the prudent cost of providing the water supply and delivery service, including costs associated with future supplies and periods of peak demands and/or restricted supply;
- include the costs of complying with relevant laws or regulations;
- are based on a principle of user pays so that users face the true cost of the service (with subsidies and community service obligations eliminated or reduced over time; and where they remain, publicly reported); and
- are made publicly available to increase transparency and allow users and potential users to compare charges across regions and use this information to make decisions as to where to locate their business, thus promoting dynamic efficiency.

To promote the efficient and sustainable use of water infrastructure assets, the Tier 3 rules will ensure that charges:

- reflect the prudent costs of maintaining, replacing and upgrading infrastructure, where necessary, to accommodate efficient infrastructure investment, including the upgrade and/or rationalisation of assets over time; and
- are based on a principle of user pays so that the costs of infrastructure investment in each service area are reflected in the charges for that area, thus promoting economically efficient investment (with subsidies and community service obligations eliminated or reduced over time; and where they remain, publicly reported).

## 5.2 Option 2 - Multiple regulators and broader publication exemption provisions

### *5.2.1 Form of regulation*

As discussed in section 4, in developing its accreditation advice, the ACCC sought to design a framework that would maximise transparency and regulatory certainty while minimising compliance and administrative costs for stakeholders.

The NSW Government supported the ACCC's proposed accreditation framework, despite its preference for a single rather than a multiple regulator approach, noting:

*I am pleased to advise that the NSW Government supports the proposed accreditation framework noting that the rules should contribute to achieving the Murray-Darling Basin water charging objectives and principles. In particular, the framework should achieve consistency in approving, or determining, prices in the absence of a single regulator and it should be recognised that these outcomes require the framework to be quite prescriptive with respect to the accreditation process.<sup>37</sup>*

The majority of stakeholders that made submissions to the ACCC's draft advice on accreditation supported the inclusion of accreditation under the rules. For example the National Farmers' Federation (NFF) noted:

*NFF welcomes the ACCC incorporating the accreditation of state agencies for making determinations under the Water Charge Rules.<sup>38</sup>*

### 5.2.2 Stakeholders

Option 2 is expected to impact on the same set of stakeholders as option 1 as described in section 5.1.2.

### 5.2.3 Costs

The only cost differences expected between option 1 and 2 are administrative costs for the ACCC and state regulators.

Under option 1, the ACCC would bear all of the (regulator) costs of undertaking a price approval or determination - the state regulators will save the costs previously associated with this function. Under option 2 the impact on state regulators that currently regulate Tier 3 operators in NSW and Victoria will depend on whether they apply to be accredited (and are successful) to undertake determinations under the water infrastructure charge rules.

Should a state regulator apply and be accredited, as the existing State regulatory regime is simply being substituted by Commonwealth legislation that follows a similar administrative process, the incremental costs for the accredited state regulator are not likely to be significant. Should a state regulator not be accredited, and the ACCC undertakes the determination process, the state regulator will save the costs previously associated with this function.

The broader publication provisions under option 2 are not expected to have any cost implications for stakeholders.

### 5.2.4 Benefits

The difference in benefits between a single (option 1) and multiple (option 2) regulator approach compared to the status quo alternative is not expected to be significant. While it is likely that option 1 will a priori result in greater consistency in rural water charging across the Basin, the accreditation framework developed by the ACCC and adopted in option 2 has been designed with a degree of prescription to promote consistency across multiple

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<sup>37</sup> NSW Government submission to the ACCC draft advice on accreditation under the water charge rules, December 2009 p. 1.

<sup>38</sup> NFF submission to the ACCC draft advice on accreditation under the water charge rules, December 2009 p. 4.

regulators. This was recognised by the NSW Government in its submission to the ACCC's draft accreditation advice (see section 5.2.1).

The benefits for stakeholders of adopting the broader publication provisions are expected to be positive, if not significant. The provisions in option 2 will provide added flexibility and certainty for operators and customers to exclude regulated charges from publication where commercial disadvantage from publication is a genuine concern. The changes have also been structured so that they do not undermine the broader transparency benefits associated with the publication requirements across the Basin.

### 5.3 Impact analysis conclusion

In short, the incremental compliance costs of options 1 and 2 over the status quo alternative are expected to be small. In contrast, the benefits of these options - in terms of more efficient use of, and investment in, water infrastructure derived from implementing a more consistent approach to setting rural water charges across Basin jurisdictions - are expected to be of national significance. Moreover, a number of stakeholders expressed support for overarching three-tiered regulatory approach taken in both options on the grounds of its practicality, cost-effectiveness and avoidance of undue regulatory burden.

The impact analysis therefore demonstrates that options 1 and 2 are viable regulatory alternatives to the status quo.

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## 6.0 Consultation

### 6.1. Stakeholders

The main stakeholders likely to have an interest in the development of water infrastructure charge rules were identified as:

- water infrastructure operators - such as Murray Irrigation Limited, Central Irrigation Trust, State Water and SunWater
- irrigators and other farmers that use Basin water resources
- industrial and stock and domestic water users
- industry representative organisations - such as the New South Wales Irrigators' Council, National Farmers Federation and the Minerals Council of Australia
- water market intermediaries - such as Waterfind
- State water agencies - such as the Department of Sustainability and Environment in Victoria

State regulators such as the ESC in Victoria and IPART in NSW.

