

Draft Report

Inquiry into Water Resource
Management and Planning Charges

3 December 2009

Economic Regulation Authority



WESTERN AUSTRALIA

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Executive Summary

The Authority is pleased to present its draft recommendations on water resource management and planning charges.

The inquiry is being undertaken in response to a request from the Treasurer in April 2009. This report is a draft report which provides a draft set of recommendations for water resource management and planning charges. The Authority invites feedback from interested parties on the draft recommendations by 26 February 2010.

The Authority has not proposed any indicative fees or charges to recover water resource management and planning costs in the draft report, as further information is needed from the Department of Water before fees and charges can be determined. More specifically, the Department is not at this stage in a position to provide suitable estimates of efficient costs that would be recovered from water licence holders.

The Department of Water will need additional time to implement systems that can be used to substantiate the cost inputs used to set fees and charges. This will require the Department to collect information on the levels of effort and costs involved in providing different services to licence holders and other users.

The Department of Water has indicated that it will provide suitable cost estimates by the end of May 2010. Once this information has been received, the Authority will be in a position to develop the fees and charges appropriate for the recovery of efficient costs. The Authority would then produce a second draft report, setting out the proposed fees and charges for public comment. The Final Report for the inquiry will be delivered to the Treasurer by 29 October 2010.

However, the Authority has developed a preferred approach for recovery of water resource management and planning costs which can be adopted by the Authority once the relevant information becomes available, subject to any concerns raised in submissions.

The Authority has consulted on and developed draft principles to guide the recovery of the costs of managing and planning water resources. A key principle recommended by the Authority is that the efficient costs of services provided by the Department of Water should be recovered from those for whom the services are provided. In applying the draft principles to the costs that should be recovered, and on the basis that suitable cost estimates are provided by the Department, the Authority's draft recommendations are that:

- for water licensing, costs be recovered from licence holders, with charges reflecting the costs associated with application assessments and on-going monitoring and planning;
- where costs are incurred by the Department of Water on behalf of private parties and those costs also benefit the wider community (such as the costs associated with allocation planning, groundwater and surface water assessment and water measurement and information), the costs be shared between the wider community and the groups or individuals for whom the activity is carried out;
- where it is possible to identify the costs of activities carried out for particular large licence holders or projects, separate charges be levied on those parties;

- for water source protection plans, costs be recovered from public drinking water suppliers;
- for the assessment of subdivision applications, costs be recovered from the Western Australian Planning Commission; and
- for water metering, costs be recovered from metered licence holders.

Regarding the recovery of costs from licence holders, the Authority's draft recommendation is that a "fee for service" approach to licence fees would be appropriate, with a licence application fee reflecting the efficient costs of processing licence applications, and an annual charge reflecting efficient ongoing costs, including compliance monitoring and enforcement and water resource management and planning activities related to licensing.

The Authority's draft recommendation is that all of the efficient costs incurred by the Department of Water to prepare drinking water source protection plans, the assessment of subdivision applications and the undertaking of water metering activities would ideally be recovered from users. As it is not possible to conclude at this stage that these costs have been incurred efficiently, the Authority has not made any recommendations on the level of costs to be recovered. The amount of costs to be recovered from users will be reassessed in the second draft report, when the Authority believes it will be in a position to assess the level of efficient water resource management and planning costs incurred by the Department.

Another draft recommendation is that the Department of Water develop more appropriate service standards and performance indicators, to allow analysis over time and benchmarking with other relevant agencies. This is achievable once the Department has the required processes in place to record detailed information about the work involved in undertaking the activities that would be paid for by users. Development of service standards and performance indicators would ideally be undertaken in conjunction with stakeholders, such as through a water industry committee representing different stakeholder groups.

In regard to the preferred regulatory arrangements for water resource management and planning, the Authority's draft recommendation is that the Authority have an ongoing role to undertake efficiency reviews of the Department of Water and independently determine water resource management and planning charges, while a water industry committee would work with the Department of Water to ensure that service standards and performance measures are appropriate and achieved.

The Authority has published an Issues Paper, a Discussion Paper and held a round table to obtain feedback on the principles that would be applied in recovering the costs of water resource management and planning. The Authority wishes to thank those who provided submissions that were received in response to the Issues Paper and the Discussion Paper. Those submissions, along with the discussions held at the round table, have helped to formulate these draft recommendations.

The Authority now welcomes a further round of submissions on the draft recommendations, with submissions due by 26 February 2010. Once the Department of Water has provided suitable cost estimates to the Authority by the end of May 2010, a second draft report will be released for public comment, which sets out the proposed licence fees. The Final Report for the inquiry will be delivered to the Treasurer by 29 October 2010 and the Treasurer will, in accordance with the Act, have 28 days to table the report in Parliament.

Draft Recommendations

Principles for the Recovery of Water Resource Management and Planning Costs

- 1) The Authority recommends that the following principles be applied to the recovery of water resource management and planning costs:
 - a) The costs of activities to address impacts, or potential impacts, arising from the use of water resources, be recovered from those parties who cause the costs to be incurred, if the parties can be identified. Costs may be caused by individuals (for example assessment and monitoring of individual licences) or groups (for example allocation planning for groups of licence holders).
 - b) If the parties who cause costs to be incurred cannot be identified, costs be recovered from public funds.
 - c) The costs of activities that produce outputs in the nature of public goods be borne by the public.
 - d) If costs are incurred on behalf of private parties for activities that also produce outputs in the nature of public goods, the costs be shared between the private parties and the public.
 - e) Only efficiently incurred costs be recovered from licence holders and other private parties.
 - f) Water licensing and the recovery of costs from licence holders be implemented in a way such that benefits exceed costs.
 - g) Any charges to licence holders be:
 - practical to implement;
 - clear and transparent; and
 - equitable, with licence holders in similar situations facing similar charges.

Allocation of Costs to Private and Public Users

- 2) The allocation of costs between private and public users be determined for each individual water resource management and planning activity, based on who is causing the costs to be incurred.
- 3) The costs of water used as an input into commercial operations, including farming enterprises, would include the associated costs of water resource management and planning.
- 4) For public open spaces, water resource management and planning costs be shared between local governments and the general community, as not all the users of such open spaces are local rate payers. The Authority is seeking feedback on the appropriate proportion of costs to be recovered from rate payers.

Nexus between Costs and Charges

- 5) Where practicable, charges to licence holders would vary by region to reflect the costs of water resource management in each region.

Recognising the Contribution of Licence Holders to Water Resource Management and Planning Activities

- 6) Licence holders who carry out work that contributes significantly to allocation plans could receive a reduction in their licence fees (e.g. by waiving some or all of the

allocation planning cost component of their licence fee). The Authority will examine this issue further and is seeking feedback from interested parties.

Equitable Charges

- 7) Garden bore owners in Perth would ideally be charged for the costs that they cause to be incurred in monitoring and managing Perth's groundwater resources. The Authority will examine further whether this can be achieved in a cost efficient way and make a recommendation in the final report.

Ability to Pay for Different Users

- 8) Ability to pay concerns should not influence the design of water resource management and planning charges. Subsidies are generally not supported for groups of water resource users who claim that they do not have the ability to pay, as licence holders tend to use water for commercial purposes. However, if there is a recognised affordability issue pertaining to any groups who only use the water for household purposes, subsidies would be better provided by grants rather than through the design of the charging regime.

Water Source Protection

- 9) The efficient costs of water resource management and planning activities incurred by the Department of Water that are directly associated with the protection of public drinking water supplies be recovered from public drinking water suppliers through a direct charge.

Assessment of Subdivision Applications

- 10) The efficient costs of water resource management and planning activities incurred by the Department of Water that are directly associated with the assessment of subdivisions be recovered from the Western Australian Planning Commission.

Water Metering

- 11) The efficient costs of water resource management and planning activities incurred by the Department of Water that are directly associated with water metering be recovered from metered licence holders. This would include recovery of the cost of purchase, installation, maintenance and reading of meters.

Water Licensing

- 12) Efficient costs incurred by the Department of Water that are directly related to the provision of licences be recovered from licence holders.
- 13) Charges to licence holders should reflect, as closely as practicable, the efficient costs of services provided by the Department of Water in the issuing and monitoring of those licences:
 - a) Costs associated with the processing and assessment of applications be recovered through an up-front application charge.
 - b) Costs associated with on-going water resource management and planning activities related to licences (i.e. compliance monitoring and enforcement, allocation planning, environmental water planning, water licensing policy, groundwater and surface water assessment and water measurement and information) be recovered through an annual charge.
- 14) The activities of allocation planning, environmental water planning, groundwater and surface water assessment and water measurement and information have a "public good" component, as the information they produce is of benefit to the wider community. The Authority recommends that a small proportion of the cost of these activities be allocated to the general public.

Proposed Options for Recovering the Costs of Water Licensing

- 15) A “fee for service” approach to licensing charges complies with the cost recovery principles in that it:
- is able to reflect the different services, and their varying levels of complexity and effort, provided by the Department in the processing and assessment of licences and the monitoring and enforcement of compliance with licence conditions;
 - is transparent to licence holders; and
 - can accommodate an adjustment of charges to reflect any public benefits associated with licensing.
- 16) Where the costs associated with licensing of particular large licence holders (such as the Water Corporation) can be accurately identified, such costs should be charged to that licence holder.

Implementation of Water Resource Management and Planning Charges

- 17) The Department is not able, at this stage, to provide the information needed for the Authority to determine the efficiency or cost reflectivity of the costs to be allocated to licence holders.
- 18) The Department of Water is therefore asked to provide detailed information to the Authority about how its costs are incurred and allocated to various functions by the end of May 2010.
- 19) The Department to recover from users all of the efficient costs incurred to prepare water source protection plans, the assessment of subdivision referrals and the undertaking of water metering activities, once the Authority has determined the level of efficient water resource management and planning costs incurred by the Department.
- 20) The Department to introduce detailed performance indicators that are more relevant than those that currently exist, which should remain unchanged for a period of time to allow analysis over time and benchmarking with other similar agencies.

Legislative Powers

- 21) The Government should ensure that State legislation provides for the appropriate recovery of water resource management and planning costs.

Setting Service Standards and Performance Indicators

- 22) The Department of Water to develop service standards and performance indicators for the relevant water resource management and planning activities in conjunction with a water industry committee or existing key stakeholder groups.

Regulatory Oversight

- 23) Water resource management and planning charges be set and reviewed every three years by the Authority.

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1 Introduction

The Treasurer of Western Australia gave written notice to the Authority, on 2 April 2009, to undertake an inquiry into water resource management and planning charges in Western Australia.

The inquiry has been referred to the Authority under Section 32 of the *Economic Regulation Authority Act 2003 (Act)*, which provides for the Treasurer to refer the Authority inquiries on matters related to regulated industries (i.e. water, gas, electricity and the rail industry).

1.1 Terms of Reference

The Terms of Reference for the inquiry are provided in [Appendix A](#).

In accordance with the Terms of Reference, the Authority is to provide the Government with a range of options and recommendations for:

- the recovery of the water resource planning and management expenses incurred by the Department of Water; and
- the most appropriate regulatory arrangements for the setting of service standards for the water resource manager, the setting of the charges and the subsequent recovery of those charges from water users.

In considering the options, the Authority is to consider and develop findings on:

- the tasks or activities undertaken in the efficient management of the State's water resources by the Department of Water, that would appropriately be recovered from water users;
- the most appropriate level of cost recovery from water users; and
- the most appropriate allocation of costs between licence holders and other water users.

