



Independent Pricing and Regulatory Tribunal

Review of prices for State Water Corporation

From July 2010

Water — Issues Paper

July 2009



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Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due from State Water by 11 September 2009 and from stakeholders and members of the public by 23 October 2009.

We would prefer to receive them by email <ipart@ipart.nsw.gov.au>.

You can also send comments by fax to (02) 9290 2061, or by mail to:

State Water Corporation Price Review 2010
Independent Pricing and Regulatory Tribunal
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Our normal practice is to make submissions publicly available on our website <www.ipart.nsw.gov.au>. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed on the previous page.

We may choose not to publish a submission—for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. IPART will then make every effort to protect that information, but it could be subject to appeal under freedom of information legislation.

If you would like further information on making a submission, IPART's submission policy is available on our website.

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1 Introduction

The Independent Pricing and Regulatory Tribunal of NSW (IPART) regulates the prices State Water Corporation (State Water) charges irrigators, industrial users and town water suppliers (extractive users) for extracting bulk water from regulated rivers in this NSW.¹

As its current determination on these prices ends on 30 June 2010, IPART is conducting a review and will make a new determination on bulk water prices for the period starting July 2010. This paper outlines IPART's approach for this review and the key issues it will need to consider, to assist stakeholders in making submissions to the review.

1.1 The 2006 Determination

The current bulk water price determination (the 2006 Determination²) set bulk water prices to recover extractive users' shares of the efficient costs incurred by State Water in providing bulk water services. The remaining costs were expected to be borne by the government on behalf of the community. IPART determined that State Water's notional revenue requirement was \$333.0 million over the term of the price path (\$2009/10). Of this total, \$234.3 million was expected to be recovered from extractive users through tariffs. Prices for extractive users increased by a maximum of 15 per cent per annum above inflation on average. Some irrigators faced greater increases, depending on the location, level of security and usage.³

The 2006 Determination reformed the way that State Water's revenue requirement was established. IPART established an initial regulatory asset base (RAB) value and used the 'building block' approach to determine the revenue requirement.⁴ Prices were also restructured so that a greater proportion of revenue came from usage charges in all valleys.⁵

¹ Regulated rivers are rivers where the natural flow of water is regulated by infrastructure such as dams or weirs.

² IPART, *Bulk Water Prices for State Water Corporation and Water Administration Ministerial Corporation from 1 October 2006 to 30 June 2010 – Report*, September 2006 (the 2006 Determination).

³ *Ibid*, p 8.

⁴ This is discussed further in Chapter 3.

⁵ 2006 Determination, p 107.

1.2 How will IPART approach this review?

Since IPART made the 2006 Determination, various NSW Government agencies' responsibilities in relation to bulk water services have changed. In addition, plans to transfer responsibility for setting bulk water prices in the Murray Darling Basin from IPART to the Australian Competition and Consumer Commission (ACCC) are being finalised (see Box 1.1). IPART will take account of these changes in making its 2010 determination.

IPART proposes to use the same approach as it used for the 2006 Determination. That is, it will:

- ▼ Determine the efficient costs State Water will incur in providing its bulk water services over the 2010 determination period using the building block method.
- ▼ Determine extractive users' share of these efficient costs.
- ▼ Set bulk water prices with the aim of recovering extractive users' share of the efficient costs. The remaining costs will be borne by the NSW Government on behalf of the community.
- ▼ Determine the appropriate balance for prices, which includes a fixed service component and a variable usage component.

This approach is consistent with the principles for bulk water pricing IPART developed in 1996 and which have guided its price determinations since that time (see Appendix A).⁶ It is also consistent with the objective of full cost recovery, set out in the Council of Australian Governments' (COAG) National Water Initiative⁷ and in the principles of the *Water Act 2007* (Clth)⁸.

In the 2006 Determination, IPART set prices that were expected to achieve cost reflective levels in most valleys by the end of the determination period. These prices were set based on sales forecasts at the time. Notwithstanding this, State Water has under-recovered efficient costs in the current determination period as sales forecasts were not met.⁹

In the upcoming determination, IPART will again consider the objective of setting water prices that achieve full cost recovery in accordance with the agreed COAG objectives and taking into account the impact on customers.

IPART's general approach for making water price determinations is outlined in Figure 1.1.

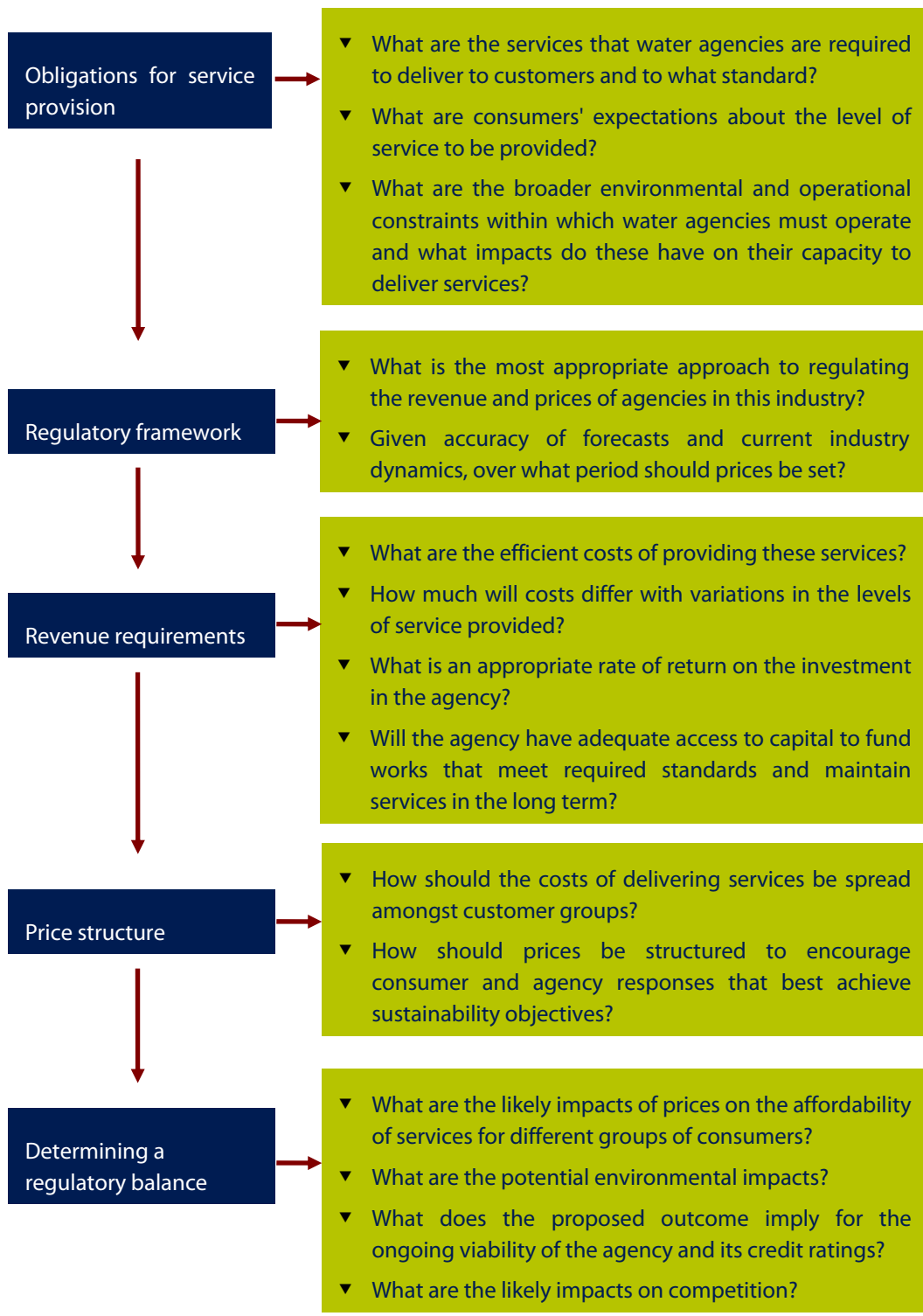
⁶ IPART, *Bulk Water Prices – An Interim Report*, October 1996.

⁷ Intergovernmental Agreement on a National Water Initiative Between the Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory, dated 25 June 2004.

⁸ See *Water Act 2007* Schedule 2. The ACCC's draft water charge rules are required to contribute to achieving these principles.

⁹ See Section 5.1 for further discussion.

Figure 1.1 IPART's determination process



Box 1.1 What's changed since the 2006 Determination?

Since IPART's 2006 Determination there has been significant restructuring of NSW Government agencies responsible for providing bulk water services. State Water has maintained responsibility for the provision of bulk water from regulated rivers. However, responsibility for water resource management (WRM) has been transferred from the Department of Natural Resources to the Department of Water and Energy (DWE).^a DWE undertakes WRM activities on behalf of the legal entity responsible for WRM; the Water Administration Ministerial Corporation.

In addition, plans are in train to transfer responsibility for setting prices for bulk water services provided by State Water in the Murray Darling Basin from IPART to ACCC under the *Water Act 2007* (Cth).^b The ACCC has developed draft water charge rules which include a transitional arrangement for regulated charges set by IPART to continue until the ACCC makes a pricing determination.^c Therefore, the 2010 Determination is likely to be the last made by IPART for State Water's prices in the Murray Darling Basin.

Notes

a IPART notes that the Premier announced further reforms to the structure of NSW Government departments that may affect the water functions of DWE (NSW Premier Nathan Rees, Press Release, *Premier announces historic public sector reform*, 11 June 2009). IPART will take these changes into consideration as more information is available.

b A decision has not been made as to whether NSW will defer powers for setting State Water's prices outside the Murray Darling Basin to the ACCC.

c ACCC, *Draft Water Charge (Infrastructure) Rules*, April 2009, Section 32.

1.3 What issues will IPART need to consider?

To apply the approach described in Section 1.2, IPART will need to consider a range of issues including:

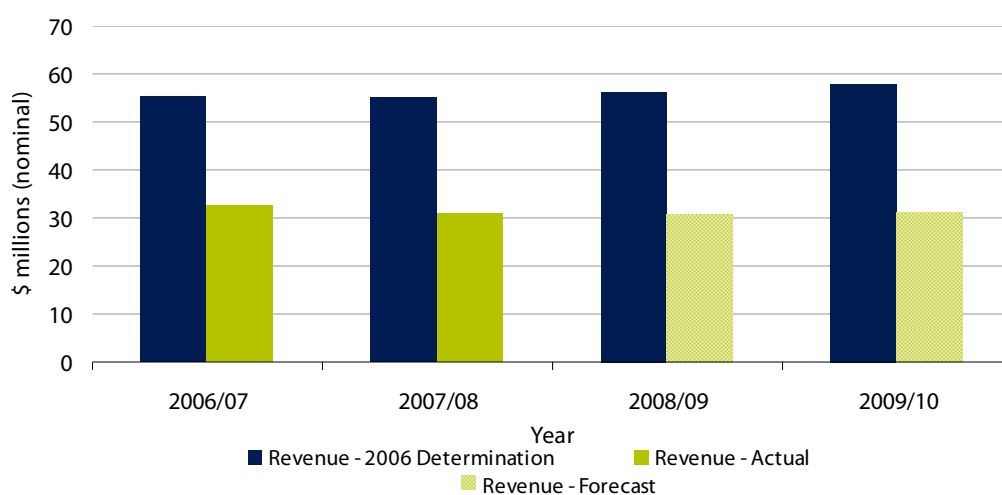
- ▼ The bulk water services State Water is required to provide and the service standards it is required to achieve to meet its regulatory obligations, other government-imposed requirements and customer expectations.
- ▼ The efficient costs State Water will incur in meeting these obligations and expectations over the 2010 determination period and ensuring it can continue to do so over the long term. This will include considering:
 - State Water's forecast operating costs and the scope for further efficiency gains over the determination period
 - State Water's forecast capital expenditure requirements and the outcomes that will be achieved by its proposed capital expenditure programs
 - the appropriate rate of return for State Water
 - an appropriate rate of depreciation.
- ▼ The appropriate shares of State Water's costs to be recovered from extractive users and funded by the community.
- ▼ The forecast demand for bulk water from State Water's storages.