### 6.2 Initial consultation and response to stakeholder concerns

Two formal consultation processes were undertaken in developing the water infrastructure charge rules. The initial multi-stage process was conducted by the ACCC – and is described in this section. The second – a one-stage process conducted by the Department on behalf of the former Minister – is described in section 6.3 below.



Under the Water Act, the ACCC has the role of providing advice to the Minister on making the water market and water charge rules. In developing this advice, the ACCC has undertaken a comprehensive public consultation process, as set out in the *Water Regulations 2008*.<sup>39</sup>

The ACCC adopted a three-stage process in developing its final advice on the rules (see *Table 4*), consulting on an issues paper, a position paper, and the draft rules. The position paper stage was added following stakeholder requests for more time to consider the draft rules. Accordingly, the ACCC requested, and the former Minister granted, an extension to the deadline for the provision of advice to allow an additional consultation stage.

At each stage of the consultation process, the ACCC invited comment from Basin State Water Ministers, infrastructure operators, interested stakeholders and the public. The ACCC also published notices in national and regional newspapers and on the internet, notifying stakeholders of the public forum and inviting submissions in response to the issues papers, position papers, and draft advice.

The ACCC also held a public forum in Sydney on 30 April 2009. A record of the forum is available on the ACCC website. In addition to formal consultation, the ACCC undertook targeted stakeholder consultation with Basin jurisdictional governments, infrastructure operators, industry associations and irrigator groups on an ongoing basis. A complete list of all ACCC stakeholder consultations was provided to the former Minister with the ACCC's advice.

At the former Minister's request, the ACCC undertook a further one-stage consultation process on the accreditation of state regulators under the rules.

*Table 4: ACCC consultation timeline*

| Consultation                                                  | Release date      | Submission date  | Consultation period | No. submissions received <sup>40</sup> |
|---------------------------------------------------------------|-------------------|------------------|---------------------|----------------------------------------|
| Irrigation infrastructure operator issues paper <sup>41</sup> | 30 May 2008       | 15 July 2008     | 6 weeks             | 31                                     |
| Bulk water operator issues paper                              | 7 July 2008       | 18 August 2008   | 6 weeks             | 14                                     |
| Position paper                                                | 29 September 2008 | 24 November 2008 | 4 weeks             | 16                                     |
| Draft advice and rules                                        | 6 April 2009      | 8 May 2009       | 4 weeks             | 11                                     |
| Final advice to the Minister (including draft rules)          | 26 June 2009      | N/A              | N/A                 | N/A                                    |
| Draft further advice on accreditation                         | 6 November 2009   | 18 December 2009 | 6 weeks             | 10                                     |
| Final further advice to the Minister on accreditation         | 19 February 2010  | N/A              | N/A                 | N/A                                    |

The Department also undertook informal consultations with a range of key stakeholders after the ACCC provided its final advice to the former Minister. In developing its advice on the water infrastructure charge rules the ACCC has taken into account a wide range of stakeholder views from written submissions, the public forum and

<sup>39</sup> The *Water Regulations 2008* set out the process for making the rules.

<sup>40</sup> All written submissions are publicly available on the ACCC website [www.accc.gov.au](http://www.accc.gov.au)

<sup>41</sup> ACCC (2008a) which included termination fees.

direct contacts. The ACCC has shown itself to be responsive to the views of stakeholders, as has the Department in response to stakeholder views presented in its consultation.

The changes in policy position in response to stakeholder views between the ACCC's position paper, its draft advice and then advice to the Minister, and changes recommended by the Department subsequent to the ACCC's advice, are highlighted below.

### *Tier 1 and 2 transitional arrangements*

In its position paper, the ACCC proposed that the Tier 1 publication and non-discrimination pricing rules would have immediate effect. Generally submissions expressed the view that operators already comply with Tier 1 rules. However, Macquarie River Food & Fibre (MRFF) also noted:

*There are Infrastructure Operators in the Macquarie that at the present time do not comply with the [Tier 1] rules ... Therefore MRFF believes it is appropriate for ACCC to allow a reasonable transition period (6 to 12 months) for Schemes to adopt the changes necessary to comply with the Tier 1 rules.<sup>42</sup>*

Also, the NSW Irrigators' Council noted the large number of small operators in NSW and disputed:

*... that tier 1 operators "generally would already comply" on the basis that generalisations cannot be made about an indistinct population. At present, the ACCC, the Commonwealth and the NSW Government are unable to even determine how many tier 1 operators exist.<sup>43</sup>*

Taking these views into consideration, the ACCC's draft advice recommended a 3 month transitional period from the registration of the rules to allow for any administrative or pricing tasks that may be required for operators to become compliant with the Tier 1 rules. This position was maintained in the ACCC's advice to the Minister.

In its position paper and draft advice, the ACCC proposed that the Tier 2 network service planning rules would have a 12 month transition period from registration of the rules. SunWater, which will be a Tier 2 operator in the Basin, submitted that:

*... [it] has regulated price paths in place until 30 June 2011, and these price paths do not include capacity to change prices and recover the additional costs of complying with the ACCC rules. SunWater submits that, in the interests of regulatory certainty, the implementation of the Water Charge Rules should be aligned with the expiration of the current price paths.<sup>44</sup>*

In response to this, the ACCC's advice to the Minister extended the transition period to 30 June 2011 to match the SunWater price path expiration date. The transition period extension also allows synchronisation of NSP periods with financial reporting years and provided more time for information about Commonwealth modernisation funding to be incorporated in operator asset management plans.