The options recommended to the Government are to include:

- the implementation impacts for various types of users, including a sensitivity analysis on capacity to pay assumptions; and
- opportunities for implementation under both the existing legislative responsibilities of the Department of Water as well as those specified by the National Water Initiative.

The Authority is also required to have regard to:

- the Government's social, economic and environmental policy objectives;
- the Government's obligations as a signatory to the National Water Initiative Intergovernmental Agreement; and
- any relevant pricing principles arising from the 1994 Council of Australian Governments water reform agreement and the National Water Initiative.

In undertaking the inquiry, the Authority recognises section 26 of the Act, which requires the Authority to have regard to:

- the need to promote regulatory outcomes that are in the public interest;
- the long-term interests of consumers in relation to the price, quality and reliability of goods and services provided in relevant markets;
- the need to encourage investment in relevant markets;
- the legitimate business interests of investors and service providers in relevant markets;
- the need to promote competitive and fair market conduct;
- the need to prevent abuse of monopoly or market power; and
- the need to promote transparent decision making processes that involve public consultation.

1.2 Background to the Inquiry

Attempts to introduce licence fees for water resource management and planning activities in Western Australia go back to 1991 when the Government endorsed, but subsequently withdrew, a proposal by the Water Authority to introduce fees to licensees abstracting groundwater. In 2003, the State Water Strategy included a commitment to investigate the applicability of water resource management charges and the Department of Environment subsequently developed a proposal for the Minister for the Environment to introduce fees to recover 86 per cent of administration costs. However, the Government did not endorse the proposal. In 2007, the Government gazetted regulations to apply water administration licence fees to recover administration costs. These regulations were subsequently disallowed by Parliament and a revised fee structure was gazetted. However, the revised fee structure was also disallowed.

The Government has had an obligation to recover the costs, at least partially, of water resource management and planning activities since signing the Council of Australian Governments (**CoAG**) Water Reform Agreement in February 1994. An important principle of the 1994 agreement was to signal to users the costs associated with managing water resources and any environmental costs caused through extractive use.

The 1994 CoAG Agreement was followed in 2004 by the National Water Initiative (**NWI**). Western Australia became a signatory to the NWI in 2006. Section 67 of the NWI states:¹

The States and Territories agree to bring into effect consistent approaches to pricing and attributing costs of water planning and management by 2006 involving:

- (i) The identification of all costs associated with water planning and management, including the costs of underpinning water markets such as the provision of registers, accounting and measurement frameworks and performance monitoring and benchmarking;
- (ii) The identification of the proportion of costs that can be attributed to water access entitlement holders consistent with the principles below;
 - (a) charges exclude activities undertaken for the Government (such as policy development and Ministerial or Parliamentary services)
 - (b) charges are linked as closely as possible to the costs of activities or products.

¹ 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, 25 June 2004.

Section 67 of the NWI also states:

The States and Territories agree to report publicly on cost recovery for water planning and management as part of annual reporting requirements, including:

- (i) the total cost of water planning and management; and
- (ii) the proportion of the total cost of water planning and management attributed to water access entitlement holders and the basis upon which this proportion is determined.

The National Water Commission (**NWC**) is responsible for auditing the implementation of the NWI, which involves monitoring each jurisdiction's progress in fulfilling their NWI commitments. Western Australia, along with other States and Territories, is responsible for implementing the NWI. In its second biennial report to COAG in 2009 assessing progress on implementation of the NWI, the NWC noted that:

Progress in meeting NWI commitments for cost recovery for water planning and management for both surface and groundwater has been very limited. Progress in this area is long overdue in Queensland, Western Australia, Victoria, South Australia and the Northern Territory.²

With regard to Western Australia's progress on recovering the costs of water resource management and planning from water licence holders, the NWC supported the referral of this inquiry to the Authority, but noted that:

The Commission...is concerned about the continued delay in the introduction of these charges, and notes this as a failure of Western Australia to meet its NWI commitments in this area.³

The NWC has established an inter-jurisdictional working group to develop a consistent set of pricing principles for the recovery of water resource management and planning costs.⁴ It is understood that the pricing principles have been completed but have not yet been publicly released. The Authority will take these principles into account should they become available during the course of this inquiry.

1.3 Structure of the Draft Report

This draft report is structured in the following way:

- Chapter 2 begins with a consideration of the key economic principles that are relevant to the recovery of water resource management and planning costs that are incurred by the Department of Water. These principles are then applied to the key issues that have been raised by stakeholders during consultations, assisting the Authority to develop its approach to cost recovery of water resource management and planning activities.
- In Chapter 3, each of the water resource management and planning activities that the Authority believes could be subject to full or partial cost recovery, such as licensing and allocation planning activities and water metering, are assessed using

² National Water Commission (2009), *Australian Water Reform 2009: Second Biennial Assessment of Progress in Implementation of the National Water Initiative*, p180.

³ Ibid, p178.

⁴ The Steering Group on Water Charges (**SGWC**), which reports to the NRM Ministers' NWI Committee, is progressing implementation of various parts of the best practice pricing element of the NWI, including the pricing of water resource management and planning charges. The SGWC is chaired by the Commission and consists of representatives of the NWI parties (State governments and the Australian Government) and economic regulators.

the approach that has been developed in Chapter 2, to establish which costs should be recovered and how they can be efficiently recovered from users.

- Following on from this, in Chapter 4, the Authority considers the key findings of the consultants, Marsden Jacob Associates, who reviewed the proposed licence fees model that was developed by the Department of Water and ACIL Tasman. The consultants also reviewed the efficiency of the Department's costs, and the processes that the Department uses to control its expenditure and align it with priorities. These findings affect the Department of Water's ability to recover some of its water resource management and planning costs, such as licensing and allocation planning costs, at least in the short term.
- Lastly, in Chapter 5, the Authority examines different regulatory arrangements that can be applied to oversee the Department of Water's performance should water resource management and planning charges be introduced. The determination of appropriate service standards and key performance indicators are also discussed in this chapter.

1.4 Review Process

The recommendations of this inquiry will be informed by the following public consultation process:

- The Authority published an Issues Paper on 30 April 2009 and called for submissions from stakeholder groups, industry, government and the general community on the matters in the Terms of Reference. 32 submissions were received in response to the Issues Paper.
- A Discussion Paper was published by the Authority on 6 August 2009, which called for submissions from interested parties to provide feedback on the principles the Authority should use in developing the draft recommendations. 8 submissions were received in response to the Discussion Paper.
- A round table was held on 10 August 2009, where interested parties discussed issues of relevance to the inquiry.
- Following consideration of submissions, the Authority has developed a set of draft recommendations, presented in this Draft Report. Public submissions on the Draft Report are invited by 26 February 2010 (see section 1.5 below on how to make a submission).
- The Department of Water has indicated that it will provide suitable cost estimates to the Authority by the end of May 2010. Once this information has been received and assessed, the Authority will produce a second draft report, setting out the proposed fees and charges for public comment.
- The Final Report for the inquiry is to be delivered to the Treasurer by 29 October 2010 and the Treasurer will, in accordance with the Act, have 28 days to table to the report in Parliament.

The Authority has and will continue to consult with its Consumer Consultative Committee during the course of the inquiry.

In accordance with section 45 of the Act, the Authority will act through the Chairman and members in conducting this inquiry.

1.5 How to Make a Submission

Submissions on any matter raised in this Draft Report or in response to any matters in the Terms of Reference should be in both written and electronic form (where possible) and addressed to:

Inquiry into Water Resource Management Charges
Economic Regulation Authority
PO Box 8469
Perth Business Centre
PERTH WA 6849

Email: publicsubmissions@era.wa.gov.au
Fax: (08) 9213 1999

Submissions must be received by 26 February 2010.

Submissions made to the Authority will be treated as in the public domain and placed on the Authority's web site unless confidentiality is claimed. The submission or parts of the submission in relation to which confidentiality is claimed should be clearly marked. Any claim of confidentiality will be dealt with in the same way as is provided for in section 55 of the *Economic Regulation Authority Act 2003*.

The receipt and publication of a submission shall not be taken as indicating that the Authority has knowledge either actual or constructive of the contents of a particular submission and, in particular, where the submission in whole or part contains information of a confidential nature and no duty of confidence will arise for the Authority in these circumstances.

Further information regarding this inquiry can be obtained from:

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2 Principles for Cost Recovery

2.1 Terms of Reference

The Authority is requested in the Terms of Reference to consider and develop findings on:

- the tasks or activities undertaken in the efficient management of the State's water resources, by the Department of Water, that would appropriately be recovered from water users;
- the most appropriate level (or percentage) of cost recovery from water users; and
- the most appropriate allocation of costs between licence holders and other water users (licensed entitlement or actual use).

2.2 Principles for the Recovery of Water Resource Management and Planning Costs

The nature of water resources is that they are shared between users and water dependent ecosystems, and that the use of water by one party can impact on the amount and quality of water available to other users and water dependent ecosystems. For this reason, regulation (such as licensing) is required to manage and plan the use of water resources to ensure that impacts are acceptable. In Western Australia, the responsibility for the allocation, management and planning of water resources lies with the Department of Water. The costs of water resource management and planning activities are currently recovered from public funds.

There have been a number of attempts to introduce licence fees for water resource management and planning activities in Western Australia. Most recently, in 2007, two proposals to recover licence administration costs were unsuccessful. Some key concerns about these attempts to introduce licensing fees became evident during the Economics and Industry Standing Committee Inquiry into Water Licensing and Services, which was undertaken between October 2007 and February 2008. These concerns indicate that it is likely that any proposal to introduce water resource management and planning charges would need to incorporate the following:

- transparency and clarity around how the charges were developed, what they were intended to cover, and how they were attributed to licence classes;
- confidence that the activities being charged for were being undertaken efficiently (for example, through an independent assessment of the efficiency of the Department's activities);
- users in similar circumstances be treated similarly; and
- the funds generated through charges be used for water resource management and planning activities, not for other activities of the State Government.

The Authority published an Issues Paper, a Discussion Paper and held a round table to obtain feedback on the principles that should be applied in recovering the costs of water resource management and planning. The consultation indicated general support for the principles referred to above and also support for the following principles:

- charges would be cost-reflective, which means that costs would be recovered from those who cause the costs to be incurred;
- charges would not be levied for activities that benefit the general community; and
- the extent of cost-reflective charges would be limited by the practicality and administrative costs associated with achieving cost-reflective charging.

Principles for the Recovery of Water Resource Management and Planning Costs

- 1) The Authority recommends that the following principles be applied to the recovery of water resource management and planning costs:
 - a) The costs of activities to address impacts, or potential impacts, arising from the use of water resources, be recovered from those parties who cause the costs to be incurred, if the parties can be identified. Costs may be caused by individuals (for example assessment and monitoring of individual licences) or groups (for example allocation planning for groups of licence holders).
 - b) If the parties who cause costs to be incurred cannot be identified, costs be recovered from public funds.
 - c) The costs of activities that produce outputs in the nature of public goods be borne by the public.
 - d) If costs are incurred on behalf of private parties for activities that also produce outputs in the nature of public goods, the costs be shared between the private parties and the public.
 - e) Only efficiently incurred costs be recovered from licence holders and other private parties.
 - f) Water licensing and the recovery of costs from licence holders be implemented in a way such that benefits exceed costs.
 - g) Any charges to licence holders be:
 - practical to implement;
 - clear and transparent; and
 - equitable, with licence holders in similar situations facing similar charges.