- ▼ The appropriate balance between the fixed and variable components of bulk water prices.

It is important to note that whether the prices IPART sets actually recover extractive users' share of State Water's costs over the determination period depends on a range of factors. These include whether State Water manages to keep its operating and capital expenditure at the levels IPART allows for in making its determination, and whether it generates the level of revenue from users IPART assumes in making the determination (given forecast demand).

IPART notes that although the prices it set for the 2006 determination period were expected to reach cost-reflective levels in most valleys by the end of the period, these prices actually under-recovered costs by a significant amount. One of the reasons for this was that State Water's bulk water sales were lower than forecast due to continued drought conditions. Another reason was that prices were structured so that a greater proportion of revenue came from variable usage charges than from fixed charges in all valleys. Together, this meant that State Water's actual revenue from users was much lower than expected, as shown in Figure 1.2.

Figure 1.2 State Water's actual and forecast revenue from users over the 2006 determination period compared to the revenue IPART assumed in setting prices (\$ millions, nominal)



Data source: IPART 2006 Determination and data from State Water, 11 June 2009.

Given this, the forecast demand for bulk water (including whether drought conditions are likely to continue) and the appropriate balance between fixed and variable charges will be particularly important issues for the 2010 determination. For example, IPART will need to carefully consider the approach used to forecast demand, the proportion of revenue raised through fixed charges, and the overall level of charges so that it can increase the likelihood that the prices it sets enable State Water to recover its efficient costs.

As the 2010 determination will be made under the *Independent Pricing and Regulatory Tribunal Act 1992* (IPART Act), IPART will also need to consider the matters that Section 15 of the Act requires it to consider in making price determinations. These matters relate to:

- ▼ **consumer protection** – protecting consumers from abuses of monopoly power; standards of quality, reliability and safety of the services concerned; social impact of decisions; effect on inflation
- ▼ **economic efficiency** – greater efficiency in the supply of services; the need to promote competition; effect of functions being carried out by another body
- ▼ **financial viability** – rate of return on public sector assets including dividend requirements; impact on pricing of borrowing, capital and dividend requirements of agencies
- ▼ **environmental protection** – promotion of ecologically sustainable development via appropriate pricing policies; considerations of demand management and least-cost planning.

Section 15(1) of the IPART Act is set out in full in Appendix B. In considering these matters, IPART will need to balance the diverse needs and interests of stakeholders – such as customer affordability issues, environmental impacts and the maintenance of the overall quality of services provided to customers – as well as ensuring the long term financial viability of State Water.

1.4 How and when can stakeholders provide input to the review?

In undertaking this review, IPART will consult with key stakeholders, including State Water and environmental, community and water users' advocacy organisations, and undertake its own analysis.

IPART seeks a submission from State Water which details its pricing proposals and provides comprehensive financial information on the forecast operating and capital expenditure it believes is necessary to maintain customer service levels and respond to regulatory and customer demands. IPART will make this submission publicly available on its website. Other interested parties are invited to make submissions; commenting on State Water's submission, the issues raised in this paper, and other matters relating to bulk water pricing.

IPART will engage an independent consultant to assess the efficiency of State Water's forecast operating and capital expenditures, and may engage further consultants to help it review other issues where specialist expertise is required. It will make the consultants' reports publicly available on its website. It also plans to hold up to four public hearings to provide further opportunity for stakeholders to present their views.

IPART will consider all matters raised in submissions and public hearings, and the findings and recommendations of its consultants, before making a draft determination. It will release this draft determination and a draft report, and invite stakeholders to make further submissions on these, and on the consultant's review of operating and capital expenditures and any matter raised in the public hearings. After IPART has considered these submissions it will release its final determination and report.

An indicative timetable for the review is provided below. Details on how to make submissions can be found at the front of this paper.

Table 1.1 Indicative review timetable

Task	Timeframe
Release issues paper	17 July 2009
Receive submission from State Water	11 September 2009
Receive public submissions	23 October 2009
Hold public hearing – Griffith	24 November 2009
Hold public hearing – Dubbo	25 November 2009
Hold public hearing – Moree	2 December 2009
Hold public hearing – Sydney (if required)	4 December 2009
Release draft determination and report	March 2010
Receive submissions on draft determination	April 2010
Release final determination and report	June 2010

Note: These dates are indicative and may be subject to change.

In the past, IPART has had difficulties completing its price reviews on time because of delays in the provision of necessary information by regulated entities. Delays and new information not only add to the work of IPART, its staff and consultants, but also limit the ability of stakeholders to participate and provide input into IPART's processes and decisions.

To enable IPART to better manage delays in the provision of information, it intends to put in place mechanisms that will 'stop the clock' when necessary information is not received on time from State Water. Under this arrangement, the review timetable will be automatically extended by a period equal to the length of the delay. If IPART 'stops the clock' it will make a statement to this effect and publish a revised timetable on its website. Where new information is provided by State Water, IPART reserves the right to 'reset the clock' to reflect the need to rework and reconsider matters in the light of this new information.

1.5 Information IPART requires from State Water

Throughout this paper, IPART has identified the information it seeks from State Water to assist with this review. IPART intends to write to State Water to seek confirmation that it can provide this information in accordance with the review timetable. IPART will endeavour, as far as possible, to reach agreement with State Water on the information that should be provided for this review and the date by which it should be provided. This should ensure that the demands placed on State Water are not unreasonable and also minimise the risk that the review ‘clock’ has to be stopped or reset.

IPART also requires State Water to provide sufficiently comprehensive information to justify its costs, forecast sales or changes to cost sharing ratios. In particular, any proposal to change the price structure or level of any of its regulated services must be accompanied by sufficient cost information, argument and justification to support change. This will enable IPART to analyse the proposal and stakeholders to make an informed response. The submission should also identify potential customer impacts of its proposal, the distribution of these impacts and options explored by State Water to mitigate or minimise these impacts.

For convenience, a full list of the information IPART seeks from State Water is provided in Appendix C.

1.6 List of issues for stakeholder comment

This paper also identifies the issues on which IPART seeks stakeholder comment. Stakeholders (including State Water) may address all or some of these issues in their submissions, and are also free to raise and discuss any other issues that they feel are relevant to this review. A full list of these issues is provided below:

- | | | |
|---|---|----|
| 1 | The appropriateness of State Water’s proposed service levels for the forthcoming determination period. | 16 |
| 2 | The appropriateness of State Water’s forecast operating costs for the 2010 determination period, including the approach taken to allocate indirect operating costs (such as corporate overheads) between valleys. | 20 |
| 3 | Whether there is scope for State Water to achieve further efficiency gains over the 2010 determination period. | 20 |
| 4 | The information provided by State Water on its past and forecast capital expenditure, and the prudence and efficiency of this expenditure. | 23 |
| 5 | An appropriate rate of return to apply on State Water’s RAB and the means of estimating this rate. | 26 |
| 6 | Whether it is appropriate to address State Water’s revenue risk by adjusting the WACC. | 26 |

7	The implications of transferring pricing responsibility from IPART to the ACCC for the Murray Darling Basin and any transitional arrangements that IPART might put in place to ensure a smooth transition.	26
8	The appropriateness of State Water's proposed approach to depreciation, asset classes and lives.	27
9	Appropriate output measures for the 2010 determination period. These should be aligned to projects or activities that State Water plans to undertake over the forthcoming determination period.	28
10	The usefulness of valley-based reports.	28
11	Whether the cost sharing approach used in the 2006 Determination remains appropriate.	32
12	State Water's consumption forecasts, as outlined in its submission.	35
13	The implications for prices and for State Water's financial viability of continued reduced water availability.	35
14	The appropriate approach to translate users' share of the revenue requirement into State Water's prices.	36
15	What transitional path and rate of increase is reasonable for prices in valleys where prices are not yet at full cost recovery level.	36
16	Options for meeting the cost of providing water in valleys in which cost reflective prices may not be practical.	37
17	The appropriate balance between fixed and usage charges.	39
18	The impact of State Water's proposed prices on its customers.	39
19	The appropriateness of introducing a mechanism, such as scarcity pricing, to address State Water's revenue volatility; and a different sharing of revenue risks between irrigators and State Water.	39
20	Whether there are any practical limitations that would need to be considered if a form of scarcity pricing was introduced.	39
21	The appropriateness of State Water's proposal to recover the cost of meter service provision.	40
22	Whether consumers support the continuation of the Yanco Creek Levy.	40
23	Whether consumers support the introduction of other levies.	40
24	Whether it is appropriate to maintain rebates to irrigation companies and districts (ICDs).	41
25	The level of these rebates, if appropriate, and justification for this position.	41
26	The appropriate balance between high security and general security entitlement prices.	42
27	The appropriate length for the 2010 determination period.	43

1.7 What does the rest of this paper cover?

The rest of this paper provides background information on State Water and how it is regulated, and discusses the issues IPART will need to consider in detail in the review. It is structured as follows:

- ▼ Chapter 2 outlines the role of State Water and other agencies in providing bulk water services and the regulatory framework for State Water.
- ▼ Chapter 3 explains how IPART will determine State Water's efficient costs for the 2010 determination period using the building block method, and discusses the steps in this method and the key issues to be considered for each step.
- ▼ Chapter 4 discusses how IPART will decide what share of these efficient costs should be recovered from extractive users through prices and what share should be funded by the NSW Government (on behalf of the community).
- ▼ Chapter 5 outlines how IPART will set prices to recover users' share of the efficient costs, and discusses the key issues related to this including forecasting water sales, setting prices, achieving cost reflective prices, determining the appropriate price structure, setting other charges, levies and rebates, balancing high and general security entitlement charges, and deciding on the length of the determination period.

2 State Water's role and regulatory framework

In regulating State Water's bulk water prices, IPART aims to set prices so they recover the costs incurred by State Water in making available and supplying bulk water to extractive users. The sections below explain the source of these costs by outlining the role of State Water and its river operation activities. The final section provides an overview of State Water's general regulatory framework.