To ensure that Tier 2 operators have sufficient time to prepare for compliance with the rules, the Department recommended that the former Minister further extend the Tier 2 transitional period until 30 June 2012. The former Minister agreed to this in-principle.

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<sup>42</sup> MRFF, Submission to ACCC water charge rules position paper, November 2008, p. 4.

<sup>43</sup> NSWIC, Submission to ACCC water charge rules position paper, November 2008, p. 6.

<sup>44</sup> SunWater, Submission to ACCC water charge rules draft advice, May 2009, p. 2.



### *Timing of Tier 1 publishing requirements*

In its draft advice, the ACCC recommended that, after the 3 month transition period, all operators be required to provide a schedule of fees and charges to their customers one month before changes to charges take effect.

A number of stakeholders raised concerns that the one month advance notice to customers of changes to fees and charges was too long. In particular, it was noted that the setting of charges for an upcoming irrigation season was typically left until close to the start of the season, and in some cases until a few weeks into the season, when indications of likely water allocations are available and government and bulk water charges are known.

In its submission to the draft advice Western Murray Irrigation (WMI) noted:

*WMI completes its financial budgets in May\June with the Board signing off in June. The fee schedule is provided to each customer via the mail with the first quarterly invoice of the irrigation season, which is generally sent in the third week of July. The timeframe for finalisation of the fees schedules in the rules should be 1 July.<sup>45</sup>*

At the public forum, Central Irrigation Trust noted that it sets its charges by late August and requested that the rules allow for this. Murray Irrigation Limited also noted its preference that charges should be made available by 1 July of the relevant year rather than one month before changes take effect.

In response to these concerns, in its final advice the ACCC recommended reducing the period between the operator providing its schedule of fees and charges to customers and the operator levying those fees and charges from one month to two weeks.

### *Tier 1 publishing costs*

In its draft advice, the ACCC recommended that Tier 1 operators servicing over 10 GL of water entitlement must publish their schedule of fees and charges in the Government Gazette or a regional newspaper (or newspapers) circulating in their area of operations. A number of operators raised concerns that this requirement would be costly.

Western Murray Irrigation (WMI) argued:

*It would cost WMI thousands of dollars to print its full A4 charges schedule in a local newspaper for no benefit.<sup>46</sup>*

Similarly, Macquarie River Food and Fibre (MRFF) submitted:

*MRFF believes that the requirement to publish a schedule of charges in the newspapers and/or the Gazette is unnecessarily onerous.*

*... Requirements ... to publish the schedule in print media, would only serve to add additional cost and burden to the Operator, and therefore irrigators.<sup>47</sup>*

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<sup>45</sup> WMI, Submission to ACCC water infrastructure charge rules draft advice, May 2009, p. 3.

<sup>46</sup> WMI, submission to ACCC water infrastructure charge rules draft advice, May 2009, p. 2.

<sup>47</sup> MRFF, submission to ACCC water infrastructure charge rules draft advice, May 2009, p. 1.

At the public forum, Murray Irrigation Limited advised that electronic distribution of information to customers is now part of their business practices and submitted that the water infrastructure charge rules should not unwind progress towards adoption of new technology and cost saving measures by businesses.

In response to these concerns, the ACCC's advice to the Minister recommended a third option for operators to meet their wider publication obligations – publication on a publicly accessible page of the operator's business website.

### *Tier 2 Network Service Plan review costs*

In its draft advice, the ACCC recommended that Tier 2 operators be required to have their Network Service Plan (NSP) externally reviewed by an independent engineer and the report made available to customers. Some operators raised concerns about the cost implications of this proposal. Operators considered the review unnecessary and costly, and some expressed the view that the ACCC should meet the costs of independent review.

In its presentation to the ACCC public forum,<sup>48</sup> Murray Irrigation Limited noted the significant cost implications of an independent review, particularly in light of their in-house engineering expertise, and indicated it did not support the proposal. Central Irrigation Trust (CIT), also in its presentation to the public forum, stated that the requirement to have an independent engineer's report will impose extra costs on the operator and its customers and is not supported by CIT. CIT further suggested that the ACCC should pay for this requirement.

Taking these views into consideration, the ACCC's advice to the Minister, maintained that the benefits of providing customers with independent information on the prudence and efficiency of an operator's network operations warranted keeping the independent review requirement. However, the ACCC proposed that it be responsible for retaining and paying for the engineer.

### *Opening up determinations mid-term*

In response to the position paper, State Water recommended that the rules should include a provision for the ACCC to reopen a determination mid-term. In response to this, in its draft advice the ACCC introduced a mechanism which would allow for a determination or approval to be varied in the case of unforeseen and materially adverse circumstances. The proposed reopening provisions would apply where those circumstances caused the operator to undertake substantial capital expenditure to rectify the effects of those circumstances.