2.3 Application of Principles to Issues Raised in Submissions

Consultation has indicated that it is in the application of the principles to water resource management and planning charges that issues arise. These issues, which will be discussed in the remainder of this chapter, can be grouped into the following themes:

- contention about which costs should be paid for by licence holders and which should be paid for by the general community;
- how to establish a nexus between costs and charges;
- how to adjust charges in recognition of work undertaken by licence holders instead of by the Department of Water and for work that benefits the general community;
- contention about who is required to be licensed, and therefore, charged; and
- concerns about the ability to pay of different users.

2.3.1 Allocation of Costs to Private and Public Users

The Department of Water submitted that many of its activities (such as licence allocation and monitoring, water source protection, metering and allocation planning) are carried out primarily for the private benefit of licence holders, in order to provide them with secure water entitlements. The Department asked for further clarification from the Authority regarding the appropriate allocation of costs between private parties and the public.

The Authority's view is that the water resource management and planning regime has primarily been put in place to protect the community from the unintended consequences of unfettered water resource use (such as to the security of supply to existing water users, to environmental flows and to land use development that may compromise the quality of the water resource). It is appropriate, therefore, that as a general principle any costs efficiently incurred by the Department in preventing these unintended consequences are paid for by those who cause the costs to be incurred, where these parties can be identified (including water service providers, such as the Water Corporation and the water boards). At the same time, some water resource management and planning activities can also produce outputs in the nature of public goods, which benefit the wider community.

Based on the cost allocation principles, the following framework (Box 1) can be used to assess whether costs should be recovered from private individuals or groups, or the general public.

Box 1. Framework for Guiding Allocation of Costs Between Private and Public Users

- Some water resource management and planning activities produce outputs in the nature of public goods. The nature of public goods is that it is not possible to exclude individuals from the consumption of these goods, and the use of those goods by one person does not prevent others from using them. Examples include information on the State's water resources provided by the Department that is of general benefit to the State. The costs of these activities should be recovered from the public.
- Other activities are carried out by the Department to address impacts, or potential impacts, associated with the use of water resources. Regulation, such as licensing, is needed to ensure that the use of water resources complies with the standards (such as environmental and health standards) demanded by society. Costs are incurred by the Department, or by private parties, to ensure those standards are met.
 - For costs incurred by the Department, where it is possible to identify those who caused the costs to be incurred, the costs should be recovered from these parties. Costs may be caused by individuals (for example assessment and monitoring of individual licences) or groups (for example allocation planning for groups of licence holders).
 - If those who caused the costs to be incurred cannot be identified, the costs should be recovered from public funds.
 - Some activities may be carried out to address impacts resulting from past actions, activities, or Government decisions. These are legacy costs, and should be recovered from public funds.
 - Some activities may be to address impacts, but may also have public good elements. The costs of these activities should be shared between those who cause the costs to be incurred, and the public. For example, allocation plans developed primarily to establish allocation limits for licence holders, may also benefit the wider community through the better understanding of water resources, which can be applied outside the allocation plan area.
 - If the standards applied to water use activities change (e.g. due to changes in community expectations, climate, technology), the costs of meeting the new standards should be borne by those who are required to comply with them. This is consistent with other regulatory frameworks (e.g. in water, electricity or gas supply, where the costs of meeting higher service standards are borne by the service provider and passed on to the consumer through tariffs). However, changes to service standards would need to be justified on cost/benefit grounds, and based on the community's willingness to pay for the changes to service standards.

Submissions raised a number of other issues regarding the sharing of costs between private parties and the public.

Some submissions proposed that most of the water resource management and planning activities that are undertaken by the Department of Water are public goods that should be recovered from public funds, not through charges on licence holders.

The Manjimup and Pemberton Landowners Group (**Landowners Group**) submitted that in general, water is "owned by the Crown", it is "vital to life" and that "management of water resources should be a core function of Government" as reasons for claiming that the Government should fund resource management and planning from public funds.⁵

⁵ Manjimup and Pemberton Landowners Group submission on the Issues Paper, p2.

Harvey Water submitted that the actual water users in agriculture are those who consume the final food product, not the farmers. They claim that taxation is therefore an appropriate mechanism to recover the costs of water resource management and planning as they apply to agriculture.⁶

WA Farmers submitted that the need to ensure security of food supply should be factored into this analysis, which implies that WA Farmers considers that water used for agriculture has public good characteristics.⁷

In the circumstance where licence holders are using the water in a commercial operation, it is reasonable to treat the costs associated with obtaining that water (including the costs of resource management and planning) in the same way as any other costs incurred by the business in undertaking its commercial activity. Therefore, the claim by Harvey Water that it is more appropriate to recover the costs of water resource management and planning from taxpayers, as a means of recovering the costs directly from consumers rather than producers, is not supported by the Authority. Consumers should be able to see, when making their purchasing decisions, the relative costs of producing one product over another. To do otherwise would mislead consumers as to the relative cost of each good and could result in more of a particular good being purchased than would otherwise be the case (in effect resulting in a subsidy for that particular producer). In the case of water-dependent production for which the producer is a price taker, the relative profitability of that sector should reflect the relative costs of the water inputs so that water resources are allocated appropriately.

Neither does the Authority support the submission by WA Farmers which implied that the local agricultural sector should be subsidised (by not paying for water resource management and planning costs that the sector causes to be incurred) to ensure security of food supply. The Authority's view is that it is for consumers to decide whether they wish to support local growers (whether due to higher quality, lower transportation costs, or other factors), and that consumption and production decisions should not be distorted by treating one user of water differently to another.

The Town of Kwinana submitted that since water drawn from ground or surface resources by local authorities is used for public benefit (to water sports grounds and public open spaces), local authorities should not be subject to licensing fees.⁸ WALGA submitted that in the case of neighbourhood parks the beneficiaries are predominantly local; in the case of regional sporting grounds and foreshore or coastal reserves, the beneficiaries are likely to live across the metropolitan area of Perth and beyond. As a result, WALGA suggests that water drawn from ground or surface resources used for public benefit should not be subject to charges.⁹

In the case of public open spaces, WALGA points out that it can be difficult to define the beneficiaries of public open spaces, since parks or reserves are used by many people who are not necessarily local. The Authority's view is that water used to provide local amenities has the characteristics of a local public good, which means that the benefits can largely be attributed to a particular group (such as local rate payers). It could therefore be argued that the costs of water resource management and planning that are caused by the local authority should be passed on to local rate payers, or through fees to park users, just as any other management costs associated with local parks and facilities are passed on.

⁶ Harvey Water submission on the Issues Paper, p.2.

⁷ Western Australian Farmers Federation submission on the Discussion Paper, p2.

⁸ Town of Kwinana submission on the Issues Paper, p1.

⁹ WALGA submission on the Discussion Paper, p1.

However, there may be some parks which have significant public good characteristics. An example is Sir James Mitchell Park in South Perth, where the beneficiaries extend far beyond the local rate payers, there are no entry fees, and where it would be inequitable to have local rate payers bear the burden of the water licensing costs. Also, if local governments were to recover all of their water licensing costs from local rate payers, this could lead to an under-investment in water for public open spaces, as only the benefits to local rate payers would be weighed against the costs, and not the wider benefits to non-local users. The Authority therefore considers that some sharing of water licensing costs for public open spaces between the licence holder and the general community is appropriate, and that recovering a proportion of these costs from public funds would avoid the risk of over-allocating costs to local rate payers. The Authority invites comments on the appropriate proportion of costs that should be recovered from rate payers.

Allocation of Costs to Private and Public Users

- 2) The allocation of costs between private and public users be determined for each individual water resource management and planning activity, based on who is causing the costs to be incurred.
- 3) The costs of water used as an input into commercial operations, including farming enterprises, would include the associated costs of water resource management and planning.
- 4) For public open spaces, water resource management and planning costs be shared between local governments and the general community, as not all the users of such open spaces are local rate payers. The Authority is seeking feedback on the appropriate proportion of costs to be recovered from rate payers.

2.3.2 *Nexus between Costs and Charges*

The Landowners Group submitted that the Department of Water does not provide any services that benefit the businesses in their area and that there is no evidence that licensing services are necessary in what they consider to be a water abundant region. Furthermore, the Landowners Group suggest that there is no obvious water management service provided by the Department, as the licence holders manage the water on their property and accept all risks associated with dam construction and maintenance. The Landowners Group believe that funding provided by water resource management charges would not result in improved services provided by the Department to self-supply water users and would not improve security of water entitlements.¹⁰

The Landowners Group suggested that their concerns could be addressed in two ways. First, the Landowners Group outlined that where a water licence is sought, an application assessment fee could be required which reflects the complexity of the Department of Water's assessment for the particular dam or bore and water resource. The applicant should receive a quote for assessment related to hours of service and fee per hour.

Second, the Landowners Group proposed that there should be an appeals process for users who disagree with the amount of work or the level of assessment required by the Department in issuing or renewing a licence. The Landowners Group proposed that a

¹⁰ Manjimup and Pemberton Landowners Group submission on the Issues Paper, p3.

licence holder should be able to appeal to a senior officer of the Department if the quote for the work required is unacceptable.¹¹ The Authority is generally supportive of the proposals to have charges set as cost reflectively as possible and has considered in detail the option of setting fees based more closely on the services provided to licence holders, as suggested by the Landowners Group. However, the Authority is concerned that the proposed appeals process could evolve into a more complicated process with appeals being made to bodies other than the Department of Water, in which case the benefits of appeals may be outweighed by the administrative and legal costs involved.

If fees are set to closely reflect the costs of services being provided, the Authority considers that the number of disputes would be minimal and the need for an appeals process would be reduced as a result. The need for independent review of charges is also critical to confirming the nexus between charges and costs.

The Landowners Group also submitted that in general, clearing of trees for agricultural use reduces interception by trees and increases run off and stream flow. The Landowners Group consider there is no defined 'natural' baseline flow in areas which have been substantially cleared (e.g. Upper Lefroy, Smith Brook); the baseline flow now is probably greater than the previous 'natural' flow, notwithstanding lower average rainfall. The Landowners Group claim that, in contrast to the lack of evidence of environmental damage caused by dams, the dams provide a refuge habitat for more than 20 species of native water birds and for native freshwater fish and marron. According to the Landowners Group, the Department of Water ignores these major environmental attributes of 'farm dams' in their consideration of water for the environment.¹²

The Authority's view is that all impacts on the environment – positive or negative – need to be taken into account when assessing environmental costs. The Department has informed the Authority that any positive impacts associated with water use are taken into account in the development of allocation plans and the setting of allocation limits in each region, and that stakeholders are consulted as part of this process.

The Water Corporation submitted that in order to appropriately allocate the costs to licence holders causing the costs to be incurred, licence holders should pay a charge based on the costs associated with the specific resource they are drawing from. The Water Corporation was concerned that charges based on state-wide costs would introduce the possibility of some licence holders paying for services they do not use and others paying twice for the same service.¹³

An example of costs incurred by the Department on behalf of licence holders that can vary between regions is that of allocation planning. Allocation plans are developed by the Department in order to determine the amount of water that can be taken by licence holders in a given area, taking into account environmental water requirements and the potential impacts of water use on the environment and other water users. The costs of allocation planning are much higher in areas where most, if not all, of the water resources have been allocated. Cost reflective charges would therefore involve differentiating charges for allocation planning on the basis of costs per region, or category of water resource allocation.

¹¹ Ibid, p2.

¹² Manjimup and Pemberton Landowners Group submission on the Discussion Paper, p2

¹³ Water Corporation submission on the Discussion Paper, p2.