2.1 State Water's role

State Water is a statutory state-owned corporation which operates under the *State Water Corporation Act 2004* (the Act). State Water's river operation activities relate to those activities undertaken to provide bulk water to users on regulated rivers. Section 6 of the Act sets out State Water's principal functions as:

- ▼ to capture and store water and to release water to persons entitled to take the water, for the purposes of flood management, and for any other lawful purpose, including the release of environmental water
- ▼ to construct, maintain and operate water management works
- ▼ any other functions conferred or imposed on it by the operating licence or under this Act or any other act or law.

This section of the Act also empowers State Water to:

- ▼ provide facilities or services that are necessary, ancillary or incidental to its principal functions
- ▼ conduct any business or activity (whether or not related to its principal functions) that it considers will further its objectives.

State Water's statutory objectives are outlined in Box 2.1.

Box 2.1 State Water's objectives under the State Water Corporation Act^a

- ▼ To capture, store and release water in an efficient, effective, safe and financially responsible manner.
- ▼ To be a successful business.
- ▼ To exhibit a sense of social responsibility by having regard to the interests of the community in which it operates.
- ▼ Where its activities affect the environment, to conduct its operations in compliance with the principles of ecologically sustainable development contained in Section 6 (2) of the *Protection of the Environment Administration Act 1991*.
- ▼ To exhibit a sense of responsibility towards regional development and decentralisation in the way in which it operates.

Note:

- a Section 5.
-

2.2 Scope of State Water's river operation activities

State Water's area of operations is defined in the *State Water Corporation Act 2004* as the whole of NSW, other than the areas of operations of Sydney Water Corporation, Sydney Catchment Authority, Hunter Water Corporation and the area of operations of any other water supply authority.¹⁰ State Water's area of operations is shown in Figure 2.1.

State Water provides services to around 6,200 customers including irrigation corporations, country town water supply authorities, farms, mines and electricity generators. It also meets community needs by providing water for stock and domestic users. The business is also responsible for delivering environmental flows on regulated rivers.

State Water operates 20 dams and more than 280 weirs and associated assets on regulated rivers. State Water's bulk water supply system delivers about 5,500GL per annum of bulk water to irrigators, industry, town water supplies and other bulk water users.¹¹ In addition to these water releases State Water also releases about 9,000GL per annum for environmental flows.¹²

State Water is responsible for the Fish River Water Supply Scheme (Fish River Scheme) which was a government trading enterprise that operated as a bulk water supplier on the Fish River until 2005. The Fish River Scheme sources water from

¹⁰ Section 15.

¹¹ Some environmental trusts purchase a portion of this 5,500GL of bulk water on the open market which can be released for their specific environmental purposes such as delivery to wetland sites.

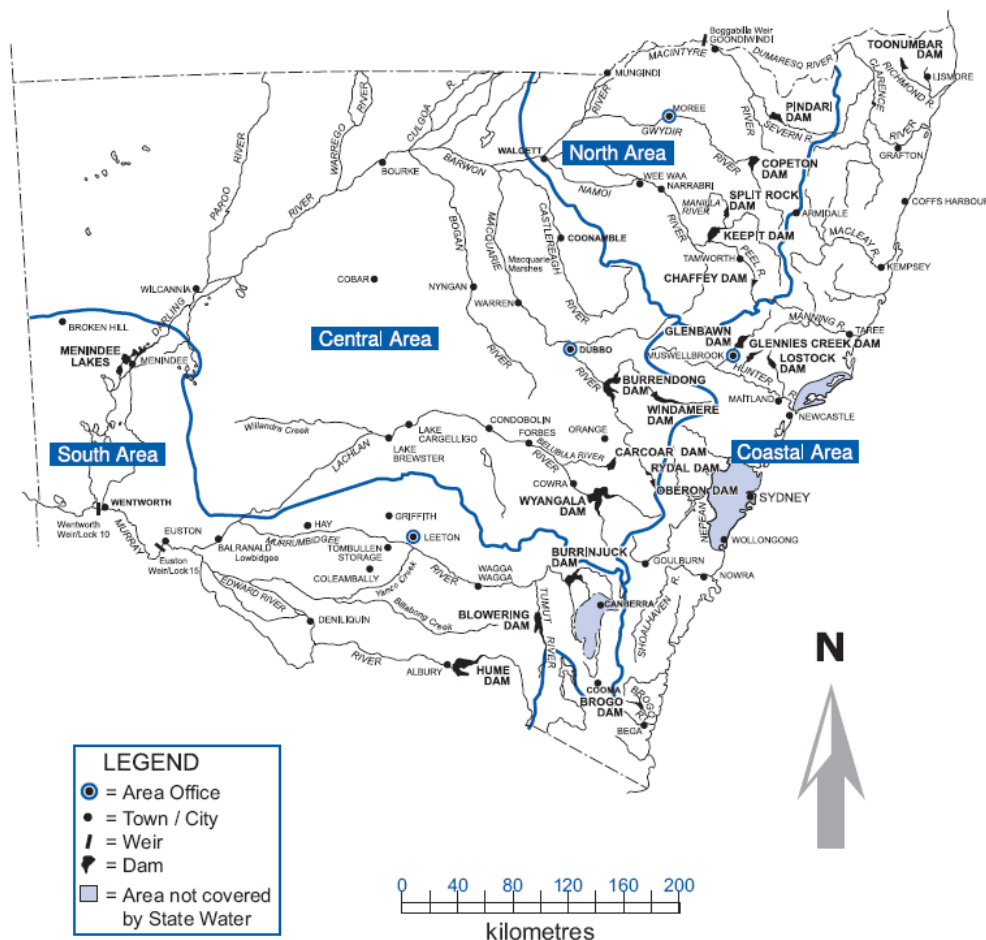
¹² State Water Corporation, *07-08 Annual Report*, p 4.

Oberon Dam and supplies bulk water to four major customers – Delta Electricity, Lithgow City Council, Oberon Council and the Sydney Catchment Authority. It also provides water to approximately 240 smaller customers. These smaller customers include farmers (not irrigation) and some industrial customers (eg, collieries) who use the water for domestic purposes (such as showers, toilets). The water is supplied to customers through pipes.

The Fish River Scheme is geographically separate from State Water's other assets and is not subject to a water sharing plan, and customers do not have an entitlement similar to customers in other river valleys. While there is the possibility that the scheme will be subject to a water sharing plan, this is not likely to occur for some time. Customers in the scheme currently have contracts with State Water to supply them with water.

In previous reviews, IPART has set valley-based prices for each of the regulated rivers. IPART has historically considered the Fish River Scheme as a separate valley for pricing purposes.

Figure 2.1 State Water's area of operations



Source: State Water Annual Report 2007-08.

2.3 Water resource management

Water resource management (WRM) activities arise from the need to manage a resource that is being used by a wide range of groups. The overriding aim of the WRM activities is to ensure the long-term sustainability of the resource, to allow continued water extraction and maintain the health of the natural ecosystem. Most of these activities are performed by the Department of Water and Energy (DWE), while some are performed through the Murray-Darling Basin Authority (MDBA) and the Dumaresq-Barwon Border River Commission (BRC) on behalf of State Water.

2.3.1 DWE

DWE's primary role in regard to WRM is to ensure that water resources are managed optimally for the community as a whole. According to DWE, its overriding WRM objective is to achieve "secure and sustainable allocation of water between communities, industry, farmers and the environment."¹³ DWE's WRM activities include:

- ▼ negotiating with other States and the Commonwealth on interstate water sharing arrangements
- ▼ developing water sharing plans under the *Water Management Act 2000*, which specify the rules for each river system for sharing water between the environment and extractive users
- ▼ administering water licences and approvals, assessing resource availability, allocating available water to licensees, monitoring compliance and, where necessary taking appropriate enforcement action
- ▼ advising on plans and strategies for the protection and enhancement of water courses, riparian corridors and groundwater dependent ecosystems.¹⁴

IPART is currently reviewing the charges for DWE's activities on regulated and unregulated rivers and groundwater. Discussion on these matters is contained in a separate issues paper, expected to be released at the end of July. Water entitlement holders on regulated rivers will be required to pay for DWE's WRM activities as well as for State Water's services.

In 2008, IPART conducted its end of term review of State Water's operating licence.¹⁵ As part of this review, IPART considered the split of responsibilities between State Water and DWE for bulk water services. These responsibilities are articulated in State Water's operating licence, DWE's Valley Works Approvals and service level agreements between State Water and DWE.

¹³ Department of Water and Energy, *Corporate Plan 2007-2010*, November 2007, p 10.

¹⁴ DWE, *Annual Report 2007-2008*, October 2008, p 2.

¹⁵ IPART, *State Water Corporation Operational Audit 1 July 2006 - 24 June 2008 Report to the Minister Water, Compliance Report*, December 2008.

IPART will again consider the split of these responsibilities in setting prices for State Water and DWE in making the 2010 determination. If there are any changes in responsibilities since the recent operating licence review, IPART expects clear contractual arrangements between the two agencies to be in place.

IPART seeks information from State Water on:

- 1 Whether service agreements between State Water and DWE have changed since the 2008 end of term review of State Water's operating licence.

2.3.2 MDBA and BRC

The MDBA and the BRC are cross-jurisdictional bodies that have responsibility for coordinating and managing WRM activities from a 'whole of system' perspective where the issues involve more than one state. These include activities such as monitoring water quality, managing ground water, monitoring bores and developing/implementing salinity mitigation strategies.

The MDBA assumed responsibilities for the Murray Darling Basin Commission (MDBC) in December 2008. In addition, the MDBA is responsible for preparing the Basin Plan, a strategic plan for the integrated and sustainable management of water resources in the Murray Darling Basin. The first Basin Plan is expected to commence in 2011, which will coincide with the 2010 determination period.

The costs of managing and maintaining assets under these arrangements are jointly paid for by the signatory states. The costs are then allocated to each state in a proportion defined under the terms of the agreement. The NSW Government pays the NSW share of these costs to the MDBA and the BRC. The portion attributed to regulated rivers in NSW is allocated to State Water. State Water includes these costs in the cost information it submits to the price review so they can be recovered through its bulk water prices.

IPART noted difficulties in determining the efficient costs to be paid by State Water for the MDBC in the last review.¹⁶

IPART seeks information from State Water on:

- 2 The costs allocated to State Water for the MDBA and the BRC and the uncertainties and risks in assessing these costs.
- 3 If and how State Water proposes to account for changes that may flow from the Basin Plan in prices.

¹⁶ 2006 Determination, p 28.

2.4 Regulatory framework

State Water operates under a regulatory framework similar to those of Hunter Water, Sydney Water and the Sydney Catchment Authority. In addition to the State Water Corporations Act and the IPART Act, there are a number of other applicable laws imposing obligations on State Water. Some of these include:

- ▼ *Water Management Act 2000*
- ▼ *Water Act 1912*
- ▼ *Environmental Planning and Assessment Act 1979*
- ▼ *State Owned Corporations Act 1989*
- ▼ *Dams Safety Act 1978*
- ▼ *Fisheries Management Act 1994*
- ▼ *Public Health Act 1991.*

State Water must also comply with its operating licence administered by the portfolio Minister and is subject to annual audits of its performance against the terms and conditions of this licence. The revised operating licence commenced on 24 June 2008 and will expire on 24 June 2013.

The 2010 review will need to consider the obligations imposed on State Water and the implications that these obligations have on State Water's bulk water business. Changes to State Water's obligations, such as the recent changes to its licence, may result in changes to State Water's costs.