State Water in its submission to the position paper noted:

*... the tier 3 rules do not include any mechanism to either modify or prematurely end an existing determination. These mechanisms provide the regulator with the flexibility to respond to unforeseen circumstances. For example, IPART recently opened the Sydney Water Determination to include the costs of the desalination plant. State Water recommends that the rules incorporate methods to address unforeseen circumstances related to pricing outcomes during the regulatory period.<sup>49</sup>*

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<sup>48</sup> A summary of the ACCC public forum discussions and stakeholder presentations is available on the ACCC website.

<sup>49</sup> State Water, Submission to ACCC water charge rules position paper, November 2008, p. 3.

In response to the draft advice, State Water further noted:

*State Water is generally supportive a force majeure type exclusion during the regulatory period to reflect extenuating circumstances (Rule 39). While State Water recognises that incentives need to be in place to prevent the abuse of such a clause, the ACCC's favoured scenario ... lacks flexibility to allow for the full range of circumstances that could occur. State Water therefore recommends that the criteria for exclusion should relate to material variations which will have a material adverse impact on the financial position of the operator. Under a more flexible approach the ACCC would be given discretion to decide whether or not operators are able to legitimately declare extenuating circumstances.<sup>50</sup>*

In response to State Water's concerns, in its final advice the ACCC recommended extending this provision to apply for both capital and operating expenditure (or more generally, expenditure).

### *Aligning regulatory periods*

In its draft advice, the ACCC recommended that, following transitional arrangements, the initial regulatory period for Tier 3 operators be limited to 3 years, with subsequent periods of 4 years. In response to the draft advice, Lower Murray Water (LMW) noted:

*The current proposal in the Water Infrastructure Charge Rules – Draft advice is to place LMW into the Tier 3 business category which will have a 4 year regulatory cycle for irrigation based functions. The remaining urban based functions will still be based on the ESC 5 year regulatory period.*

*This misalignment of regulatory periods will create major administrative complexities leading to business inefficiencies and cost imposts in accounting around different regulatory periods. This is highlighted in the distribution of corporate costs across all functions particularly where revenue cap tariffs are in place.<sup>51</sup>*

In its final advice the ACCC recommended a rule that allows the ACCC to align the length of the regulatory period with the length of a regulatory period that has been determined by another regulatory body where an operator is subject to regulation of its urban prices by that other regulatory body. This should address the concerns of LMW that it would be subject to determinations that did not align in respect of its urban water charges and its rural water charges.

### *Accreditation of state regulators*

In its final advice to the Minister the ACCC recommended that it be the sole regulator to undertake price determinations under the water infrastructure charge rules and made no provision for the accreditation of state regulators in the draft rules. A number of stakeholders expressed support for state regulators to continue their price determination role under the rules. For example the National Farmers Federation (NFF) noted:

*NFF reiterates its previous position that there is significant support for independent state regulators to continue to undertake this role. NFF urges the ACCC to ensure that state regulators are accredited to undertake Tier 3 determinations.<sup>52</sup>*

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<sup>50</sup> State Water, Submission to the ACCC water infrastructure charge rules draft advice, May 2009, p. 2.

<sup>51</sup> LMW, 'Submission to the ACCC water infrastructure charge rules draft advice', May 2009, p. 2.

<sup>52</sup> NFF, Submission to ACCC water charge rules position paper, November 2008, p. 5.

The Victorian Government noted:

*... the ACCC's proposed application of the Tier 3 rules should enable this [price approval or determination] function to be carried out by accredited jurisdictional regulators ... The Victorian Government believes that a process for the accreditation of existing jurisdictional regulators ... should be developed, as required under the IGA [Intergovernmental Agreement on Murray–Darling Basin Reform].<sup>53</sup>*

In response to stakeholder concerns, the Minister requested the ACCC to provide further advice, including draft rules, on accreditation. This advice was provided by the ACCC in February 2010. Following consideration of this advice, the Department recommended that the former Minister adopts rules that provide for accreditation (option 2). The former Minister agreed to this in-principle.

### *Tier 1 publication exemptions under certain contracts*

In its submission to the ACCC's draft advice, SunWater raised concerns about rules requiring the publication of contract charges by operators:

*... the proposal to require the publication of all contract pricing information is unnecessary and contrary to the requirements of the legislations.*

*... individually negotiated charges and supply arrangements should not be required to be published, particularly in circumstances where an individual customer ... [has] entered into [a] "foundation customer contract" ...*

*... The method proposed by the ACCC to allow such information not to be published provides insufficient protection for individual companies, particularly where initial agreements are struck with competing interests.<sup>54</sup>*

In response to these concerns, and further consultation with key stakeholders, the Department recommended that the former Minister adopts three changes to the publication exemption requirements (option 2). The first to allow a customer to apply by itself to the ACCC for a water charge publication exemption. The second to introduce a statutory exemption for water charges contained in pre-existing commercial-in-confidence contracts. The third is to define adverse and material effect to make the exemption easier to apply. The former Minister agreed to this in-principle.

## 6.3 Further consultation and response to stakeholder concerns

Subsequent to the ACCC's consultation process, the Department undertook a further one-stage 8-week formal consultation on behalf of the former Minister (see *Table 5*). This was required by *Water Regulations 2008* as the former Minister made an in-principle decision to make rules that are not substantially the same as the ACCC's draft rules.