Nexus between Costs and Charges

- 5) Where practicable, charges to licence holders would vary by region to reflect the costs of water resource management in each region.

2.3.3 *Recognising the Contribution of Licence Holders to Water Resource Management and Planning Activities*

Much of the work of water resource management and planning is carried out by licence holders themselves. Licence applicants are often required to carry out hydrological (surface water) and hydrogeological (groundwater) studies, conduct environmental impact assessments, and develop operating strategies for managing the impacts of their water use.

Some submissions, such as the Water Corporation and Rio Tinto submissions, recommended that the investment licence holders make in the identification, development and management of water resources should be recognised in any licence fee structure. In addition, Rio Tinto submitted that licence holders could be refunded for any costs incurred that have a broader public benefit, and would, in other circumstances, be funded by the Department of Water.

There are two key points to note regarding the costs incurred by licence holders.

First, licence fees should recover only costs incurred by the Department of Water. Licence holders should not be charged for work that they carry out themselves.

Second, there is the issue of whether licence holders should be refunded for the work they carry out, since such work often contributes to the understanding and knowledge of water resources in the region, and can benefit other licence holders in the area, future licence applicants, or the general public. The work carried out by licence holders is largely for their private benefit, in that it is part of the assessment required to prove-up the amount of water available for their allocation, and would in most cases not be carried out if it had not been for that application. However, it is also the case that the information provided by the licence holders to the Department of Water contributes to its knowledge of water resources and may be used in the development of water allocation or management plans. This is likely to be particularly important in areas where water allocation plans are still being developed. A case could therefore be made that a licence applicant should be reimbursed from the Department of Water, to the extent that the licence applicant carries out work that would be done by the Department as part of its general water management planning.

The Authority has considered several approaches to recognising the contribution that licence holders make towards water resource management and planning.

The Authority considers that it is efficient for licence holders to carry out such activities, as they often have the capabilities for this work, and have a greater incentive than the Department to carry out the work at least cost, because they are incurring the costs directly.

It may be possible to establish a rebate mechanism, under which licence applicants could be reimbursed for the costs they incur by future applicants that benefit from the work

carried out.¹⁴ However, this would be difficult to administer, requiring the Department to keep track of when work was done, when future beneficiaries arrive, the extent to which future users benefit from the previous work, and to arrange for rebates to be paid.

A more practical alternative, favoured by the Authority, is for the Department to partially reimburse licence holders for work carried out that contributes significantly to the development of water allocation plans or broader water resource assessment processes. The reimbursement could be a waiver of some or all of the allocation planning component of the annual charge for eligible applicants.

However, the Authority has not yet considered how such issues are dealt with in other industries where licence holders may carry out work that would otherwise be done by a Government agency as part of its general functions. The Authority is seeking feedback from interested parties on this issue, which will be examined further before the final recommendations are provided to the Government.

There may also be situations in which it is cost effective to expand the scope of work carried out by a licence holder beyond that which would be required for the licence holder to obtain their licence, in order to learn more about the water resources in the area and avoid the cost of further investigations in the future.¹⁵ In this case, the cost of the additional scope of the study could be covered by the Department, and recovered through the allocation planning charge.

Recognising the Contribution of Licence Holders to Water Resource Management and Planning Activities

- 6) Licence holders who carry out work that contributes significantly to allocation plans could receive a reduction in their licence fees (e.g. by waiving some or all of the allocation planning cost component of their licence fee). The Authority will examine this issue further and is seeking feedback from interested parties.

2.3.4 Equitable Charges

A number of submissions raised concerns that some significant users of water, such as domestic garden bore owners or users in areas that are un-proclaimed, may not be covered by the charging regime. This issue is related to the principle that users in similar situations should pay similar charges.

Domestic Garden Bores

On the issue of licensing domestic garden bores, the Conservation Council of Western Australia, WA Farmers and the Landowners Group and affiliated people submitted that it is inequitable that domestic garden bore users are not required to be licensed.

¹⁴ An example of a rebate mechanism is the capital contributions policy under the WA electricity access regime, in which new users who connect to a new extension to the electricity network pay a rebate to those who provided the extension. The same approach is also adopted in the National Gas Access Regime.

¹⁵ However, as most of the costs involved in water resource management and planning activities are operational rather than capital, economies of scale are probably less achievable than in capital-intensive industries such as utilities networks.

Bores in Perth collectively use 120 GL per year (775 kL per bore per year), with 60 GL coming from the Gnangara Mound.¹⁶ This calls for consideration of whether or not bore owners should contribute towards the costs incurred in the modelling and monitoring of groundwater levels on the mound. In principle, the Authority supports charging those who cause costs to be incurred, if this can be done cost effectively. One approach would be to license bore owners, although ACIL Tasman has calculated that the cost of licensing domestic bore owners in Perth would amount to \$3.7 million assuming no assessment is required.¹⁷ An alternative means of charging garden bore owners could be through the Water Corporation's billing system. A further consideration is that there may be some environmental benefits provided by domestic bores, which draw water from the superficial aquifer over a large area in comparison to the Water Corporation's bores, which draw water also from the superficial aquifer but in a way that can have greater localised impacts.

The Authority considers that garden bore owners should contribute towards the cost incurred by the Department of Water in the modelling and monitoring of groundwater levels on the Gnangara Mound, if it can be done in a cost effective manner. Possible approaches to charging garden bore owners will be explored further by the Authority and included in the final report.

Equitable Charges

- 7) Garden bore owners in Perth would ideally be charged for the costs that they cause to be incurred in monitoring and managing Perth's groundwater resources. The Authority will examine further whether this can be achieved in a cost efficient way and make a recommendation in the final report.

Un-Proclaimed Areas

The Landowners Group is concerned that water users in neighbouring catchments would not be subject to water resource management and planning charges because their catchments have not been proclaimed.

The Authority's view is that any regulation must have benefits that outweigh the costs of implementing and carrying out that form of regulation. The current legislation acknowledges that in some instances there is likely to be a net benefit to society from licensing the market for water resources (i.e. the benefits of licensing outweigh the costs). The legislation provides for water catchment areas to be "proclaimed" if it is deemed likely that the benefits of licensing are greater than the costs. Over the years, the decision to proclaim has been based on a number of factors with a view to getting the right level of water management. Competition for water is a key factor, particularly as the likelihood of impacts to other users and the environment increases. In some areas, the capacity to take water is limited by hydrology, hydrogeology, climate or land use, so there may be no need for regulatory management. Proclamation may be prompted by local water users seeking security of supply.

¹⁶ Gnangara Sustainability Strategy, Situation Statement, January 2009, p69.

¹⁷ Source: ACIL Tasman, Options for Cost Recovery in Water Licensing, June 2009, p 49.

The Department of Water's proclamation process is set out in an appendix of its *Analysis and Response to Public Submissions on the Whicher Surface Water Proclamation*¹⁸, which was prepared in 2007. The process involves public consultation, consideration of submissions, and a report to the Minister for Water, who makes the decision on proclamation. According to the Department, there is no protection over the groundwater or surface water area in unproclaimed areas other than that offered by riparian rights, which means that if you own land that has a watercourse running through it you have a right to take that water for ordinary use, as long as this does not diminish or degrade flows.¹⁹

Further, the Department is of the view that proclamation of an area ensures resource security for individual water users and protection of water dependent ecosystems. Water for the environment can only be secured through management of the resource, and the Department of Water can only manage the resource when it has a statutory responsibility to do so (such as through proclamation). The aim of the proclamation process is to resolve any conflicts between upstream and downstream water users and to ensure equitable water access and security. This is achieved through licensing and water management, although the use of water for domestic garden and household use and stock watering purposes do not require licensing in a proclaimed area.

The Authority's view is that water users in a proclaimed area are in a different situation to water users in an area that has not been proclaimed, and as a result water users in proclaimed areas should not be treated the same as water users in an unproclaimed area. Areas are not proclaimed unless the demand on water resources and risk of impacts to other users or the environment is high enough to warrant management by the Department. There is low demand for water for agricultural purposes in the Blackwood catchment, which is not proclaimed, compared with the high demand for water in the farmed regions of the neighbouring Warren River and Donnelly River catchments.

2.3.5 Ability to Pay for Different Users

Some submissions raised concerns about different users' ability to pay for water resource management and planning charges. Harvey Water submitted that despite the fact that the majority of water use is attributed to agriculture, it would be inequitable to charge primary food producers because they are unable to pass on the costs to consumers due to the market structure for agricultural products. According to Harvey Water, most farmers are price takers and do not have the ability to increase prices to take account of extra costs.²⁰ WA Farmers also indicated that their members had no capacity to pass on water resource management and planning charges and, unlike other water users, would bear the full cost of the charges, representing a significant cost to their businesses.²¹

The Landowners Group are concerned that the cost impost on self-supply water users, if not restrained, could exceed the \$1.5 million funding the Shire of Manjimup received through the Royalties for Regions grants program in 2008-09.²²

The Water Corporation submitted that cost recovery based on the size of the customer's client base and/or perceived ability to pay may result in a distortion of water trading markets and result in an inefficient allocation of the water resource. While ability to pay is

¹⁸ Department of Water, May 2007, *Analysis and Response to Public Submissions on the Whicher Surface Water Proclamation*, pp21-23.

¹⁹ Ordinary use is for domestic garden and household use and for watering stock.

²⁰ Harvey Water submission on the Issues Paper, p2.

²¹ Western Australian Farmers Federation submission on the Discussion Paper, p1.

²² Manjimup and Pemberton Landowners Group submission on the Issues Paper, p3.

an important factor when considering cost allocation between customer groups, the Water Corporation indicated that the Authority should ensure equal treatment of customers who are using the same service.²³

The Authority considers that ability to pay matters should not influence the design of a cost-reflective charging regime. It is important for the costs of water resource management and planning to be signalled to those who cause those costs to be incurred. Water resource management costs are one part of the cost of providing water, to those who use it as an input to commercial activities (as with any other input), or to those who use it for private consumption. Cost-reflective pricing helps to promote the use of water resources in their highest value use, and discourage water use for activities where it is not valued. The Authority does not believe that subsidies to particular groups of water resource users are required, as licence holders generally use water for commercial purposes. However, if there is a recognised affordability issue pertaining to any groups who only use the water for household purposes, subsidies would be better provided by grants rather than through the design of the charging regime.

Ability to Pay for Different Users

- 8) Ability to pay concerns should not influence the design of water resource management and planning charges. Subsidies are generally not supported for groups of water resource users who claim that they do not have the ability to pay, as licence holders tend to use water for commercial purposes. However, if there is a recognised affordability issue pertaining to any groups who only use the water for household purposes, subsidies would be better provided by grants rather than through the design of the charging regime.

2.4 Conclusion

The Authority set out the principles for the recovery of the costs associated with water resource management and planning at the beginning of this chapter. Consultation has found that there is general support for the principles that apply to cost recovery of water resource management and planning. However, stakeholders have raised a number of issues that arise when the principles are applied.

These issues have been considered, and the principles have been applied to each of them to assist the Authority's assessment of each issue. The application of these principles has allowed the Authority to develop an approach to cost recovery, which is used in Chapter 3 to establish which costs could be recovered by the Department of Water and how best to recover these costs. This includes consideration of the level (of cost recovery from water users, and the allocation of costs between licence holders and other water users, for each activity.

²³ Water Corporation submission on the Issues Paper, p5.