IPART seeks information from State Water on:

- 4 Variations in costs caused by changes to its regulatory environment.
- 5 The risks or uncertainties in State Water's operating environment over the forthcoming determination period and beyond, including the nature of these risks/uncertainties and the likelihood of these impacting on specific costs (for example, continuing drought conditions, electricity charges).

IPART seeks comments from stakeholders on:

- 1 The appropriateness of State Water's proposed service levels for the forthcoming determination period.

3 Establishing efficient costs

As Chapter 1 indicated, one of the key steps in IPART's proposed approach for this review will be to determine the efficient costs State Water is expected to incur over the 2010 determination period in meeting its regulatory and other obligations and customers' expectations, and ensuring that it can continue to do so in the future.

To determine these efficient costs, IPART will seek detailed information on State Water's actual and forecast operating and capital expenditure and the drivers of this expenditure for the 2006 and 2010 determination periods. IPART will also consider what the proposed expenditure will imply for overall service quality and performance. In addition, it will seek expert advice on the efficiency of this expenditure and the scope for efficiency improvements over the 2010 determination period.

As for the 2006 Determination, IPART will then use the building block approach to determine State Water's notional revenue requirement for each year of the determination period. The section below provides an overview of the building block approach. The subsequent sections discuss the main steps involved in applying the method.

3.1 The building block approach to determining revenue requirement

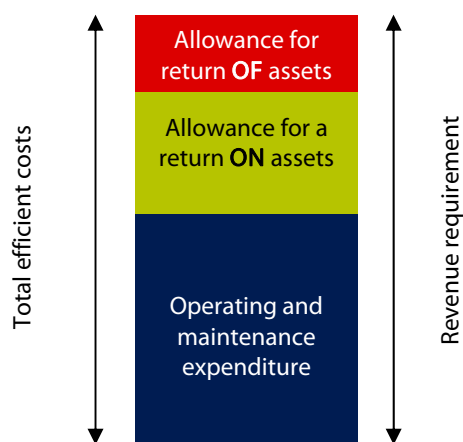
Using the building block approach to determine State Water's notional revenue requirement will ensure that the full, efficient costs of providing its regulated services are measured and monitored in a rigorous and transparent way. It is also consistent with the approach IPART uses in regulating other water businesses and industries in NSW.

To apply the building block approach, IPART needs to make decisions on:

- ▼ The revenue required for operating expenditure over the determination period, including the forecast efficient operating, maintenance and administration costs plus an allowance for working capital.
- ▼ The revenue required for capital investment over the determination period. This comprises two building blocks:
 - an allowance for a return on the assets used in providing the regulated services
 - an allowance for a return of these assets (regulatory depreciation).

The sum of these amounts represents IPART's view of State Water's total efficient costs over the determination period, or its notional revenue requirement (Figure 3.1).

Figure 3.1 Building block approach



The allowance for a return on capital represents IPART's assessment of the opportunity cost of the capital invested in the business by State Water. Providing a return on capital ensures that shareholders receive appropriate compensation for committing capital to the business and bearing the risks associated with the business. It also ensures that efficient investment in capital will continue into the future to renew infrastructure and provide for growth.

The allowance for regulatory depreciation recognises that through the provision of services to customers, State Water's capital infrastructure will wear out and that an efficiently operating business will allow for the cost of maintaining its capital base.

Both these allowances are calculated with reference to State Water's regulated asset base (RAB). The RAB is the asset base maintained for the purposes of setting regulated prices, and can be different to the total value of State Water's assets. To determine these allowances, IPART will need to:

- ▼ calculate the annual value of the RAB over the 2010 determination period by rolling the opening value forward to the end of this period
- ▼ decide on an appropriate rate of return on assets for State Water, and multiply the annual value of the RAB by this rate (to give the allowance for a return on assets)
- ▼ decide on the appropriate depreciation method and asset lives for State Water's existing and new assets, then calculate the allowance for regulatory depreciation by dividing the RAB by the weighted average asset lives.

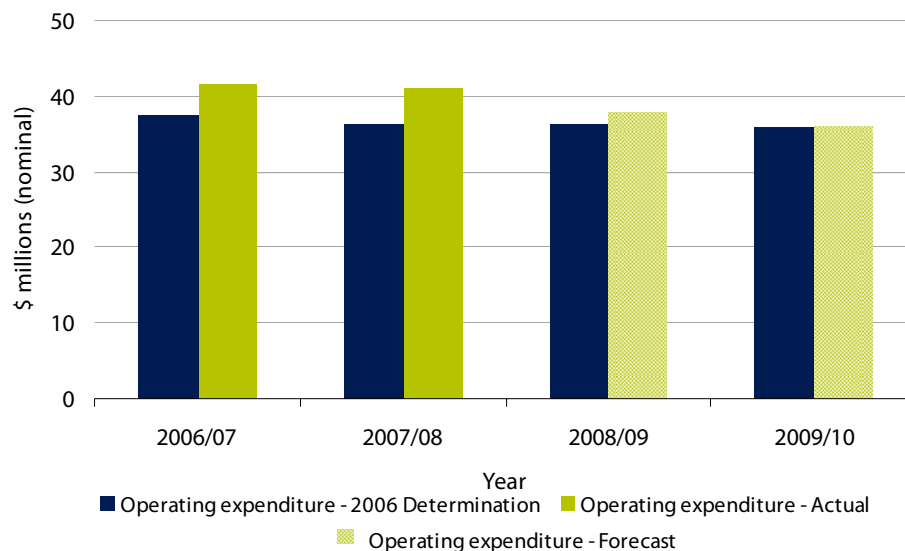
3.2 Revenue required for operating expenditure

Operating expenditure includes all expenditure related to the operation, maintenance and administration of State Water's business of providing bulk water services. These costs include labour, materials, contracting and energy costs.

As for the 2006 Determination, IPART will review State Water's estimates of its forecast operating expenditure over the 2010 determination period and the potential for efficiency gains. IPART will also engage an independent consultant to review State Water's actual operating expenditure over the 2006 determination period and its forecast operating expenditure over the 2010 determination period. The review will assess the efficiency of this expenditure and the scope for efficiency gains. The information provided by State Water and the consultants will be used in conjunction with IPART's own analysis to determine appropriate levels of future operating expenditure.

Preliminary information provided by State Water indicates that its actual operating expenditure over the 2006 determination period was fairly similar to the expenditure IPART allowed for in making that determination, particularly in the last two years of the period (Figure 3.2).

Figure 3.2 State Water's actual operating expenditure compared to the expenditure IPART allowed for in making the 2006 Determination (\$ millions, nominal)



Data source: IPART 2006 Determination and data from State Water, 11 June 2009.

IPART seeks information from State Water on:

- 6 State Water's operating expenditure over the 2006 determination period, the drivers of this expenditure and the service outcomes achieved.
- 7 State Water's operating expenditure over the 2006 determination period compared to expenditure allowed by IPART when it set prices for the 2006 Determination and an explanation of variances.
- 8 State Water's forecast operating expenditure over the 2010 determination period, including drivers and justifications for this expenditure, expected service outcomes, specific efficiency programs and the potential for efficiency gains by year and by valley.
- 9 Details of the portion of the MDBA and BRC operating costs attributed to regulated rivers in NSW and valley allocations. IPART expects that the method for allocating these costs will be robust and transparent.
- 10 Steps taken to 'ring fence' any non-regulated costs and revenues.¹⁷

IPART seeks comment from stakeholders on:

- 2 The appropriateness of State Water's forecast operating costs for the 2010 determination period, including the approach taken to allocate indirect operating costs (such as corporate overheads) between valleys.
- 3 Whether there is scope for State Water to achieve further efficiency gains over the 2010 determination period.

3.3 Opening value of the RAB at the start of the 2010 determination, and its annual value over this period

To determine the opening value of the RAB at the start of the 2010 determination period, and its annual value over this period, IPART intends to conduct two assessments of capital expenditure – an assessment of actual capital expenditure undertaken over the 2006 determination period and an assessment of capital expenditure proposed for the 2010 determination period.

IPART will examine whether State Water's decisions to invest any amounts over the 2006 determination period were ones that the agency, acting efficiently and prudently, would have been expected to make given the circumstances that existed and the information that was available at the time. IPART will examine whether State Water's proposed capital expenditure represents the best way of meeting service needs (over the life of the asset).

¹⁷ State Water undertakes other income-earning activities not subject to regulation by IPART, such as hydroelectricity generation, rental of cottages and accommodation charges at dams. IPART expects that the costs provided for in the determination of bulk water charges will exclude the costs associated with these activities.

Capital expenditure incurred during the current determination period that is deemed efficient in light of the circumstances that existed at the time will be rolled into the RAB. Capital expenditure that State Water proposes to incur over the forthcoming determination period will go into State Water's allowance for capital expenditure if it is deemed to be efficient.

In addition, IPART will make other adjustments to the value of the RAB – for example, to account for actual and forecast asset disposals, depreciation and inflation over the 2006 and 2010 determination periods.

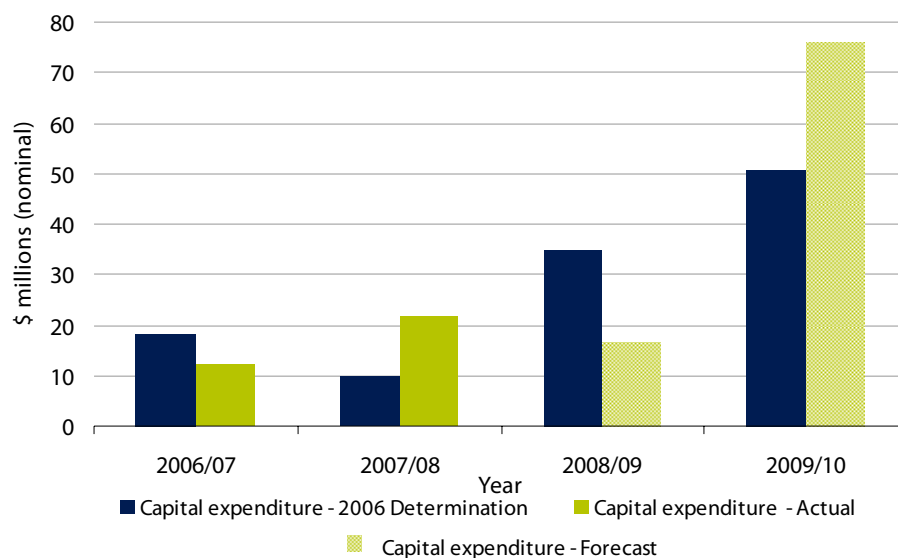
3.3.1 Past and forecast capital expenditure

IPART seeks detailed information from State Water on its actual capital expenditure during the 2006 determination period and its proposed capital expenditure over the 2010 determination period. This information should clearly:

- ▼ explain the drivers of this expenditure (eg, higher environmental standards, governance requirements, community requirements)
- ▼ explain the rationale or business case justifying the expenditure
- ▼ indicate the actual and expected outcomes of expenditure, including achievements in terms of service quality and improved performance
- ▼ demonstrate that any discretionary capital expenditure aims to achieve outcomes that are supported by users and/or the community
- ▼ demonstrate that the proposed capital expenditure program is consistent with State Water's Total Asset Management Plan (TAMP)
- ▼ detail the MDBA and BRC capital costs attributed to regulated rivers in NSW over this period which are to be recovered from users.