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<sup>53</sup> Victorian Government, submission to the ACCC water charge rules position paper, January 2009, p. 1–2.

<sup>54</sup> SunWater, submission to the ACCC water infrastructure charge rules draft advice, May 2009, p. 1.

Table 5: The Department's formal consultation

| Consultation                               | Release date | Submission date   | Consultation period | No. submissions received <sup>55</sup> |
|--------------------------------------------|--------------|-------------------|---------------------|----------------------------------------|
| Proposed water infrastructure charge rules | 14 July 2010 | 10 September 2010 | 8 weeks             | 12                                     |

On 14 July the former Minister announced that she intended to make the water infrastructure charge rules – with the changes proposed by the Department - and undertake a further 8-week consultation. The Department consulted on all the proposed rules and not just the proposed changes from the ACCC's advice (such as providing for accreditation of state regulators and broadening the publication exemption provisions as set out in option 2).

The Department invited comment from Basin State Water Ministers, infrastructure operators, interested stakeholders and the public. The Department also published notices in national and regional newspapers and on the internet, notifying stakeholders of the further consultation and inviting submissions. In addition to this formal consultation, the Department also had discussions with Basin jurisdictional governments, infrastructure operators and industry associations.

The Department was responsive to stakeholder views presented in the consultation. The key changes in policy position in response to stakeholder views that the Department is recommending to the Minister are highlighted below.

#### *Definition of customer, member owned operator*

In submissions to the Department's consultation Murrumbidgee Irrigation Limited (MI) and Murray Irrigation Limited raised some drafting concerns about the definition of customer and member-owned operator in the proposed rules. For example, MI requested that the reference to a person seeking infrastructure services should be deleted from the definition.<sup>56</sup>

In response to these concerns the Department recommends that the Minister makes the following drafting changes:

- amend the customer definition in rule 3 to remove the reference to customers seeking services and make it clear that reference to delivery right is by way of non-exclusive example; and
- recast the definition of member owned operator in rule 5 in terms of related customers.

#### *Electronic publication*

In its submission to the Department's consultation MI requested, albeit as a less preferable alternative, that the rules expressly authorise electronic communications as an alternative to providing hard copy documents to customers.<sup>57</sup>

In response to this concern, the Department recommends that the Minister insert a new subrule to rule 3 clarifying that documents can be provided in electronic form under certain circumstances.

<sup>55</sup> Written submissions are publicly available on the Department's website [www.environment.gov.au/water](http://www.environment.gov.au/water)

<sup>56</sup> MI, Submission to Department's formal consultation, 17 September 2010, p. 1.

<sup>57</sup> MI, Submission to Department's formal consultation, 17 September 2010, p. 2.

### *Reopening provision threshold*

In its submission to the Department's consultation State Water Corporation raised a concern that the threshold for the operator mid-term reopening provision – set at 5% of the operator's regulated asset base – is too high.<sup>58</sup> State Water recommended that the threshold should rather be aligned to annual regulated revenue requirement.

In response to this concern, the Department recommends that the Minister sets an upper bound to the threshold - the lower of \$15m or 5% of the regulated asset base for the first year of the regulatory period.

### 6.4 Option 1 versus 2 – a stakeholder perspective

As discussed in chapter 4, option 2 adopts the ACCC's three-tiered approach set out in option 1, but provides for the accreditation of state regulators rather than having the ACCC as the sole regulator, and contains broader publication exemption provisions.

The ACCC's consultation process showed strong stakeholder support for these changes as demonstrated in section 6.2 above. The Department's formal consultation process provided further evidence of stakeholder support for option 2.

For example, the National Irrigators' Council (NIC), the NSW Government and Western Murray Irrigation (WMI) all submitted support for the decision to provide for the accreditation of state regulators:

*.... we welcome the government's decision to allow the accreditation of state agencies for making approvals or determinations relating to charges. This is a common sense outcome.*<sup>59</sup>

*The Part 9 rules for accreditation covering these arrangements are considered acceptable to NSW.*<sup>60</sup>

*WMI also fully supports the retention of State based regulators such as IPART in NSW ..*<sup>61</sup>

The Queensland Government's submission acknowledged the changes to broaden the publication exemption rule:

*It is acknowledged that the drafting of this Rule has advanced insofar as it now provides an exemption for all contracts made before the relevant date (10 July 2010) as well as providing for the customer to apply to the Australian Competition and Consumer Commission (ACCC) for exemption. There is also now a definition of material and adverse effect.*<sup>62</sup>

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<sup>58</sup> State Water Corporation, Submission to Department's formal consultation, 10 September 2010, p. 5.

<sup>59</sup> NIC, Submission to Department's formal consultation, 3 September 2010, p. 2.

<sup>60</sup> NSW Government, Submission to Department's formal consultation, 3 September 2010, p. 6.

<sup>61</sup> WMI Government, Submission to Department's formal consultation, 3 September 2010, p. 2.

<sup>62</sup> Queensland Government, Submission to Department's formal consultation, 3 September 2010, p. 1.



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## 7.0 Conclusion and recommended option

As demonstrated in sections 4 and 5, option 1 – the ACCC’s preferred approach - and option 2 – multiple regulators and broader publication provisions - are viable regulatory alternatives for consideration by the Minister.