3 Recovery of the Costs of Water Resource Management

3.1 Terms of Reference

The Authority is requested in the Terms of Reference to consider and develop findings on:

- the tasks or activities undertaken in the efficient management of the State's water resources, by the Department of Water, that would appropriately be recovered from water users;
- the most appropriate level (or percentage) of cost recovery from water users; and
- the most appropriate allocation of costs between licence holders and other water users (licensed entitlement or actual use).

3.2 Background

In this chapter, the Authority considers which of the Department of Water's costs associated with water resource management and planning charges could be recovered from licence holders and other users of the Department's services. This includes consideration of:

- how costs can be recovered;
- the extent to which an activity has a component of wider benefits to the community; and
- any other issues that are specific to an activity.

The Department of Water identified five water resource management and planning activities with high priorities for cost recovery.²⁴ These activities, and the estimated costs of undertaking them (excluding corporate overheads), are outlined in Table 3.1.

Table 3.1 Water Resource Management and Planning Activities with High Priorities for Cost Recovery

Activity	Cost Estimate for 2009-10 (Excluding Overheads)
Water Source Protection	\$2,166,960
Urban Water Management	\$5,250,207
Water Metering	\$987,874
Licensing, Compliance and Enforcement	\$7,413,711
Allocation Planning	\$2,453,303
Total	\$18,272,055

Source: Department of Water

²⁴ Department of Water submission on the Issues Paper, p9.

The Authority considers that all of these activities are candidates for cost recovery, along with three other activities that it believes are part of water licensing. These activities are listed in Table 3.2.

Table 3.2 Cost Recovery of Other Water Resource Management and Planning Activities

Activity	Cost Estimate for 2009-10 (Excluding Overheads)
Environmental Water Planning	\$2,221,591
Groundwater and Surface Water Assessment, Investigation and Review	\$3,514,000
Water Measurement and Information	\$5,618,000
Total	\$11,353,591

Source: Department of Water

Analysis and public consultation by the Authority has identified that any cost recovery of water resource management and planning costs should be consistent with the principle that any charges for services should reflect as closely as possible the efficient costs of the activities that have been carried out in providing those services.

The Authority's view is that costs allocated to different users (licence holders or the public) should be determined on an activity by activity basis, similar to the approach adopted by the Independent Pricing and Regulatory Tribunal (**IPART**) in the regulation of water resource management charges in New South Wales. Each activity undertaken by the Department of Water is likely to have a different cost sharing ratio between users and the public, which needs to be reflected in any cost recovery model.

3.3 Water Source Protection

Costs are incurred by the Department of Water in relation to the protection of drinking water sources that are then licensed for abstraction by water service providers, such as the Water Corporation, Aqwest and Busselton Water. The Department's cost of water source protection activities in 2009-10 is estimated to be around \$2.2 million (excluding overheads) which is allocated evenly between the following three functions:

- preparation of approximately ten drinking water source protection plans each year. Until now, 101 drinking water source protection plans have been completed by the Department, which have a recommended five year review period. The majority of this work is for the benefit of water service providers, in particular the Water Corporation. The Department has therefore submitted that there is potential to recover most of the costs associated with water source protection plans through either a direct charge or negotiated arrangement with the service providers;²⁵
- advising the government on protecting water sources for around 300 Indigenous communities and around 500 mines and/or associated communities, which may not have water supply provided through licensed water service providers; and
- providing land use advice to the Western Australian Planning Commission, the Department of Planning and to local government authorities via responses to statutory referrals. This involves preparation of land-use advice, policy, strategies and guidance documents to protect the State's water resources. The Department

²⁵ Department of Water submission on the Issues Paper, p70.

also provides information and advice on water resource protection to other government agencies, individual land owners or managers, development consultants and the general community.

The Water Corporation has indicated that it would like to have an influence on the water source protection activities it would be paying for, either directly through the purchase of specific services, or indirectly on the setting of priorities for the Department of Water to align with those of the Water Corporation. This would involve identifying priority Drinking Water Source Protection Plans. In addition, the Corporation would like to agree with the Department of Water on appropriate timetables for completing plans.²⁶

The Authority agrees that service providers should be charged directly for the costs incurred by the Department to prepare drinking water source protection plans for sources that are used for public water supplies, since the costs of protecting drinking water sources can be separately identified in most cases. The Water Corporation, and other service providers if relevant, should ideally be able to purchase the specific services required from the Department of Water.

Water Source Protection

- 9) The efficient costs of water resource management and planning activities incurred by the Department of Water that are directly associated with the protection of public drinking water supplies be recovered from public drinking water suppliers through a direct charge.

3.4 Urban Water Management

The Department of Water's urban water management activities, which are estimated to cost around \$5.3 million in 2009-10, can be divided into two different sections:

- urban drainage planning and water assessment, which develops drainage and water management plans for urban and coastal areas. This section also leads development of best management practices for water resources and industry guidelines for planners and developers; and
- water and land use coordination, which provides advice to decision making authorities, such as the Western Australian Planning Commission (WAPC), on planning proposals that have water management implications.²⁷ This includes assessment of subdivision applications referred to the Department of Water by the WAPC. The Department of Water has submitted that it received 1,800 statutory subdivision referrals from the WAPC in 2008 for assessment.²⁸ The water and

²⁶ Water Corporation submission on the Issues Paper, p4.

²⁷ The WAPC requires that the following water management related information has to accompany subdivision applications (where applicable): any alterations to an existing drainage system and/or methods of dealing with storm water drainage; and environmental impacts that may be caused by a proposed subdivision, including impacts on native vegetation, rivers and watercourses, wetlands and catchments (information about these features can be obtained from the Department of Environment and Conservation and/or the local government in which the subject land is located). (WAPC, June 2009, *Guide to Subdivision Applications and Fees: Application for Approval of Freehold or Survey Strata Subdivision.*)

²⁸ The Department endeavours to assess and respond to these referrals within 28 days as agreed with the WAPC, and responses generally contain conditions and recommendations for more water resource management information to be provided. During 2008, the Department also received 200 requests from

land use coordination section also develops strategic planning guidance on how the development industry can meet water resource management requirements, as well as cooperates with other Departments and the development industry to streamline approvals processes.

For most of these activities, the costs that are incurred are not caused by a particular user or group of users, and as such the wider community should continue to pay for most of the urban water management. The exception is where the Department assesses subdivision applications that have been referred from the WAPC, where it is possible to identify the user who is causing the costs to be incurred.

The Department of Water has proposed the following two options to recover its subdivision assessment costs²⁹:

1. Incorporate the Department's subdivision assessment costs into the current WAPC subdivision fees³⁰, with fees to be transferred to the Department of Water from the Department of Planning.
2. Introduce fees for the review of any conditions that were identified during the assessment of subdivision applications, to determine whether or not they have been met, similar to those of local government authorities. Standard fees could apply with additional cost for clearance that requires the assessment of water management documentation.

However, the Department of Planning submitted that:

There are significant ramifications if the DoW introduces charges to cover their costs in undertaking this land use planning and drainage management functions. For instance, charging for the assessment of water management strategies required under the [Better Urban Water Management] framework would certainly trigger protests from the development sector and local government about the increasing costs of regulatory compliance.

There would be similar issues in trying to recover the costs of undertaking drainage water management plans that currently provide detailed hydrogeological information about connected surface and groundwater flows.

...

There is no meaningful way to determine how the direct and indirect beneficiaries of the Department of Water's planning functions could be charged as there is no way to apportion the benefit. Similarly, according to the Department of Planning, it would not be equitable to charge local extractive users for the costs of developing drainage water management plans as they would be neither contributing to any relevant externality nor benefitting measurably in terms of their extractive use.³¹

applicants to assess whether conditions related to water management had been met, many of which were in response to the need to prepare additional water resource management information as recommended by the Department of Water in the application process. (Department of Water submission on Issues Paper, p65.)

²⁹ Department of Water submission on the Issues Paper, p65.

³⁰ The WAPC introduced new subdivision fees in 2007 that were fully cost reflective. All of the costs incurred in assessing the applications for subdivisions are recovered by the WAPC, except when applications have exempt lots, which is where areas reserved for the purpose of a pedestrian access way, right of way, truncation, road widening, drainage reserve or recreation reserve are not counted as lots. (WAPC, June 2009, *Guide to Subdivision Applications and Fees: Application for Approval of Freehold or Survey Strata Subdivision*.)

³¹ Department of Planning and Infrastructure submission on the Issues Paper, pp 2-3.

Authority's Assessment

The Authority's view is that the costs of assessing subdivision plans should be recovered from the users of this service. If the WAPC, or an area in the Department of Planning, undertook the assessments of water related issues themselves, presumably these costs would be included in its subdivision fees.

The Authority's preferred option for cost recovery for subdivision assessments is where the Department of Water's costs are recovered from the WAPC, who has the option to pass these costs onto the applicants to continue its recovery of all the costs that it incurs.

Assessment of Subdivision Applications

- 10) The efficient costs of water resource management and planning activities incurred by the Department of Water that are directly associated with the assessment of subdivisions be recovered from the Western Australian Planning Commission.

3.5 Water Metering

Water metering involves the installation, maintenance and support of a meter or a number of meters on river pumps and bores to measure the volume of water extracted, and the collection and recording of such data.

The Department of Water has an existing policy on metering, which requires that licence holders with allocations over 500 megalitres per year have to install, maintain and read their own meters, as part of their licence conditions and management of their own water use.³²

As required under the NWI, the Department of Water has also started to install meters for other licence holders with allocations above 50 megalitres per year in high demand and high risk areas (sub-areas on the Gngangara Mound). The metering program is currently funded by the Department of Water, and its metering activities include³³:

- assessing sites for meter installation;
- managing contractors for the design, supply, installation and maintenance of water meters;
- collecting meter readings and reporting on data;
- developing metering policy and guidelines;
- trialling different types of metering technology; and
- providing metering advice to the Australian Government and other jurisdictions.

The Department of Water's metering program is estimated to cost \$987,874 (operating expenditure) in 2009-10. An additional \$1.9 million is estimated to be spent on the Department's capital costs of metering.

³² Department of Water's submission on the Issues Paper, p52.

³³ Ibid, p52.

In the future, the Department intends to install meters for most licence holders with an allocation above 50 megalitres, but this depends on the level of funding from the Commonwealth Government.³⁴

A Metering Implementation Plan was developed by the Department in 2008, which supports Western Australia's submission to the Commonwealth Government for funding to upgrade the State's meters, according to the framework established by the National Plan for Water Security (2007).³⁵ The funding that is being sought from the Commonwealth Government will be reduced by the amount of any costs that will be recovered from users if and when cost recovery for metering activities is introduced.

In relation to cost recovery of metering activities, the Department of Water submitted that most metering work contributes to a private benefit. However, some portion of metering expenditure is considered by the Department to be for the benefit of the State, including work that is done for managing government objectives, such as meeting a particular groundwater level to support a wetland.³⁶

In its submission on the Issues Paper, the Department identified a number of options that could be implemented to recover costs of metering activities, ranging from an option where the users would pay all or most of the costs associated with metering to an option where the costs would be shared between the Commonwealth Government, the State Government, water service providers and users.³⁷

Authority's Assessment

In New South Wales, users must currently install and pay for their own meters as a condition of taking bulk water. IPART has determined that 90 per cent of the capital costs associated with metering and monitoring of water use systems on unregulated rivers and groundwater are recoverable from users. In addition, all of the operational administration costs associated with metering and billing water usage are recovered from users.^{38,39}

In Queensland, all of the directly incurred costs associated with water metering are recovered from users through an annual metering service charge, which consists of a fixed meter use charge and a metering operating charge, which may vary from year to year.⁴⁰

The view of the Authority is that there are private benefits that arise from metering, as licence holders will have more certainty about the amount of water that has been allocated to them in their licences as well as knowledge about how much water they are using. Further, in many instances licence holders can sell any water savings identified through metering, to other water users. It would therefore be appropriate to recover all or most of the efficiently incurred costs associated with water metering from licence holders.