Preliminary information provided by State Water indicates that its actual capital expenditure over the 2006 determination period varied considerably from the expenditure forecast at the time of the 2006 review (Figure 3.3). State Water's submission should also explain the reasons for this variance.

Figure 3.3 State Water actual and forecast capital expenditure compared to the 2006 Determination (\$ millions, nominal)



Data source: IPART 2006 Determination and data from State Water, 11 June 2009.

As indicated above, IPART intends to engage an independent consultant to assist it with its assessments of State Water's capital expenditure. In particular, it will ask the consultant to review the information provided by State Water and make recommendations on:

- ▼ the prudence and efficiency of its actual capital expenditure over the 2006 determination period, in light of the circumstances that existed and information available at the time
- ▼ the efficiency, timing and necessity of its proposed capital expenditure for the 2010 determination period and whether there is potential for any efficiency gains
- ▼ the portion of the MDBA and BRC capital costs attributed to NSW.

IPART will need to consider whether State Water's capital expenditure meets users' and regulatory requirements for supplying bulk water services. It will be looking for evidence that State Water has well-developed and sound asset management practices and plans in place, and that capital expenditure programs are based on a robust asset management framework and sound investment appraisals. It will also be seeking assurance that the critical infrastructure of the business is not being run down.

IPART seeks information and explanation from State Water on:

- 11 State Water's actual capital expenditure over the 2006 determination period, the drivers of this expenditure and the outcomes achieved.
- 12 State Water's actual capital expenditure over the current determination period compared to expenditure allowed by IPART in 2006, and an explanation of variances.

- 13 State Water's forecast capital expenditure program over the 2010 determination period, the drivers of this expenditure, the expected service outcomes to be achieved (by year and by valley), and scope for efficiency gains.
- 14 How discretionary capital expenditure is aimed at achieving outcomes that are supported by users and/or the community.
- 15 State Water's asset management practices and plan, and the relationship between its asset management framework and its capital expenditure program.
- 16 Details of the portion of the MDBA and BRC capital costs attributed to regulated rivers in NSW. IPART expects that the method for allocating these costs will be robust and transparent.

IPART seeks comment from stakeholders on:

- 4 The information provided by State Water on its past and forecast capital expenditure, and the prudence and efficiency of this expenditure.

3.3.2 Other adjustments to the RAB

Prior to 2006, IPART used an annuity approach to estimate State Water's revenue requirements. When it adopted the building block method for the 2006 Determination, IPART needed to establish a value for State Water's RAB. It did this by:

- ▼ Setting an opening RAB as of 1 July 2004. This initial RAB was allocated between users and the Government. The user share of the RAB was allocated across valleys in accordance with the 2001 Determination¹⁸ allowance for annuities by valley.
- ▼ Rolling forward actual prudent capital expenditure incurred over the period from 1 July 2004 to 30 June 2006 (net of capital contributions).
- ▼ Deducting estimated regulatory depreciation.
- ▼ Deducting actual/forecast asset disposals and capital contributions from sources other than State Water (eg, government grants).
- ▼ Indexing the annual closing regulatory asset base for actual/forecast inflation.

For the current determination, IPART intends to maintain this approach for rolling forward the RAB set in the 2006 Determination.

IPART seeks information from State Water on:

- 17 The value and timing of the capital contributions received and assets disposed of over the 2006 Determination, and forecast over the 2010 period.

¹⁸ IPART, *Department of Land and Water Conservation - Bulk Water Prices from 1 October 2001, December 2001* (the 2001 Determination).

3.4 Return on capital

To determine the allowance for a return on capital, IPART will need to multiply the annual value of the RAB over the 2010 determination period (determined as described above) by an appropriate rate of return.

For the 2006 Determination, IPART used the real pre-tax weighted average cost of capital (WACC) to determine an appropriate range for the rate of return. It then made a judgement on what point within this range was appropriate for State Water's rate of return.

The WACC is the weighted average of the cost of debt and equity. There are a number of input parameters to consider in determining an appropriate WACC range. Interest rates, inflation adjustment and debt margin are dependent on current market rates. The market risk premium, tax rate and dividend imputation factor do not vary with the nature of the business. However, the equity beta, capital structure and debt margin vary with the nature of the business.

Table 3.1 below shows the final input parameters IPART adopted in determining the WACC range for recent decisions in the water industry. It indicates that there has been a wide variation in the WACC range that IPART has determined over the years. This is not surprising given that some parameters are based on market observations. Table 3.1 also highlights a very high degree of consistency for parameters that are not directly observable from market data. Such inter-temporal consistency reduces regulatory risk and its associated costs.

Table 3.1 Input parameters IPART adopted in determining the WACC range in recent past decisions

Parameter	2009 Metro water ^a	2008 Sydney Water	2006 Bulk water	2005 Metro water	2003 Metro water
Nominal risk free rate	4.3%	6.1%	5.8%	5.2%	5.1%
Real risk free rate	NA ^b	2.4%	2.4%	2.6%	2.9%
Inflation adjustment	2.5%	3.6%	3.3%	2.5%	2.2%
Market risk premium	5.5% - 6.5%	5.5 - 6.5%	5.5 - 6.5%	5.5 - 6.5%	5.0 - 6.0%
Debt margin	2.8% - 3.5%	3.1 - 3.7%	1.1 - 1.3%	1.2 - 1.3%	0.7 - 1.0%
Debt to total assets	60%	60%	60%	60%	60%
Dividend imputation factor (gamma)	0.5 - 0.3	0.5 - 0.3	0.5 - 0.3	0.5 - 0.3	0.5 - 0.3
Tax rate	30%	30%	30%	30%	30%
Equity beta	0.8 - 1.0	0.8 - 1.0	0.8 - 1.0	0.8 - 1.0	0.65 - 0.90
WACC range (real pre-tax)	5.7% - 7.5%	6.8 - 8.4%	5.5 - 6.9%	5.7 - 7.1%	5.2 - 6.7%
WACC (real pre-tax) point estimate	6.5%	7.5%	6.5%	6.5%	5.6%

^a Gosford City Council, Wyong Shire Council, Hunter Water Corporation.

^b Not required when using swap market data.

IPART recognises that there has been significant volatility in financial markets recently and there is likely to be continued volatility in the near future. This has affected market-based parameters including the risk free rate, the inflation adjustment and the debt margin. To address these issues, IPART has released discussion papers seeking comment on alternative approaches to estimating the inflation adjustment and the debt margin.¹⁹

To date, IPART has released its final decision on the approach to adjusting for expected inflation. IPART decided to use swap market data to estimate the inflation adjustment to the cost of capital in future WACC decisions, and use the appropriate breakeven inflation rates and economists' forecasts of inflation as a cross-check.²⁰ This removes the need to estimate the real risk free rate from market data. IPART's consultation on the debt margin is expected to be completed in July 2009. Any revision to the approach of estimating the debt margin will be considered in this review of State Water's prices.

IPART recognises that higher usage charges transfer significant risk from users to State Water. Conversely, higher fixed charges reduce State Water's risk, transferring it to users. In the 2006 Determination, IPART considered possible approaches to addressing the revenue volatility faced by State Water arising from variations between actual and forecast water usage. One option was to adjust the value of the equity beta. However, this raises the issue that the beta represents systematic or non-diversifiable risk, and revenue volatility due to climatic conditions does not generally fall into this category. Another option was to adjust the WACC within the range. Under this option, a WACC value above (below) the midpoint of the range would be chosen if a low (high) fixed charge was adopted.

IPART did not consider that it was appropriate to adjust prices to mitigate revenue risk in the 2006 Determination. However, since that time, State Water has faced significant shortfalls in revenue due to the difference between the expected and actual levels of water available and the emphasis placed on usage charges. IPART will again consider the balance of risk between users and State Water when setting the WACC and consider whether the WACC should vary according to price structure and revenue risk.

¹⁹ IPART, *Adjusting for expected inflation in deriving the cost of capital - Discussion Paper*, February 2009 and IPART, *Estimating the debt margin for the weighted average cost of capital - Discussion Paper*, May 2009.

²⁰ IPART, *Adjusting for expected inflation in deriving the cost of capital - Final Decision*, May 2009, p 2.

As Chapter 1 discussed, responsibility for regulating bulk water prices in the Murray Darling Basin is expected to be transferred from IPART to the ACCC after the 2010 determination has been made. IPART notes that there may be implications for State Water's costs and revenues from changes in regulatory approaches. In relation to the WACC calculations, IPART notes four key differences between IPART's and the ACCC's approach:

- ▼ IPART generally calculates the WACC on a pre-tax basis; the ACCC generally models the WACC on an after-tax basis
- ▼ IPART uses a real WACC; the ACCC uses a nominal WACC
- ▼ IPART generally uses the statutory tax rate in its determinations whereas the ACCC generally uses the effective tax rate, which varies from business to business
- ▼ IPART uses a gamma of 0.3 to 0.5; the ACCC uses a gamma of 0.5 and the Australian Energy Regulator (AER) determined a value for gamma of 0.65 in its recent determination for electricity transmission and distribution businesses.

The first two of these differences are largely presentational. However, the last two affect the outcomes. IPART's approach leads to a higher return on assets.

IPART seeks comment from stakeholders on:

- 5 An appropriate rate of return to apply on State Water's RAB and the means of estimating this rate.
- 6 Whether it is appropriate to address State Water's revenue risk by adjusting the WACC.
- 7 The implications of transferring pricing responsibility from IPART to the ACCC for the Murray Darling Basin and any transitional arrangements that IPART might put in place to ensure a smooth transition.

3.5 Depreciation method and asset lives

To calculate the allowance for regulatory depreciation, IPART needs to make decisions on the expected or assumed life of the assets included in State Water's RAB and the appropriate method for depreciating those assets. For the 2006 Determination, it set asset lives for new and existing assets and used the straight line depreciation method.²¹ With this method, the total value of the RAB is recovered evenly over the assumed life of the assets.

For this price determination, IPART will consider the depreciation methodology and asset lives used to calculate the depreciation allowance. IPART will assess the option of adopting an alternative approach to depreciation for this review. IPART will make its decision on the depreciation method based on the relative merits of using the straight line depreciation method against alternative depreciation methods and consider whether it is appropriate to maintain existing asset lives and classes.

²¹ 2006 Determination, p 92.

IPART seeks information from State Water on:

- 18 Any changes proposed by State Water to the calculation of depreciation, including the approach to depreciation, asset classes and lives and the assumptions used to determine these.

IPART seeks comment from stakeholders on:

- 8 The appropriateness of State Water's proposed approach to depreciation, asset classes and lives.