Both options will achieve the water charging objectives of the Water Act by setting rules that promote the efficient use of, and investment in, water infrastructure and facilitate the efficient operation of water markets across the Basin.

In determining the form of regulation for options 1 and 2, care was taken to ensure that the benefits that accrue from regulation outweigh any associated costs - including compliance and administrative costs - and, moreover, that the chosen form of regulation offers the highest net benefit compared with all other available options. This approach is mirrored in this regulation impact statement by comparing these two options to 4 alternatives, including the status quo.

Options 1 and 2 are preferred to option 4 which requires the approval or determination of all water charges. While option 4 appears the most likely to constrain market power, result in consistent water charging practices across the Basin and encourage transparency, it is likely to be time-consuming, intrusive and the compliance costs would be relatively high.

Options 1 and 2 are preferred to option 5 which requires detailed pricing rules for all operators. The benefits of option 5 are uncertain and the costs are likely to be relatively high, and regulated businesses would have to undertake expenditure and investment in an environment of regulatory uncertainty.

Options 1 and 2 are preferred to option 3, the status quo alternative. The status quo is characterised by varying levels of economic regulation under different state regimes leading to a lack of consistency in charging across jurisdictions where water can be traded. Where Basin jurisdictions pursue different charging practices, this can distort the signals about the efficiency of water storage and delivery infrastructure, resulting in trade distortions and an inefficient market.

The impacts of options 1 and 2 were assessed in section 5 in comparison to option 3. In short, the incremental compliance costs of options 1 and 2 over the status quo alternative are expected to be small. In contrast, the benefits of these options - in terms of more efficient use of and investment in water infrastructure derived from implementing a more consistent approach to setting rural water charges across Basin jurisdictions - are expected to be of national significance.

Moreover, a number of stakeholders expressed support for overarching three-tiered regulatory approach taken in both options on the grounds of its practicality, cost-effectiveness and avoidance of undue regulatory burden.

The regulatory impact statement therefore demonstrates that options 1 and 2 are viable regulatory alternatives to the status quo. The recommended option, however, is option 2. While the two options are difficult to separate in terms of costs and benefits, the consultation process - the ACCC’s formal consultation and the Department’s further consultation process - suggests a clear stakeholder preference for option 2 over 1.

The ACCC's consultation provided evidence of support from a wide range of stakeholders for the rules providing for the accreditation of state regulators. This was confirmed in the subsequent consultation by the Department. The broader publication exemption provisions in option 2 have been proposed in direct response to stakeholder concerns during the ACCC's consultation, and were acknowledged by the Queensland Government in the Department's consultation.

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## **8.0 Implementation of the recommended option and review**

### **8.1 Transitional arrangements**

Section 92(3)(k) of the Water Act provides for the water charge rules to take into account transitional arrangements involved in introducing the rules.

The recommended option provides a 3 month transition period for Tier 1 rules from registration to allow for any administrative or pricing tasks that may be required for operators to become compliant. To reflect the higher compliance requirements with Tier 2 rules, the recommended option provides relevant operators with an extended transition period to 1 July 2012 to comply with Tier 2 rules.

Tier 3 transitional arrangements involve IPART undertaking the next determination for State Water in NSW. In addition, current determinations made by ESC in Victoria will remain in force until their expiry on 30 June 2013. Upon the expiry of these price paths, the ACCC, or an accredited state regulator, will assume responsibility for undertaking all Tier 3 approvals or determinations across the Basin under the auspices of the water infrastructure charge rules.

As part of the transition arrangements, the ACCC will develop guidelines, including worked examples, to assist operators to comply with the water infrastructure charge rules. The guidelines will be publicly released after the rules are registered.

### **8.2 Monitoring and review**

It is generally prudent to monitor any new regulatory arrangements to ensure that they have the desired effect on the behaviour of market participants, and do not have any unintended consequences.

Section 253 provides for a review of the operation of the Water Act - and the extent to which the objectives and principles of the Water Act have been achieved - to be undertaken at a time to be determined by the Minister, before the end of 2014. To this end, the recommended option supports a review of the water charge rules. The specific timing of the review would be influenced by the ability to collect sufficient information with which to assess the effectiveness of the water charge rules. The ACCC notes that, with the proposed transitional arrangements, the water charge rules will not be fully implemented before 2014.

Section 95 of the Water Act provides for the ACCC to monitor compliance with the water charge rules and provide a report on the results of such monitoring to the Minister. The recommended option anticipates a cooperative approach to information-gathering by all parties.



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## 9.0 References

**Australian Government (2007).** Best Practice Regulation Handbook. Canberra.

**ABS (2008).** Water and the Murray-Darling Basin – A Statistical Profile 2000-01 to 2005-06. Australian Bureau of Statistics. ABS Catalogue No. 4610.0.55.007. August 2008.

**ACCC (2008a).** Irrigation Infrastructure Operator Water Charge Rules. Issues Paper. Australian Competition and Consumer Commission. May 2008.

**ACCC (2008b).** Bulk Water Charge Rules. Issues Paper. Australian Competition and Consumer Commission. July 2008.

**ACCC (2008c).** Water Infrastructure Charge Rules. Position Paper. Australian Competition and Consumer Commission. September 2008.