³⁴ Ibid, p52.

³⁵ Department of Water, 2008, *Western Australia's Metering Implementation Plan*, p1.

³⁶ Department of Water submission on the Issues Paper, p53.

³⁷ Ibid, pp53-54.

³⁸ Independent Pricing and Regulatory Tribunal, 2009, *Review of Prices for Water Administration Ministerial Corporation from July 2010: Issues Paper*, pp54-55.

³⁹ Existing meters have been found to be inaccurate and are likely to be replaced as part of an upgrade to meet national water meter standards that have been developed by the Metering Expert Group, which was established in 2006. IPART has not yet determined how the costs of these new meters will be allocated between users and the wider community. (Conversation with IPART.)

⁴⁰ Department of Natural Resources and Water, 2006, *The Metering Service Charge Fact Sheet*.

The Authority's preferred option of cost recovery for water metering activities is one where the cost of purchasing and installing meters are recovered by the Department of Water over time through an annual charge, perhaps over the life of the meters (in Queensland, these costs are recovered over 25 years, although there is now an option to pay the full amount upfront). The ongoing operational costs for maintenance and readings that reflect the costs of providing the services should also be recovered from users through the annual charge. Such an approach would be consistent with the recommendation in the *Blueprint for Water Reform in Western Australia* that the cost of purchase, installation, maintenance and reading of meters be recovered from water users through an annual metering charge.⁴¹

Water Metering

- 11) The efficient costs of water resource management and planning activities incurred by the Department of Water that are directly associated with water metering be recovered from metered licence holders. This would include recovery of the cost of purchase, installation, maintenance and reading of meters.

3.6 Water Licensing

Water licensing covers a range of functions, including dealing with licence applications, assessing and enforcing compliance, allocation and environmental water planning, groundwater and surface water assessment, and water measurement and information. The cost estimate for these activities in 2009-10 is \$21.2 million, excluding allocated overheads.

Analysis and public consultation by the Authority has identified that cost recovery of the water resource management and planning costs associated with water licensing should be consistent with the key principles that any charges to licence holders should reflect as closely as possible the efficient costs of the activities that have been carried out in providing those licences (see section 2.3.1).

The Department in its submission proposed a range of possible approaches to recovering the costs of water licensing. The Department has submitted a water licensing fees model developed by ACIL Tasman based on two of these approaches. The model and its assumptions and cost inputs have been scrutinised by the Authority and its consultants, Marsden Jacob Associates. The findings of this assessment are presented in Chapter 4.

The issue of who is causing costs to be incurred is central to the development of water licence charges. The Department's view is that much of its water resource management activities in relation to water licensing are caused by licence holders. However, where there are any public benefits associated with particular licensing activities, the costs of these activities should be recovered from the public, and not from licence holders.

In determining how to recover the costs of water licences, it is necessary to establish:

- which costs would appropriately be recovered from licence holders, and which would not; and

⁴¹ Water Reform Implementation Committee, 2006, *The Blueprint for Water Reform in Western Australia*, p41.

- the best method for recovering those costs (through an up-front fee, or an annual charge, or a combination).

A further concern is to establish that the costs that are to be recovered are efficiently incurred. This is discussed in Chapter 4.

3.6.1 Which Costs Should be Recovered from Licence Holders?

The key principle used to identify which water resource management and planning costs should be recovered from licence holders is that the costs are related to activities that are carried out for, and because of, licence holders – to provide them with their water allocations and to protect the security of those entitlements.

- Some activities related to licensing will be carried out in the assessment and processing of applications, whether they be for new licences or permits, or renewals or amendments of licences and permits.
- Other licensing-related activities are of a more on-going nature, such as the monitoring of allocations for compliance, enforcement with licensing conditions, and allocation planning activities that determine the level of water available for licensed use.

Costs Directly Related to Licence Applications

With any application for a licence or renewal of a licence, the Department incurs costs associated with assessing and processing that application, establishing the amount of water that can be safely allocated to the licence holder (including assessing impacts on the environment and other users), and setting licence conditions and operating strategies. These are up-front costs associated with applications. According to the Department, these costs will vary from application to application, depending on the complexity of the water issues involved.

Technical Assessments

When the Department of Water receives an application for a permit or licence, or a renewal or amendment of a permit or licence, it is required to carry out an assessment of that application in accordance with criteria specified in the *Rights in Water and Irrigation Act 1914* (Schedule 1, Division 2, section 7.2). This assessment requires the Department to consider whether the allocation:

- is in the public interest;
- is ecologically sustainable;
- is environmentally acceptable (which takes into account the broader costs and benefits of water use, including social and cultural considerations);
- may have impacts on other current or future users or other persons;
- could be provided by another source; and
- is in keeping with local by-laws, local practices, Departmental policy, land-use planning instruments, other government policies and any intergovernmental agreements.

The legislation requires that technical assessments are undertaken for all licence applications received, even if a licence allocation is unlikely to be successful (such as when an applicant is seeking to take water from a fully allocated or over allocated water source).

The level of technical assessment carried out by the Department depends on risks associated with granting the application, in terms of the assessment criteria. The risks of impacts (and the level of technical assessment required) increase with:

- the volume of the allocation;
- the level of allocation of available water resources in the catchment;
- surface water allocations above 5,000 kL (groundwater allocations generally have lower risks of impacts);
- the likelihood of unacceptable impacts on other users or the environment; and
- allocations that are inconsistent with catchment plans, local by-laws, government objectives and local practices.

Depending on the Department's analysis of the risks of an application, technical assessments fall into three categories (Level 1 to Level 3), where Level 1 assessments involve the least amount of effort for the Department and Level 3 the highest amount of effort.

Hydrological and Hydrogeological Assessments

The technical assessment may identify the need for some licence applicants to carry out a hydrological (surface water) or hydrogeological (groundwater) study, which is then assessed by the Department.⁴² The cost of such assessments by the Department depends on their complexity, which is determined by the risk of impacts for each allocation. For hydrogeological or hydrological assessments, risks are assessed on the basis of:

- the volume of water requested (high volume applications have higher risks);
- the level of allocation of water resources in the catchment (highly allocated catchments are associated with higher risks);
- the likelihood of unacceptable impacts on other users or the environment; and
- water salinity levels (the lower the salinity level, the more valuable the water resource, so risks are higher for allocation of fresh water relative to more saline sources).

Some applicants with low risk applications will not be required to carry out hydrological or hydrogeological studies. However, where a study is required, the Department's level of assessment of these studies may range from low level (Level 1) to high level (Level 3) assessments. Regional staff may be supported in their assessments by hydrologists and hydrogeologists in the Department's Groundwater and Surface Water Assessment Unit in the head office.

⁴² The requirement for hydrological or hydrogeological assessments is set out in the Department of Water's *Statewide Policy No. 19 – Hydrogeological Reporting Associated with a Groundwater Well Licence*.

Operating Strategy Assessments

Some licence applicants may also be required to develop an operating strategy, which is reviewed by the Department.⁴³ Operating strategies set out the licence holder's responsibilities for managing the allocated water, and may include details of how the water is taken and used, monitoring and reporting requirements, strategies for managing environmental impacts, contingency plans for the event that the allocated amount is temporarily reduced, and water conservation and efficiency measures.

The costs incurred by the Department in reviewing operating strategies vary depending on their level of complexity, as defined by the Department's assessment for the risks of impacts of the allocation, which increase with:

- the volume of water requested;
- the level of allocation of available water resources in the catchment;
- the potential for impacts on other users or the environment; and
- the source of abstraction (risks are lower for applications involving abstraction from a single draw point, relative to those involving more than one draw point, or abstraction from different water sources).

Licence holders with applications assessed to have low risks may not be required to develop an operating strategy. Higher risk applications will require operating strategies, ranging from basic to highly detailed. The level of effort required by the Department in reviewing these operating strategies ranges from low (Level 1 assessment) to high (Level 3 assessment).

Other Identifiable Costs of Licence Applications

The Department has submitted that it is possible to identify specific costs associated with particular licence application activities. For example, the Department's model allows for separate miscellaneous fees to be developed to cover the costs of:

- licence applications which do not contain all the necessary information (which impose additional costs on the Department in obtaining the missing information);
- simple amendments to licence volumes (rather than carrying out a full licence application assessment); or
- extra copies of licensing documents.

Authority Assessment

The costs incurred by the Department in assessing and processing applications are incurred on behalf of licence holders, and should be recovered from licence holders. The process by which the Department of Water assesses applications is determined primarily by its legislation, which requires it to consider a range of factors with each application. Licensing procedures and risk assessment methods have been developed to guide these assessments, and to determine the level of effort required by the Department for each individual licence. If the level of effort required for different levels of assessment can be accurately determined, then this should enable application fees to be set so as to reflect the level of effort.

⁴³ The requirements for operating strategies are set out in the Department of Water's *Statewide Policy No.10 – Use of Operating Strategies in the Water Licensing Process*, and *Statewide Policy No.16 – Policy on Water Conservation and Efficiency Plans*.

The Authority also considers that it is appropriate, where possible, to charge separate fees for specific activities involved in licence applications where the costs of these can be accurately determined.

On-going Costs of Licensing

Once a licence has been allocated, there are ongoing costs to the Department in monitoring the licence and ensuring compliance with licence conditions. There are also other activities (such as allocation planning, water licensing policy, groundwater and surface water assessment, and water measurement and information) that are carried out on an on-going basis and which protect the security of licence holders' entitlements, by determining available water resources.

Monitoring and Enforcing Compliance

The Department monitors licence holders to ensure that they comply with their licence conditions, and may in some cases enforce compliance. Compliance monitoring and enforcement involves activities such as:

- reviewing meter data provided by licence holders, generally on an annual basis, or more frequently, as set out in the operating strategy;
- assessing compliance with the management plan in areas in which water resources are more than 70 per cent allocated;
- in the case of licence renewals, carrying out a survey of land use; and
- issuing infringement notices in cases where compliance breaches are identified.

Enforcement activities are supported by the Department's Enforcement Unit in the Perth head office, with approximately five full time equivalents (FTEs) who deal specifically with the legal framework required to support enforcement activities.

The Department submitted that the effort involved in monitoring and enforcing compliance increases with the size of the licence, and with the increasing utilisation of water resources.

Water Licensing Policy

Four FTEs in the Department's head office work on the development of the internal policy and processes which underpin the Department's licensing decisions. This work involves consultation with stakeholders, obtaining legal opinion on the enforceability of the policy, and reviewing the policy for consistency with legislation and government policy. The Department proposes that this policy work is required to support the licensing activities of the Department and should therefore be recovered from licence holders. The budget for water licensing policy in 2009-10 is \$367,509.

Water Allocation Planning

Water allocation planning is carried out by the Department's Water Allocation Planning Branch, in the Perth head office. Allocation planning involves determining the amount of water that is available to be allocated to licence holders in each region. Plans are called "management plans" in legislation and under the *State Water Plan 2007*, but the Department started naming them "allocation plans" in 2009 to clarify the intent of the plans. The Department is aiming to produce water allocation plans for all proclaimed areas. Since the beginning of 2009, four water allocation plans have been finalised (all in

the south west of the State) and three draft allocation plans have been published (see Table 3.3 below).