3.6 Output measures

In the 2006 review, the independent consultants IPART engaged to assess State Water's operating and capital expenditure (PB Associates) identified a number of deficiencies regarding the standard of services provided and the transparency of costs. In its final report on the 2006 Determination, IPART indicated that it expected State Water to address these deficiencies over the 2006 Determination period and that it would be reluctant to allow for higher levels for expenditure in the 2010 determination unless State Water could demonstrate substantial progress in this area.²²

State Water's service standards are monitored as part of its operating licence, which requires it to achieve some minimum service standards. In addition, the 2006 Determination set out a list of reporting obligations to improve the transparency of State Water's costs and enable IPART and other stakeholders to monitor the outputs and outcomes that it delivered during the determination period (see Box 3.1). Over the 2006 determination period, State Water has developed systems to fulfil these reporting obligations, and has provided IPART with several valley-based reports which are published on IPART's website. These reports provide a greater degree of transparency by enabling stakeholders to monitor delivery against forecast outputs and outcomes.

For this review, IPART will consider the levels of capital and operating expenditure over the 2006 determination period against the outputs and service standards achieved. IPART will designate a series of output measures that can be used by the ACCC and users to assess State Water's progress against this determination.

IPART seeks from State Water a list of capital projects or activities that it plans to undertake over the 2010 determination period. IPART intends to revise State Water's reporting obligations to reflect the nature of this expenditure program.

IPART seeks information and explanation from State Water on:

- 19 State Water's performance against reporting obligations over the 2006 determination period.

²² 2006 Determination, p 10.

IPART seeks comment from stakeholders on:

- 9 Appropriate output measures for the 2010 determination period. These should be aligned to projects or activities that State Water plans to undertake over the forthcoming determination period.
- 10 The usefulness of valley-based reports.

Box 3.1 State Water's reporting obligations

IPART's 2006 Determination^a sets out a list of reporting obligations so that stakeholders can monitor delivery against forecast outputs and outcomes:

State Water is to provide Customer Service Committees with valley based reports on a six monthly basis. The valley based reports should include:

- ▼ revenue collected from water charges
- ▼ operating expenses separately identified by activity/product codes
- ▼ capital works expenditure separately identified by activity/product codes
- ▼ current year budget, year to date expenditure/revenues
- ▼ FTE staff reports (for the IPART regulated component of the business), including details of all new positions filled for the reporting period and vacancies unfilled.

State Water is to provide IPART and Customer Service Committees on an annual basis the following information:

- ▼ audited consolidated and valley-based financial accounts (Profit/Loss Statement, Balance Sheet) that reconcile with the regulated component of the business and identify the Government's financial contributions
- ▼ valley statements as described above that also include head office costs allocated to the valleys and the apportionment process used
 - explaining the variation between actual operating/capital expenditure and budgeted expenditure
 - forecast operating and capital expenditure budgets for the following financial year
- ▼ compliance with Water Sharing Plans
- ▼ water use penalties and enforcement action undertaken (subject to confidentiality).

Note:

- a** 2006 Determination, Appendix 8.
-

4 Allocating efficient costs between users and the community

Some of State Water's efficient costs are incurred as a result of extractive users, while others relate to the broader community. For this reason, IPART does not set bulk water prices to recover all the efficient costs incurred by State Water. Rather it determines how these costs should be shared between users and the Government (on behalf of the community), and sets prices to recover the extractive users' share.

IPART's objective in determining the cost shares is to ensure, as far as possible, that extractive users and the community both pay a fair share of the efficient costs of managing the bulk water system.

The sections below outline the approaches IPART has used in previous bulk water determinations for allocating costs between users and the Government, and IPART's proposed approach for the 2010 Determination.

4.1 Approaches used in previous determinations

IPART's approach to cost allocation in previous determinations has been to establish general principles to guide the allocation of costs for each specific activity undertaken by State Water.²³ There are two broad principles used for determining how costs should be shared – the 'impactor pays' approach and the 'beneficiary pays' approach.

The 'impactor pays' approach seeks to allocate costs to different individuals or groups in proportion to the contribution that each individual or group makes to creating the costs (or the need to incur the costs). The impactor is defined as any individual or group of individuals whose activities generate the costs or a justifiable need to incur the costs that are to be allocated.

The 'beneficiary pays' approach seeks to allocate costs to different individuals or groups in proportion to the benefits that each individual or group stands to derive from the costs being incurred. The beneficiary is defined as any individual or group of individuals who derive benefits from the costs that are to be allocated. These benefits may result from their own use of the services involved (in which case the beneficiary is also the impactor) or be in the form of reduced damage to their

²³ See for example 2006 Determination, p 36.

interests due to the usage patterns of others. In the latter case the beneficiary is sometimes referred to as the victim.

For the 2001 review, IPART engaged ACIL Consulting to review State Water's costs, and to provide a framework for allocating these costs between users and the Government. ACIL Consulting developed a conceptual framework for allocating costs that was weighted towards an 'impactor pays' approach and which excluded 'legacy costs'.²⁴ Under the framework, State Water's total costs were broken down according to their associated key 'products' or activities (such as dam safety compliance and water quality monitoring). Within each of these products or activities, legacy costs were allocated fully to the Government. Future expenditure that related to current or future users was allocated according to which party (users or the community) created the costs or the need to incur the costs (impactor pays).

For the 2006 review, IPART engaged the Centre for International Economics (CIE) to recommend appropriate cost sharing ratios, building on the cost sharing principles established for the 2001 Determination. CIE reviewed these principles. CIE concluded that:

...the Tribunal's principles with respect to cost share allocations [are] appropriate and robust enough to be applied to...the activities of the newly corporatised [State Water].²⁵

The 2006 Determination maintained most of the user-cost share ratios used in the 2001 Determination. The ratios adopted in the 2001 and 2006 Determinations are shown in Table 4.1.

4.2 Proposed approach for this review

IPART continues to favour the 'impactor pays' approach for several reasons:

- ▼ It ensures that water users face all of the costs of their activities, including any environmental costs that are a consequence of those activities. This is consistent with intergovernmental agreements on cost recovery.
- ▼ It is more straight forward to apply in practice than the beneficiary pays approach. Formally assessing the benefits to different stakeholder groups to determine the cost shares is likely to be much more difficult.

IPART seeks comment on whether the cost allocation principles developed in previous determinations continue to provide a robust basis for the current review. The 2006 Determination thoroughly investigated the ratios for cost allocation for each product and activity. State Water or other stakeholders may consider that there has

²⁴ Legacy costs involve current and future costs that are attributable to the past that, on equity grounds, are fully borne by Government and therefore not shared with current or future users. For the purposes of implementation, IPART drew a 'line in the sand' at July 1997 for assessing liability for cost recovery.

²⁵ Centre for International Economics, *Review of cost sharing ratios – Analysis in support of 2006 Bulk Water Price Review*, p 23.

been a change in circumstances since the 2006 Determination that warrant categories or ratios to be reconsidered. Should this be the case, IPART will require evidence for the new categories or ratios.

Table 4.1 Past determinations on user cost-share ratios (%)

Product	2001 IPART Determination	2006 IPART Determination
<i>Capital expenditure</i>		
Asset management planning (3110)	100	100
Plant and equipment (3160)	100	100
Dam safety compliance capital projects –pre 1997 (3520)	0	0
Dam safety compliance capital projects –post 1997 (3525)	50	50
MPM capital projects (3530)	100	90
Structure enhancement capital projects (3540)	100	100
OH&S compliance system (4210)	50	50
Fishpassage works (6310)	50	50
Cold water impacts mitigation works (6320)	50	50
Salt interception schemes (6340)	10	10
Fish River Supply Scheme	NA	100
<i>Operating expenditure</i>		
Customer support (1120)	100	100
Hydrometric monitoring (2120)	70	90
Water quality monitoring (2130)	50	50
River operations (2150)	100	100
Dam safety compliance O&M (3130)	50	50
Preventative maintenance (3140)	100	100
Billing & receipts (5220)	100	100
Insurance (5250)	100	100
Metering (2180)	100	100
Salt interception schemes (6140)	10	10
Fish River Supply Scheme	NA	100
<i>MDBC activities</i>		
Navigation	NA	50
OH&S (4290)	NA	50
TAMP (3510)	NA	100
River channel protection works (6330)	NA	50
Environmental preventative maintenance (6110)	NA	50
River channel protection O&M (6130)	NA	50

Note: Cost codes have been provided where relevant, for reference.

Source: Adapted from 2006 Determination, pp 41, 42.

4 Allocating efficient costs between users and the community

IPART seeks comment from stakeholders on:

- 11 Whether the cost sharing approach used in the 2006 Determination remains appropriate.

5 Setting prices

Once IPART has determined State Water's revenue requirement over the 2010 determination period, and the share of this requirement to be recovered from extractive users, IPART needs to set prices to generate revenue that is equivalent to this share of the revenue requirement. To do this, IPART will need to consider and make decisions on:

- ▼ the forecast water sales, licensed water entitlements volumes and/or the number of licences over the determination period
- ▼ the approach for translating users' share of the revenue requirement into prices
- ▼ the transition path and rate of price increase for valleys where prices are not yet at cost-reflective levels
- ▼ the appropriate price structure
- ▼ other charges, levies and rebates
- ▼ the balance between high and general security entitlement charges, and
- ▼ the length of the determination period.

The sections below discuss each of these considerations.

5.1 The forecast water sales and licensed water entitlement volumes

Forecasting water sales, licensed water entitlement volumes and/or the number of licences are key factors in setting prices of individual services. If these forecasts are not reasonable, there is a risk that the prices IPART sets will lead to State Water significantly over- or under-recovering its required revenue.

For the 2006 Determination, IPART forecast water consumption and entitlement volumes of high security and general security customers, by valley. Forecasts were calculated using the long run average (LRA) of historical water sales due to the difficulty in predicting year-to-year water sales. Data was sourced from the Department of Natural Resources' (now DWE's) Integrated Quantity and Quality Model (IQQM).²⁶

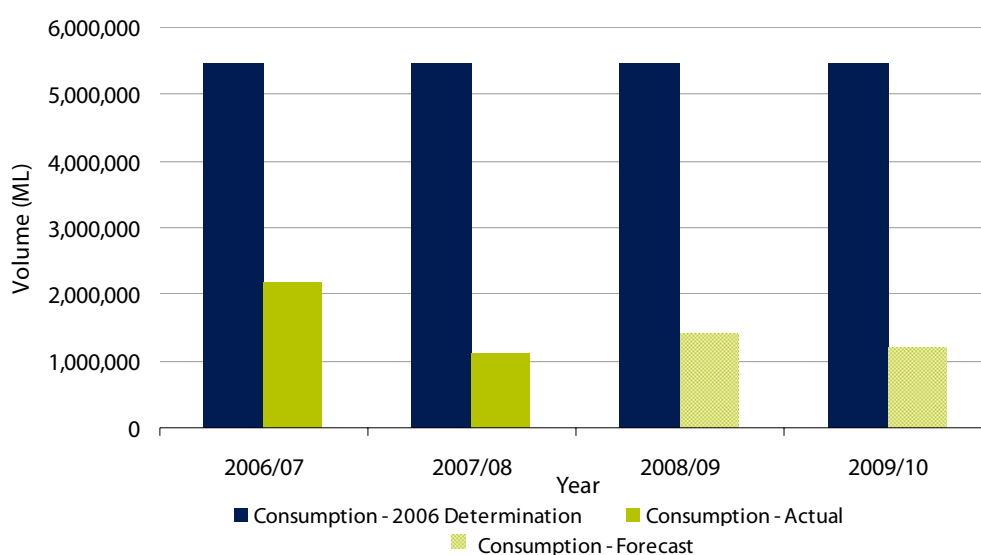
²⁶ 2006 Determination, p 99.