**ACCC (2009a).** Water Infrastructure Charge Rules. Draft Advice. Australian Competition and Consumer Commission. April 2009.

**ACCC (2009b).** Water Infrastructure Charge Rules. Final Advice. Australian Competition and Consumer Commission. June 2009.

**DEWHA (2009a).** Regulation Impact Statement: Water Market Rules 2009 and Water Charge (Termination Fee) Rules 2009. Department of the Environment, Water, Heritage and the Arts. January 2009.

**DEWHA (2009b).** Preliminary Assessment: Regulations to Enhance the Water Charge Rules. Department of the Environment, Water, Heritage and the Arts. June 2009.

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## Appendix 1: Major bulk water operators in the Basin

**SunWater**, a Queensland Government owned corporation, provides direct water supply services to irrigators, mines, power generators and local governments across Queensland (within and outside the Basin). In this way, it is a vertically integrated water business. Within the Basin, SunWater's systems predominantly consist of water storages and rivers; the only constructed channels are within the St George scheme. [The Upper Condamine scheme has a section called the North Branch which is not a channel but has some of the same characteristics.](#) Therefore, most of SunWater's activities within the Basin are bulk water activities. SunWater's charges recover all costs from harvesting and storage through to delivery. Charges are in the form of a two-part tariff and vary by scheme.

**State Water Corporation**, a NSW State Owned Corporation, provides bulk water services (water storage and delivery) in rural NSW within and outside the Basin. Its customers include irrigation infrastructure operators, town water supply authorities, farms, mines, electricity generators and stock and domestic users on regulated rivers. It is also responsible for delivering environmental flows on regulated rivers.

The Independent Pricing and Regulatory Tribunal of NSW (IPART) sets the prices State Water can charge its customers in each regulated river valley. The prices recover the majority of costs (with the exception of a few small valleys) that are attributable to water users for provision of bulk water services..

**Goulburn-Murray Water**, a Victorian Government owned statutory corporation, provides water harvesting, storage and delivery services in central north Victoria (wholly within the Basin). It is a vertically integrated water business that provides services to irrigators, urban and rural water supply authorities and hydroelectric power companies.

GMW charges for its bulk water services in two ways:

- all customers that do not hold an unbundled water access entitlement pay a 'bulk water charge' (for example, urban and rural water supply corporations and hydroelectric power companies pay this charge).
- irrigators holding an unbundled water access entitlement pay an 'entitlement storage fee' through which GMW recovers the costs of providing the bulk water service.

**Grampians Wimmera Mallee Water**, also a Victorian Government owned statutory authority, undertakes rural and urban water supply services in north western Victoria (wholly within the Basin). It is a vertically integrated water business that services urban water users, industrial customers, domestic and stock customers, irrigators and town water supply authorities. The Wimmera Mallee Pipeline will give rise to a reconfiguration of the Wimmera Glenelg Bulk Entitlement Order. The costs sharing and associated prices for bulk water will be assessed on the basis of the headworks reconfiguration upon which the Bulk Entitlement Order has been based. On the basis of this assessment of cost, GMMWater intends to uncouple bulk water charges from the delivery charge for water services it provides.

**River Murray Water** is an internal business division of the Murray-Darling Basin Authority established to operate and manage the River Murray system. RMW's main function is to decide when to allow releases from storages along the River Murray and lower Darling.

State Water, GMW and SA Water then undertake bulk water supply functions at the request of RMW (and receive funding from RMW). RMW is funded by the Australian, NSW, Victorian and SA Governments and does not levy any charges on water users.

***South Australian Water Corporation (SA Water)***, a SA Government owned statutory corporation, delivers rural and urban water and wastewater services across SA (within and outside the Basin). Over the long term SA Water receives approximately half of its water from the River Murray and stores and distributes this water (mixed with supplementary water) for urban and rural uses. **Annually the extraction from the River Murray fluctuates depending on the volume of rainfall in the Mount Lofty Ranges.** SA Water provides bulk water services under agreement with Barossa Infrastructure Limited, as well as peak and off-peak water transportation agreements with individual irrigators. The charging arrangements for these activities are determined by the respective contracts.

#### *Charging arrangements of bulk water operators*

Bulk water charges generally reflect a two-part tariff structure to ensure the recovery of both fixed and variable cost structure of the service provider. The forward-looking incremental cost of an additional unit of consumption is reflected in the volumetric (variable) charge and a share of the fixed or sunk costs is reflected in the fixed charge.

The costs associated with the provision of bulk water services are largely fixed, being associated with the provision of storage and delivery capacity (fixed costs) as opposed to the use of that capacity which occurs when water is physically delivered (variable costs).

Bulk water service providers often segment costs according to geographical boundaries that represent various catchments or water supply districts. Within the interconnected system or district, the costs associated with the storage and delivery of water are recovered from the customers within that district. The fixed and volumetric charges are often levied on a uniform or postage stamp basis for the district. However, the level of entitlement security is also used to allocate fixed charges.

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## Appendix 2: Major irrigation infrastructure operators in the Basin

In **New South Wales**, all operators are privately-owned and the majority of the larger operators are non-listed, not-for-profit companies. Many of the operators have a cooperative structure - the member/irrigators are in effect the shareholders in the entity that owns the shared irrigation network. NSW operators include five large irrigation corporations,<sup>63</sup> a number of private irrigation districts,<sup>64</sup> private water trusts and joint water supply schemes that can have as few as three members.