Table 3.3 Status of Water Management Plans and Water Allocation Plans (November 2009)

Region	Area and Water Planning Status	Status
Kimberley	La Grange Area Groundwater Management Plan	Draft (Sep 2008)
	Ord River Surface Water Management Plan	Final (Dec 2006)
Pilbara	Pilbara Mining Water Management Plan	Draft (Oct 2008)
Mid-West Gascoyne	Arrowsmith Groundwater Allocation Plan	Draft (Aug 2009)
	Carnarvon Artesian Basin Groundwater Management Plan	Final (Dec 2007)
	Gingin Groundwater Allocation Strategy	Interim (Jan 2003)
	Jurien Groundwater Allocation Plan	Draft (Sep 2009)
	Lower Gascoyne River Groundwater Management Strategy	Final (2004)
Swan-Avon and Goldfields	Canning River Surface Water – developing water management plan	
	Gingin Surface Water Allocation Plan	Draft (Sep 2009)
	Gnangara Groundwater Allocation Plan	Final (Nov 2009)
Kwinana-Peel	Cockburn Groundwater Management Plan	Final (Dec 2007)
	Rockingham Groundwater Management Plan	Draft (Dec 2007)
South West	Kemerton Groundwater Management Plan	Final (Dec 2007)
	South West Groundwater Allocation Plan	Final (Jun 2009)
	Upper Collie Surface Water and Groundwater Allocation Plan	Final (Aug 2009)
	Whicher Area Surface Water Allocation Plan	Final (Sep 2009)
South Coast	Esperance Groundwater Management Plan	Final (May 2007)

Source: Department of Water

The information requirements (and costs to the Department) for determining allocation limits are greater in areas of high resource allocation.

- In areas where water resources are less than 30 per cent allocated, small plans are developed, with allocation limits updated based on recent flow and recharge information. The Department estimates that such plans cost around \$50,000.
- Where water resources are more than 70 per cent allocated, allocation plans are based on newly commissioned studies (e.g. hydrological, ecological, environmental values, surveys of licensed and unlicensed use, surveys of land use and impact on water balance). Such allocation plans would set out environmental thresholds, policies to address high water use issues, and programs to monitor impacts. The Department estimates that the average cost of an allocation plan in a C3 area (70-100 per cent allocated) is around \$1 million, and in a C4 area (more than 100 per cent allocated) around \$5 million.⁴⁴

The Water Allocation Planning Branch includes people who work on environmental water planning (a division of 12 FTEs). The activities of environmental water planning are to:

- manage projects to investigate environmental water dependency and understand potential impacts of water user;
- set water resource objectives to maintain groundwater and surface water systems;

⁴⁴ Department of Water, personal communication.

- set water regimes which will maintain renewability of supply and maintain in-situ social, cultural and environmental values to the resource objectives;
- monitor water resources and dependent systems to inform environmental water planning and to meet compliance criteria;
- provide advice and support to licensing to reduce impacts of water use on environments.

(Department of Water submission on the Issues Paper, p99)

The estimated cost of water allocation planning in 2009-10 is \$2.5 million and the estimated cost of environmental water planning is \$2.2 million in 2009-10. In its submission on the Issues Paper, the Department's view was that some environmental water planning activities were attributable to private water users, as part of allocation planning, and should be recovered from users, but that most were for public benefit, through improved understanding of water resources and water-dependent environmental systems.⁴⁵ The Department submitted that costs associated with the provision of public benefits should not be recovered from users.

Groundwater and Surface Water Assessments

The role of this branch in the Department is to investigate, assess, review and understand groundwater and surface water resources in areas where there is licensed use. This work feeds into the Department's allocation planning and assessments of the available water resources in each area. Staff in this branch may be involved in the assessment of investigations carried out by large licence holders (such as mining companies), or in carrying out scientific and technical work to assess and evaluate water resources in areas with multiple users. The Department submitted that most of the work of this branch is for the private benefit of licence holders, and could be recovered from licence holders in a particular area. The estimated cost of groundwater and surface water assessments in 2009-10 is \$3.5 million.

Water Measurement and Information

In this function, the Department measures and collates information on water resources into a central repository of data sets on water quality and quantity across the State. The work includes spatial analysis (Geographic Information Systems, or GIS); measurement of water resources through a State-wide network of bores and gauging stations, and maintenance of that network; data analysis and presentation; exchange of data with other government departments; and provision of data to interested parties. The information enables the Department to assess the availability of water resources and impacts of water use when determining water allocations to licence holders. The estimated cost of the water measurement and information activities in 2009-10 is \$5.6 million.

Authority Assessment

The Authority considers that efficient on-going costs that are directly associated with services provided to licence holders, such as monitoring and enforcing compliance with licences, and internal water licensing policy, should be fully recovered from licence holders.

Other on-going activities, such as water allocation planning, groundwater and surface water assessment, and water measurement and information, are primarily carried out for licence holders, but may also have a public good component.

⁴⁵ Department of Water submission on the Issues Paper, pp47-48.

- These activities ensure that allocated water resources have a high security of supply, and that the security of existing allocations is not compromised by over-allocation to new applicants. Reduced uncertainty about water resources can also increase the amount of water that can be allocated, since the Department adopts a precautionary approach to water allocation if there is uncertainty about the availability of water in a region. The Authority does not consider that the activities of environmental water planning should be treated any differently from other water allocation planning activities, since establishing environmental water requirements and water use impacts is a necessary part of determining water allocation limits that comply with prevailing environmental standards.
- However, the knowledge that the Department builds up from undertaking these activities is a public good. For example, a water allocation plan in a particular area could improve the scientific understanding of how surface water and ground water sources interact, which may be applicable to other regions. GIS information, while primarily required to establish the amount of water that can be allocated to licensees, may also be useful to other agencies, private parties and the public.
- Furthermore, water allocation planning, groundwater and surface water assessment, and water measurement and information activities may also be carried out for some parties who cannot be identified. An example is those with riparian rights, who may not hold licences, but benefit from the allocation planning activities in their area, which helps to maintain their security of supply.

The Authority therefore considers that there is a case for allocating some of the costs of allocation planning, groundwater and surface water assessment, and water measurement and information to the general community. In recognising that most of the activities are carried out for licence holders (and would not be carried out in the absence of licence holders), the Authority considers that it would be reasonable to allocate a significant proportion of these costs to licence holders. The Authority invites comments on the appropriate proportion of these costs to be recovered from licence holders.

The Authority' view is that the most appropriate mechanism for recovering on-going costs of water resource management and planning is through an annual charge, spread across existing licence holders and an estimate of new applicants, rather than an up-front application fee.

- This is similar to the approach adopted in fisheries licensing in Western Australia. Fisheries resource management costs incurred by the Department of Fisheries, including the costs of research, monitoring and compliance, stakeholder consultation and information dissemination, are recovered from licence holders through an annual resource management charge. Application charges recover only the direct administration costs associated with processing applications. (The fisheries licence fees method is described below in section 3.8.3 and in Appendix B).

A further question is whether an annual fee should be differentiated, in terms of the licence size, and/or on a location basis.

- The Department considers that the costs of monitoring and compliance increase with the size of the allocation, and with the degree of allocation of water resources in an area. There may therefore be justification for allocating more of the on-going costs to larger licences, and to licence holders in highly allocated areas. This requires confirmation of the level of effort required in on-going services to different types of licence holders in different areas, and the efficiency of those costs.

- The Department also reports that the cost of allocation planning increases significantly as water resources in an area are close to fully allocated. Setting separate charges for each allocation plan would be highly cost reflective, if the costs of allocation planning and other on-going costs could be determined for each plan, and then allocated to the licence holders associated with that plan. Alternatively, annual charges could be set on the basis of the category of water resource allocation (i.e., C1, C2, C3 or C4).⁴⁶

The Authority's preference is for cost reflective annual charges rather than an averaging of water resource management costs across licence holders, as long as any link between costs and cost drivers (licence size or degree of water resource allocation) can be clearly demonstrated. Any annual charges must be practical to implement, and the benefits of implementation must outweigh the costs.

Other Costs

Allocated Overheads

Some costs, such as allocated overheads, may be incurred in each activity undertaken by the Department, and could therefore be recovered partly through the application fee and partly through the annual charge. The Department submitted that its approach to the allocation of overhead costs is to allocate these costs to the activities which they support.⁴⁷ This is consistent with Department of Treasury and Finance guidelines for the allocation of overheads by government departments.

For each regional office, therefore, overhead costs (for example rent, maintenance and utility) are allocated to the costs of licensing on the basis of the number of FTEs directly involved in licensing.⁴⁸ Similarly, there are some corporate overhead costs incurred in head office that are allocated across the Department's activities in proportion to the share of FTEs engaged in those activities. Corporate overheads include the costs of the Department's vehicle fleet management, IT support, and payroll.

Costs Related to Licensing but Not Cost Recoverable

The Department submitted that there are some costs that are related to licensing, but where it would not be appropriate to recover these costs from licence holders. An example is the time spent by departmental staff responding to Ministerial questions on licensing issues.

Authority Assessment

The recovery of overheads from licence holders, to the extent that those overheads are employed in the delivery of services to licence holders, is appropriate. Depending on the particular activities that the overheads support, some overheads may be recovered through the application charge, and others through the annual charge.

⁴⁶ C1 area is where 0-30 per cent of a water resource is allocated, C2 area is where 30-70 per cent of a water resource is allocated, C3 area is where 70-100 per cent of a water resources is allocated and C4 area is where >100 per cent of a water resource is allocated.

⁴⁷ Department of Water submission on the Issues Paper, p9.

⁴⁸ For example, if a regional office has 30 staff in total, and 2 staff are directly involved in licensing, then the 2/30 of the office's overhead costs will be apportioned to the costs of licensing.

The Authority also considers that some costs should not be recovered from licence holders, on the basis that licence holders did not cause those costs to be incurred. One example of this is responding to Ministerial correspondence.

Water Licensing

- 12) Efficient costs incurred by the Department of Water that are directly related to the provision of licences be recovered from licence holders.
- 13) Charges to licence holders should reflect, as closely as practicable, the efficient costs of services provided by the Department of Water in the issuing and monitoring of those licences:
 - a) Costs associated with the processing and assessment of applications be recovered through an up-front application charge.
 - b) Costs associated with on-going water resource management and planning activities related to licences (i.e. compliance monitoring and enforcement, allocation planning, environmental water planning, water licensing policy, groundwater and surface water assessment and water measurement and information) be recovered through an annual charge.
- 14) The activities of allocation planning, environmental water planning, groundwater and surface water assessment and water measurement and information have a “public good” component, as the information they produce is of benefit to the wider community. The Authority recommends that a small proportion of the cost of these activities be allocated to the general public.

3.6.2 *Proposed Options for Recovering the Costs of Water Licensing*

The Department of Water has proposed two options as possible approaches for the recovery of costs of water licensing:

- A “fee for service” approach – licence holders pay an application fee reflecting the complexity of the services provided by the Department of Water in processing their application, and an annual fee to recover on-going water resource management and planning costs; and
- A “volume by catchment type” approach – licence holders would pay application fees and an annual charge, both based on the volume of the application and the degree of allocation of water resources in the catchment.

A model is being developed by the Department and its consultants, ACIL Tasman, to develop charges based on these two approaches, which are described here.