Figure 5.1 compares the water consumption forecasts used in making the 2006 Determination with State Water's actual (or forecast) sales to general and high security customers over the determination period. It is evident that there has been a large shortfall between the forecast and actual levels of water available. IPART notes that State Water's dam levels have been particularly low in recent years and new evidence indicates that long run historical data may no longer be a reliable indicator of forecast water availability in the Murray Darling Basin.²⁷

Severe drought conditions have affected much of NSW over the 2006 determination period. As a consequence, State Water was not able to sell the volumes of water forecast at the time of the 2006 Determination as shown in Figure 5.1. This, coupled with an increase in the weight placed on usage charges to recover revenue, has resulted in State Water under-recovering its required revenue. This was shown in Figure 1.2 in Chapter 1.

For the 2010 determination, IPART will again need to forecast the water sales and entitlement volumes for regulated rivers by valley. The 2006 Determination demonstrated that forecasts of water sales are uncertain. The forecasts that IPART will be required to make for the 2010 determination may also turn out to be too high or low. IPART will therefore need to consider whether or not the determination should include a mechanism to adjust prices if forecast water sales are too high or low by a significant amount, and the form that any adjustment should take.

Figure 5.1 State Water actual and forecast sales compared to forecast consumption assumed in making the 2006 Determination (Volume ML)



Data source: IPART 2006 Determination and data from State Water, 11 June 2009.

²⁷ CSIRO, *Water Availability in the Murray-Darling Basin*, November 2008.

IPART seeks information and explanation from State Water on:

- 20 The appropriateness of relying on LRA data from the IQQM, or any other source.
- 21 State Water's forecast water consumption and entitlement volumes of high security and general security customers, by valley and year.
- 22 The methodology, data sources and assumptions used in developing these forecasts.
- 23 The options for ensuring State Water's continued operation in the face of significantly reduced water sales.

IPART seeks comment from stakeholders on:

- 12 State Water's consumption forecasts, as outlined in its submission.
- 13 The implications for prices and for State Water's financial viability of continued reduced water availability.

5.2 Approach for translating users' share of the revenue requirement into prices

IPART will consider a number of alternative approaches to translate users' share of State Water's revenue requirement into prices. In doing so, it will take into account potential incentives (positive and negative) that different approaches may give State Water in terms of maximising the efficiency of its operations over time. Potential approaches include:

- ▼ A **glide path modelling approach** which applies an even year-on-year price increase over the course of a price path. Under this approach, prices increase from current levels at the beginning of a price path to rise evenly over the period and achieve full cost recovery in the final year. A glide path approach evenly staggers price increases to produce a more stable price path with fewer shocks for customers. It also generates lower revenues for the utility in comparison to other modelling approaches.
- ▼ A **net present value (NPV) neutral modelling approach** which achieves full cost recovery over the price path. The approach sets prices to generate revenues that achieve full cost recovery at the targeted rate of return. An NPV neutral modelling approach is likely to deliver larger revenues than a glide path approach, all other things being equal. This approach produces a less stable price path that can create price shocks for customers.
- ▼ A **P-nought modelling approach** which adjusts prices through an immediate step increase in the first year and a glide path for the remaining years of the price path. The approach achieves full cost recovery in the final year of the period and achieves prices over the price path that sit somewhere between the prices produced by the NPV neutral and glide path modelling approaches (depending on the value of the initial price increase).

IPART seeks comment on:

- 14 The appropriate approach to translate users' share of the revenue requirement into State Water's prices.

5.3 Transition path and rate of price increase for valleys where prices are not yet at cost reflective levels

IPART aims to set prices that fully recover users' shares of State Water's efficient costs. However, even when these costs are well defined, it is not always appropriate to increase prices to a cost reflective level. IPART is mindful of the potential impact of any movement in prices on customers and society (or a particular community) in general.

In the 2006 Determination, IPART set prices that were expected to significantly increase the level of cost recovery over the determination period, and achieve cost reflective levels by the end of the determination period for most valleys. It did this by increasing the fixed and usage charges by a constant nominated amount (indexed by inflation) each year of the 2006 determination period to achieve the notional revenue requirement in 2009/10. In the Peel, North Coast, Hunter and South Coast valleys, IPART recognised that significant price increases would be necessary to achieve cost reflective prices. IPART applied a cap on the size of the annual increase in prices for these valleys. As a result of the cap on price increases, full cost recovery was not expected to be reached for these valleys over the 2006 determination period.²⁸

The 2006 Determination noted that it may be appropriate for State Water to review the future of these services and consult with government in cases where it considers that the service could be recognised as a Community Service Obligation.²⁹

IPART will again consider the appropriate level of cost recovery for valleys that did not reach full cost recovery in the previous determination period. However, the objective of full cost recovery will be balanced by assessing the impacts of price increases on customers.

IPART seeks information from State Water on:

- 24 Whether State Water has sought Community Service Obligations for valleys in which cost reflective prices are not appropriate.

IPART seeks comment from stakeholders on:

- 15 What transitional path and rate of increase is reasonable for prices in valleys where prices are not yet at full cost recovery level.

²⁸ 2006 Determination, p 123.

²⁹ Ibid, p 9.

- 16 Options for meeting the cost of providing water in valleys in which cost reflective prices may not be practical.

5.4 The appropriate price structure

While IPART proposes to retain the current price structure which comprises a fixed component and a variable usage component, it will need to consider the appropriate balance between the fixed and usage components. In particular, IPART will consider:

- ▼ The relative **fixed and variable costs of service provision** – economic theory suggests that fixed costs should be recovered through fixed charges and variable costs should be recovered through variable charges. An alignment of the nature of the cost with the nature of its recovery will lead to an efficient level of cost recovery.
- ▼ The implications for **State Water’s financial viability and revenue stability** from a usage charge/fixed charge split where a tariff structure with a large usage charge component will generate revenue shortfalls when low water availability limits customers’ extraction.
- ▼ The implications for **customers’ financial viability and revenue stability** from the usage charge/fixed charge split where a tariff structure with a large fixed charge component imposes high fixed costs but low water availability limits customers’ extraction/revenue earning capacity.

5.4.1 Demand management

The importance of demand management in the context of a limited bulk water resource is of significance in the assessment of State Water’s proposed charges. However, the existence and operation of a secondary market allows customers to trade entitlements to achieve efficient outcomes.

The ability to trade entitlements produces strong financial incentives for water to be traded to its highest value use due to the more productive and profitable outcomes that the purchaser can achieve with it. The financial incentives created through the operation of a secondary market produces strong demand management outcomes by ensuring that water is diverted towards those who value it most.

5.4.2 Current price structures

The 2006 Determination restructured State Water's charges so that 40 per cent of revenue was expected to be recovered from fixed charges and 60 per cent was expected from usage charges by the end of the determination period. The exception was for the North Coast and Hunter valleys where usage charges were set to recover 40 per cent of revenue by 2009/10.³⁰

5.4.3 Price structure and revenue volatility

As discussed above, IPART will aim to set prices that seek to achieve full cost recovery after assessing the impacts of price increases on customers. In doing so, IPART needs to also consider the risks to State Water of recovering its revenue requirement. There are a number of mechanisms to mitigate the risk of revenue volatility faced by State Water including:

- ▼ **Balancing State Water's fixed charge to align with fixed costs.** IPART recognises that State Water's costs are largely fixed; therefore an efficient level of cost recovery would be achieved through largely fixed charges. As discussed above, the implications for State Water's and customers' financial viability and revenue stability will be considered when determining the appropriate balance of fixed and usage charges.
- ▼ **Reducing the risk of error in forecasting water sales by basing forecasts on more recent averages of water sales.** This option recognises that long term data, as used in the 2006 Determination, may not be a reliable indicator of forecast water availability. Figure 5.1 indicates the large shortfall between the determined and actual levels of water available in the 2006 Determination.
- ▼ **Developing a form of scarcity pricing.** Under such an approach, State Water's usage charge would be inversely proportional to the water allocations in a particular year. In periods where water allocations are low, water prices charged by State Water would be high. Conversely, water prices would fall when allocations are likely to be fully met. This approach has the advantage of recognising that as water supply becomes more (or less) scarce, the opportunity cost of consuming water increases (decreases). Also, when water is scarce irrigators can trade their entitlement at a higher price and make greater profits (or at least reduce the losses flowing from the inability to produce an irrigated crop due to water scarcity).

³⁰ 2006 Determination, p 105.

IPART seeks information and explanation from State Water on:

- 25 State Water's proposed prices, by valleys and customers, over the 2010 determination period, and the reasoning or justification behind these proposals.
- 26 State Water's calculation of its fixed and usage charges, and the methodology and assumptions that underpin the charges, such as the split of fixed costs (eg, depreciation) and variable costs (eg, energy, materials) of the business.
- 27 If State Water is proposing changes to its price structures, any perceived transitional issues that may arise.

IPART seeks comment from stakeholders on:

- 17 The appropriate balance between fixed and usage charges.
- 18 The impact of State Water's proposed prices on its customers.
- 19 The appropriateness of introducing a mechanism, such as scarcity pricing, to address State Water's revenue volatility; and a different sharing of revenue risks between irrigators and State Water.
- 20 Whether there are any practical limitations that would need to be considered if a form of scarcity pricing was introduced.

5.5 Other charges, levies and rebates

IPART will consider and make decisions on several other charges, levies and rebates including metering charges, the levy to fund the Yanco Creek System Natural Resource Management Plan and the option of introducing other levies, and rebates to irrigation corporations.

5.5.1 Metering charges

The Commonwealth Government has agreed in principle to provide up to \$90 million to replace meters within the Murray Darling Basin, under the Water for the Future Plan.³¹ The meters are to be consistent with national rural water metering standards and read remotely via telemetry, reducing inaccurately metered extractions and minimising water theft.

It is estimated 6,000 meters would be replaced from 2009, with the rollout taking a number of years to complete. Ownership of meters will be transferred from users to State Water. While much of the initial funding for the meters is expected to be provided by the Commonwealth Government, State Water will be responsible for maintaining and replacing the meters and associated infrastructure.

³¹ Department of the Environment, Water Heritage and the Arts, *National Framework for Non-urban Water Metering - Consultation Regulatory Impact Statement*, December 2008, p 12.

IPART will consider the appropriate means of recovering the costs of meter service provision and whether there are any efficiencies to be gained from this rollout, such as economies of scale or reduced meter reading costs due to telemetry.

IPART seeks information and explanation from State Water on:

- 28 Details of the metering rollout such as the timing of the project and the types and level of service to be provided to customers.
- 29 The levels of expenditure State Water will incur to acquire, install and maintain the meters and associated telemetry network over the 2010 determination period.
- 30 State Water's proposal to recover the cost of meter service provision from customers.
- 31 Whether it is likely that customers will benefit from any efficiencies resulting from State Water taking over metering responsibilities, and the magnitude of these efficiencies.

IPART seeks comment from stakeholders on:

- 21 The appropriateness of State Water's proposal to recover the cost of meter service provision.