In **South Australia** the operators are typically private trusts where the irrigators are the members. Almost all operators in SA have been established under the *Irrigation Act 1994* (SA) by conversion from government irrigation districts to private irrigation districts or by the establishment of irrigation trusts. 45 irrigation infrastructure trusts were formed under the *Irrigation Act 1994* (SA) while Renmark Irrigation Trust was formed under the *Renmark Irrigation Trust Act 1936* (SA). In April 2009 SA passed the new *Irrigation Act 2009* and the *Renmark Irrigation Trust Act 2009*.

In **Victoria**, four government-owned statutory corporations<sup>65</sup> provide access services within the Victorian region of the Basin. Victorian operators must submit their corporate plans each year to the responsible Minister to compare progress against the water plans, provide forward planning advice, and ensure compatibility of their business directions with government policy. One operator, GMW, provides bulk water services to other operators, as well as to its own downstream operations and industrial and urban customers. LMW provides both rural and urban water services.

SunWater, which provides access services to almost all **Queensland** irrigators in the Basin, has recently changed its structure from a statutory government-owned corporation to a company government-owned corporation. However, under both arrangements, it is accountable to its shareholding Ministers. SunWater organises its access services and fees on the basis of local schemes. [Under the \*Water Act 2000\*, SunWater holds a number of Resource Operations Licences that allows them to deliver water to their customers. Through this arrangement SunWater has a contract with the entitlement holder that defines the service standards and delivery conditions as well as the rights and payment obligations of the holder.](#)

### *Charging arrangements of irrigation infrastructure operators*

An irrigation infrastructure operator typically provides two main services to its customers: to make available capacity of its irrigation network for the delivery of water to be used in irrigation; and to make available capacity of its irrigation network for the drainage of water previously used in irrigation (access services).

Fees associated with the provision and use of access services generally consist of two components- a volumetric fee and a fixed fee. The two components or 'parts' to this charging structure reflect the two cost components faced by operators: fixed and variable costs.

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<sup>63</sup> MIL, MI, CICL, Jemalong Irrigation Limited and WMI.

<sup>64</sup> For example Moira Private Irrigation District.

<sup>65</sup> Coliban Water, GMW, LMW, and GMMWater.

Fixed costs can be associated with the provision of access services (or making capacity available), including the capital financing costs associated with the renewal of the irrigation network. A number of methods exist for allocating fixed costs across network users. The most common is the number or volume of entitlements held, but other options include allocations per hectare, per property, per connection and per service point. Fixed costs may also vary between districts, reflecting differences in geography, hydrology and differences in the physical characteristics of infrastructure.

Variable costs can be associated with the physical delivery of water (or the use of capacity), including pumping and other costs that vary with the volume of water delivered. For access services, variable costs are generally lower than fixed costs.

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## Appendix 3: Basin water charging objectives and principles

### 2 *Water charging objectives*

The *water charging objectives* are:

- (a) to promote the economically efficient and sustainable use of:
  - (i) water resources; and
  - (ii) water infrastructure assets; and
  - (iii) government resources devoted to the management of water resources; and
- (b) to ensure sufficient revenue streams to allow efficient delivery of the required services; and
- (c) to facilitate the efficient functioning of water markets (including inter-jurisdictional water markets, and in both rural and urban settings); and
- (d) to give effect to the principles of user-pays and achieve pricing transparency in respect of water storage and delivery in irrigation systems and cost recovery for water planning and management; and
- (e) to avoid perverse or unintended pricing outcomes.

### 3 *Water storage and delivery principles*

- (1) Pricing policies for water storage and delivery in rural systems are to be developed to facilitate efficient water use and trade in water entitlements.
- (2) Water charges are to include a consumption-based component.
- (3) Water charges are to be based on full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities where feasible and practical.
- (4) Water charges in the rural water sector are to continue to move towards upper bound pricing where practicable.
- (5) In subclause (4):

***upper bound pricing*** means the level at which, to avoid monopoly rents, a water business should not recover more than:

- (a) the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes; and
  - (b) provision for the cost of asset consumption; and
  - (c) provision for the cost of capital (calculated using a weighted average cost of capital).
- (6) If full cost recovery is unlikely to be achieved and a Community Service Obligation is deemed necessary:
- (a) the size of the subsidy is to be reported publicly; and



(b) where practicable, subsidies or Community Service Obligations are to be reduced or eliminated.

(7) Pricing policies should ensure consistency across sectors and jurisdictions where entitlements are able to be traded.

#### **4 *Cost recovery for planning and management***

See forthcoming ACCC Water Planning and Management Issues Paper.

#### **5 *Environmental Externalities***

(1) Market-based mechanisms (such as pricing to account for positive and negative environmental externalities associated with water use) are to be pursued where feasible.

(2) The cost of environmental externalities is to be included in water charges where found to be feasible.

#### **6 *Benchmarking and efficiency reviews***

(1) Independent and public benchmarking or efficiency reviews of pricing and service quality relevant to regulated water charges is or are to be undertaken based on a nationally consistent framework.

(2) The costs of operating these benchmark and efficiency review systems are to be met through recovery of regulated water charges.