5.5.2 Yanco Creek System Natural Resource Management Plan (NRMP)

As part of the 2006 Determination, IPART set a levy of \$0.90 per megalitre (ML) of entitlement for users in the Yanco Columbo System to fund a works program that had been initiated by the Yanco Creek and Tributaries Advisory Council (YACTAC). The work program was for a 10 year period and included rehabilitation of the Yanco Columbo System to improve flows and provide significant water efficiencies for the system, based on the Yanco Creek System NRMP.³²

The 2006 Determination also provided for any user-initiated projects that may arise during the determination period by enabling State Water to negotiate any agreements according to the funding needs of the other parties as well as the preferences of irrigators that put forward the project.

YACTAC has advised IPART that its members have unanimously supported continuation of a levy of \$0.90 per ML divided into quarterly payments per annum for the next four years.³³

IPART seeks comment on:

- 22 Whether consumers support the continuation of the Yanco Creek Levy.
- 23 Whether consumers support the introduction of other levies.

³² 2006 Determination, pp 142, 143.

³³ Letter from Yanco Creek and Tributaries Advisory Council Inc to Jim Cox, CEO, IPART, 11 May 2009.

5.5.3 Rebates to irrigation corporations

In the 2006 Determination, IPART provided a rebate to large irrigation companies and districts (ICDs) against their total annual bills. This rebate replaced the wholesale discount to ICD customers.³⁴

The ICDs supported maintaining wholesale discounts on the grounds that the ICDs provide a range of services to State Water and DWE, which are not provided by individual licence holders and help to reduce the agencies' costs of providing water. The ICDs also argued that there are economies of scale in delivering bulk water to a single user rather than many users.

In its submission to the 2006 Determination, State Water proposed to remove the discounts to ICDs in the 2006 review on the basis of cost reflectivity. It argued that there are no cost savings to supply these large customers and the discounts are not warranted. A number of other irrigator groups argued against the wholesale discount, putting the view that they have been cross-subsidising the irrigation corporations.

IPART engaged CIE to provide advice on this issue. CIE concluded that there was some justification for providing the ICDs with a rebate in recognition of the:

- ▼ lower costs in delivering water to the ICDs which largely relate to billing and metering and some river operations activities
- ▼ system wide benefits of some of the river operations activities undertaken by the ICDs which reduce State Water's costs of running the overall system
- ▼ system wide benefits of some of the environmental and licensing information collected by the ICDs as part of their business operations.³⁵

IPART determined that the ICDs should get a rebate in recognition of their lower costs of service delivery and the system wide benefits that they provide.

IPART will consider whether it is appropriate to maintain rebates for large ICDs for the 2010 determination period.

IPART seeks comment on:

- 24 Whether it is appropriate to maintain rebates to ICDs.
- 25 The level of these rebates, if appropriate, and justification for this position.

³⁴ 2006 Determination, p 113.

³⁵ CIE, *Review of price discounts for wholesalers – prepared for Independent Pricing and Regulatory Tribunal*, March 2006, pp 20, 21.

5.6 Balance between high and general security entitlement charges

Water access licences entitle the holder to extract up to a specified volume of water. For each ML of that entitlement, a fixed annual charge applies. This charge varies according to whether the licence holder's entitlement is categorised as being high or general security. Owners of high security entitlements are usually able to extract the total volume of the entitlement in all but the severest drought, while owners of general security entitlements are able to extract a specified proportion of the entitlement volume each year. The proportion varies according to water availability. The costs involved in providing high security entitlements are higher than those for general security entitlements because greater storage capacity is required.

In the 2006 Determination, IPART recognised that high security licence holders receive a higher level of service than general security licence holders, but this difference in the level of service varies between valleys.

IPART seeks comment on:

- 26 The appropriate balance between high security and general security entitlement prices.

5.7 Length of determination period

IPART will consider the appropriate length for the 2010 determination period, taking into account the incentives for efficiency gains, the predictability and stability of the regulatory environment and the effectiveness of regulation.

In general, a longer determination period provides:

- ▼ greater incentives for achieving increased efficiency, by allowing agencies to retain gains that arise from cost reductions (in the form of higher profits) for a longer period of time
- ▼ a more stable and predictable regulatory environment, which may lower State Water's business risk and lead to better investment decisions
- ▼ lower regulatory costs.

However, a longer determination period can also:

- ▼ delay the delivery of benefits from efficiency gains to consumers
- ▼ increase risk associated with any inaccuracies in the data used to make the determination
- ▼ increase the risk that industry and technological changes (and other factors) will create disparities between costs and revenues.

Other factors to consider include:

- ▼ The confidence that IPART can place in State Water's forecasts. If, for example, the expenditure profile can only be reliably predicted for two years, a shorter determination period may be more appropriate.
- ▼ The transfer of responsibility for setting prices in the Murray Darling Basin from IPART to the ACCC after the 2010 determination.

The 2006 Determination set prices from 1 October 2006 to 30 June 2010 because, at the time, IPART considered that a determination period of around four years was an appropriate balance between providing incentives for improving efficiency, reducing regulatory uncertainty, and minimising the risk that changes in the industry will affect the appropriateness of the determination.³⁶

IPART notes that the ACCC's draft advice includes a transitional arrangement whereby the charges set by IPART will continue until the expiration of its determination or until the ACCC sets new prices (whichever occurs first).³⁷

IPART seeks comment on:

- 27 The appropriate length for the 2010 determination period.

³⁶ 2006 Determination, p 23.

³⁷ ACCC, *Draft Water Charge (Infrastructure) Rules*, April 2009, Section 32.



Appendices

A Principles for bulk water pricing

In 1996, IPART undertook a major research project to review and reform charges for bulk water services.³⁸ This review set the overall framework and underlying principles for its regulation of bulk water prices. Since then, IPART has made six price determinations for bulk water through which it has further developed and refined its regulatory approach.

The principles developed in 1996 aim to set prices that encourage the efficient provision of bulk water services as well as to ensure that users are provided with price signals to more efficiently manage resources. These principles are that:

- ▼ Water charges should be based on the efficient economic costs of providing water services.
- ▼ The administrator of water resources should receive sufficient funds to achieve financial stability and deliver an appropriate level of water services.
- ▼ Pricing policy should encourage the best overall outcome for the community from the use of water and the other resources used to store, manage and deliver that water.
- ▼ The cost of water services should be paid by those who use the services. Those who cause more services to be required should pay more.
- ▼ Pricing policy should promote ecologically sustainable use of water and of the resources used to store, manage and deliver that water.³⁹

³⁸ IPART, *Bulk Water Prices – An Interim Report*, October 1996.

³⁹ *Ibid*, p 2.

B Section 15(1) requirements

In making determinations IPART is required, under Section 15 (1) of the IPART Act, to have regard to the following matters (in addition to any other matters IPART considers relevant):

- a) the cost of providing the services concerned
- b) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services
- c) the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of New South Wales
- d) the effect on general price inflation over the medium term
- e) the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers
- f) the need to maintain ecologically sustainable development (within the meaning of Section 6 of the *Protection of the Environment Administration Act 1991*) by appropriate pricing policies that take account of all the feasible options available to protect the environment
- g) the impact on pricing policies of borrowing, capital and dividend requirements of the government agency concerned and, in particular, the impact of any need to renew or increase relevant assets
- h) the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body
- i) the need to promote competition in the supply of the services concerned
- j) considerations of demand management (including levels of demand) and least cost planning
- k) the social impact of the determinations and recommendations
- l) standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise).

C Information required from State Water

1	Whether service agreements between State Water and DWE have changed since the 2008 end of term review of State Water’s operating licence.	15
2	The costs allocated to State Water for the MDBA and the BRC and the uncertainties and risks in assessing these costs.	15
3	If and how State Water proposes to account for changes that may flow from the Basin Plan in prices.	15
4	Variations in costs caused by changes to its regulatory environment.	16
5	The risks or uncertainties in State Water’s operating environment over the forthcoming determination period and beyond, including the nature of these risks/uncertainties and the likelihood of these impacting on specific costs (for example, continuing drought conditions, electricity charges).	16
6	State Water’s operating expenditure over the 2006 determination period, the drivers of this expenditure and the service outcomes achieved.	20
7	State Water’s operating expenditure over the 2006 determination period compared to expenditure allowed by IPART when it set prices for the 2006 Determination and an explanation of variances.	20
8	State Water’s forecast operating expenditure over the 2010 determination period, including drivers and justifications for this expenditure, expected service outcomes, specific efficiency programs and the potential for efficiency gains by year and by valley.	20
9	Details of the portion of the MDBA and BRC operating costs attributed to regulated rivers in NSW and valley allocations. IPART expects that the method for allocating these costs will be robust and transparent.	20
10	Steps taken to ‘ring fence’ any non-regulated costs and revenues.	20
11	State Water’s actual capital expenditure over the 2006 determination period, the drivers of this expenditure and the outcomes achieved.	22
12	State Water’s actual capital expenditure over the current determination period compared to expenditure allowed by IPART in 2006, and an explanation of variances.	22
13	State Water’s forecast capital expenditure program over the 2010 determination period, the drivers of this expenditure, the expected service outcomes to be achieved (by year and by valley), and scope for efficiency gains.	23

C Information required from State Water

14	How discretionary capital expenditure is aimed at achieving outcomes that are supported by users and/or the community.	23
15	State Water's asset management practices and plan, and the relationship between its asset management framework and its capital expenditure program.	23
16	Details of the portion of the MDBA and BRC capital costs attributed to regulated rivers in NSW. IPART expects that the method for allocating these costs will be robust and transparent.	23
17	The value and timing of the capital contributions received and assets disposed of over the 2006 Determination, and forecast over the 2010 period.	23
18	Any changes proposed by State Water to the calculation of depreciation, including the approach to depreciation, asset classes and lives and the assumptions used to determine these.	27
19	State Water's performance against reporting obligations over the 2006 determination period.	27
20	The appropriateness of relying on LRA data from the IQQM, or any other source.	35
21	State Water's forecast water consumption and entitlement volumes of high security and general security customers, by valley and year.	35
22	The methodology, data sources and assumptions used in developing these forecasts.	35
23	The options for ensuring State Water's continued operation in the face of significantly reduced water sales.	35
24	Whether State Water has sought Community Service Obligations for valleys in which cost reflective prices are not appropriate.	36
25	State Water's proposed prices, by valleys and customers, over the 2010 determination period, and the reasoning or justification behind these proposals.	39
26	State Water's calculation of its fixed and usage charges, and the methodology and assumptions that underpin the charges, such as the split of fixed costs (eg, depreciation) and variable costs (eg, energy, materials) of the business.	39
27	If State Water is proposing changes to its price structures, any perceived transitional issues that may arise.	39
28	Details of the metering rollout such as the timing of the project and the types and level of service to be provided to customers.	40
29	The levels of expenditure State Water will incur to acquire, install and maintain the meters and associated telemetry network over the 2010 determination period.	40
30	State Water's proposal to recover the cost of meter service provision from customers.	40
31	Whether it is likely that customers will benefit from any efficiencies resulting from State Water taking over metering responsibilities, and the magnitude of these efficiencies.	40