*Fee for Service*⁴⁹

The “fee for service” approach consists of the following fees:

- an initial application fee, reflecting the minimum up-front costs to the Department of processing and assessing any application, regardless of whether or not it is approved;
- application fees for technical assessments, hydrological or hydrogeological assessments, and operating strategy assessments. Fees would reflect the various levels of each type of assessment by the Department (described in Table 3.4 below);
- an annual charge, based on the costs of monitoring and compliance, allocated according to the size of the allocation and the degree of allocation of water resource in the catchment; and
- miscellaneous charges based on specific activities and services provided by the Department for which the costs can be separately identified.

⁴⁹ While the model is referred to as a “fee for service”, other models could also be seen as “fee for service” approaches, to the extent that they recover the costs of service provided, even if they do so in a different way. However, to avoid confusion, the Department’s name for the model has been retained.

Table 3.4 Description of Levels of Assessment Carried Out by Department of Water on Licence Application and the Department's Estimate of the Amount of Time for Each Assessment

Type and Level of Assessment	General Description	DoW Indicative Number of Hours per Assessment
Technical Assessment		
Level 1	Applications which generally involve low volumes of water in areas where demand for water is low and the likely impacts of the allocation are limited or acceptable. An example may be water for domestic use or small commercial enterprises.	5-10
Level 2	Generally applications for moderate amounts of water and/or for which there is a low to medium risk of impacts. Assessments of this type require compulsory advertising, review of submissions and evaluation of impacts.	10-25
Level 3	Generally for allocations for large volumes in areas of high water demand, and/or a high risk of impacts. Examples may include allocations for mining companies or town drinking water supplies. Such applications require detailed reviews and evaluation of potential impacts, negotiations with stakeholders, and review of reports.	25-50
Hydrological/ Hydrogeological Assessment		
Level 0	No assessment required.	0
Level 1	Involve a desk top study by regional hydrologist.	1-5
Level 2	Involve reviews of test pumping and drilling information.	5-10
Level 3	Involve surface water and/or groundwater modelling, as well as detailed reviews of pumping and drilling information.	10-20
Operating Strategy Assessment		
Level 0	No assessment required.	0
Level 1	For basic operating strategies and water conservation and efficiency plans.	5-10
Level 2	For applications where there is a low to moderate risk of impacts, and require more complex operating strategies and water conservation efficiency plans.	10-25
Level 3	For comprehensive operating strategies, involving large volumes of water and a high risk of impacts. The Department would be required to review a number of evaluation reports and negotiate with the applicant.	25-50

Source: Department of Water

Table 3.5 sets out the structure of fees under the fee for service approach. The table shows that application fees would consist of a minimum fee, applied to all applicants, and a fee for each of the three services provided by the Department (technical assessment, hydrological/hydrogeological assessment and operating strategy assessment), which increase with the levels of assessment required. All licence holders would also pay an annual fee, which increases with the volume category of the licence, and water resource allocation category relevant to the licence.

Table 3.5 Structure of Fees Under the Fee for Service Approach

Application Fees				
Initial Application Fee	\$x			
Service Fees	Technical Assessment	Hydrological or Hydrogeological Assessment	Operating Strategy Assessment	
Level 0	n/a	\$0	\$0	
Level 1	↓ (increasing fees)	↓ (increasing fees)	↓ (increasing fees)	
Level 2				
Level 3				
Annual Fee	Catchment Type (Based on Percentage of Water Resources Allocated)			
	C1	C2	C3	C4
Allocation Volume (kL)	0-30% allocated	30-70% allocated	70-100% allocated	>100% allocated
0 - 5,000				
5,001- 50,000				
50,001-100,000				
100,001 - 500,000				
500,001 -1,000,000				
1,000,001- 5,000,000				
>5,000,000				

Source: Department of Water

Volume by Catchment Type

Another approach proposed by the Department is to charge both the application fee and the annual fee on the basis of allocation volume and catchment type (see Table 3.6 below). Under this approach, the annual charge would be the same as under the fee for service model. However, the application fee, rather than being disaggregated into the levels of technical, hydrological/hydrogeological or operating strategy assessments required by the Department, would only be disaggregated by volume of allocation and catchment type. Costs (and charges) increase with the size of the licence, and the degree to which water resources in a region are allocated. To calculate the application fee, the Department would need to determine the average costs incurred by the Department in processing applications of each classification (volume by catchment type).

Table 3.6 Department of Water’s Proposed Structure for an Annual Fee for Licence Compliance and Monitoring Fee

Allocation Volume (kL)	Catchment Type (Based on Percentage of Water Resources Allocated)			
	C1 0-30% allocated	C2 30-70% allocated	C3 70-100% allocated	C4 >100% allocated
Application Fee				
0 - 5,000				
5,001- 50,000				
50,001-100,000				
100,001 - 500,000				
500,001 -1,000,000				
1,000,001- 5,000,000				
>5,000,000				
Annual Charge				
0 - 5,000				
5,001- 50,000				
50,001-100,000				
100,001 - 500,000				
500,001 -1,000,000				
1,000,001- 5,000,000				
>5,000,000				

Source: Department of Water

Separate Billing for Large Licence Holders

The Department of Water has proposed to bill large users separately, if the direct costs of water resource management and planning activities incurred by the Department on behalf of a particular licence holder can be clearly identified. The Department of Water submitted that the costs imposed on water licensing by the activities of the water service provider and co-operatives are different to those that arise from general industrial and agricultural water licensing activities. In the case of co-operatives, much of the management function is undertaken internally by the co-operatives. In the case of the water utility service providers a close working relationship exists, and the resources within the Department that are directly related to the management of the Water Corporation’s licences are separately identified in the Department’s cost database.

The Department of Agriculture and Food also recommended differentiating charges between public water suppliers and other users:

The Department suggests that a framework should be developed to identify the proportion of costs attributable to water users.

Some Department of Water activities support specific water use groups and have limited or no benefit to other users. For example water service providers benefit from: water source protection planning, managing customer complaints against service providers, and issuing exemptions for water services licenses. The framework could address this issue by

differentiating between different users (e.g. water service providers and other water users) and different water source users (e.g. surface water and ground water users). (Department of Agriculture and Food submission, p1)

In the first instance, the Department proposes separate charging just for the Water Corporation. However, the Department considers that the co-operatives and other large users could eventually be treated in the same way as the Water Corporation.⁵⁰

Also, at times there are unusually large or controversial licence applications which involve significant investigative work. An example may be water for public drinking water supplies in an environmentally sensitive area. Again, the costs for these assessments could be identified separately and charged directly to the licence applicant.

Authority Assessment

In comparing the two key approaches proposed by the Department of Water, the Authority considers that the “fee for service” approach is the one that has the best scope for cost reflectivity, and for meeting the Authority’s recommended principles for cost recovery. As long as it can be established that the appropriate costs are allocated to licence holders, and that the cost inputs into the model are efficient, then the structure of the model has the potential to generate fees that reflect reasonably closely, for different types of licence applications:

- the upfront efficient costs of the different tasks (and their varying degrees of complexity) carried out by the Department in processing licence applications; and
- the efficient costs of water resource management and planning activities carried out by the Department on behalf of the licence holder that are of an ongoing nature (such as monitoring and compliance activities, and allocation planning).

The advantage of the fee for service model is that, by setting different fees for different levels of assessments at the application stage, application fees can reflect the level of effort required by the Department to assess any type of application (new licence, amendment of licence volumes, renewal of licence). Licence renewals could be expected to generally involve less effort, given that assessments have been previously carried out to approve the initial allocation, but the application fees should also reflect this (e.g. by waiving the fees for any assessments that are not required). The validity of the application charges will depend on the accurate determination of the level of effort required by the Department in carrying out different types of assessments.

The main disadvantage of the second approach (volume by catchment type) is that it involves more averaging across licence applicants and does not allow for the flexibility of adjusting application fees for the level of effort. For example, there may be licence applicants with high volumes or in highly allocated catchments that have simple applications, but the fees would not reflect this. However, it is likely that this approach would have lower administration costs than the fee for service approach, due to the less complex data requirements.

The Authority accepts that there is a case for charging some customers their direct licensing costs, and excluding these costs from the general licence fees, if there are adequate systems in place to separately identify these costs. In particular, other large customers, and not just the Water Corporation, should be given the option of individual charging, if the administration costs are not prohibitive. This would improve the cost

⁵⁰ Department of Water submission on the Issues Paper, p118-119.

reflectivity and transparency of charges to these customers and allow them to interrogate costs.

In the case of the Water Corporation, there may be a need for independent verification of any water resource management costs incurred by the Corporation, as there may not be sufficient incentive to minimise such costs, which are passed on to water customers.

Where it is not practical to charge large customers directly, the charging regime should be sufficiently flexible to have charges adjusted if there is clearly a case of either over or under-charging.

Proposed Options for Recovering the Costs of Water Licensing

- 15) A “fee for service” approach to licensing charges complies with the cost recovery principles in that it:
 - is able to reflect the different services, and their varying levels of complexity and effort, provided by the Department in the processing and assessment of licences and the monitoring and enforcement of compliance with licence conditions;
 - is transparent to licence holders; and
 - can accommodate an adjustment of charges to reflect any public benefits associated with licensing.
- 16) Where the costs associated with licensing of particular large licence holders (such as the Water Corporation) can be accurately identified, such costs should be charged to that licence holder.

3.6.3 *Alternative Approaches to Cost Recovery*

The Authority has also considered other approaches to recovering the costs of natural resource management through licence fees, to determine whether there are other elements that could be applied to improve the approach to the recovery of water licensing costs.

- The Department of Water in its submission proposed two other approaches to water licensing fees (charges based on licence size, and a volumetric charge), which have not been developed in its licence charging model.
- The Department of Fisheries in Western Australia applies fisheries licensing fees to commercial fisheries and recreational fishers, to recover the costs of licence administration and fisheries resource management.
- In New South Wales, the regulator, IPART, sets and regulates the water licensing fees set by the NSW Office of Water to recover its costs of water resource management and licensing.

Charges Based on Size of Licence

In its submission, the Department listed the option of adopting the same approach used in the previous introduction of water licence fees, updated for the Department’s current

budget estimates. In this approach, fees for licence applications and renewals would be minimal (e.g. \$200 in the fee schedule adopted in 2007, but later disallowed), while the annual fee would increase with the volume category of the applicant (see Table 3.7 below). The annual fee was calculated by the Department on the basis of the average amount of effort involved by the Department in processing licences of a particular size (smaller licences take less time to process than larger licences).

In its submission, the Department acknowledged that there was a lack of transparency with this approach, so that it was difficult for licence holders to see what service they were getting for their fees. The Department also submitted that the approach did not sufficiently reflect the higher costs associated with dealing with licences in areas where water resources were highly allocated.

Table 3.7 Structure of Charges Under Previous (2007) Approach to Water Licence Fees

Description	Type	Cost (\$)
Application Fee	Licence applications	\$200
	Permit application	\$200
Amendment Fee	Licence applications	\$200
	Permit application	\$200
Miscellaneous Fees	Late payment	\$200
	Duplicate copy	\$50
	Meter test maximum fee	\$50
Annual Fee (water entitlements as kL per year)	1,501 - 5,000 kL/year	↓ Increasing fees
	5,001 - 50,000	
	50,001 - 100,000	
	100,001 - 5,000,000	
	5,000,001 – 10,000,000	
	10,000,000+	

Source: Department of Water submission on issues paper, p37, and Rights in Water Irrigation Amendment Regulations (No.3) 2007

Authority Assessment

The Authority agrees that a simple approach based on the size of licences, and that does not take into account the degree of water resource allocation or the nature and complexity of the services provided, is not sufficiently cost-reflective or transparent. Application fees would recover only the minimal application costs, so that other application costs, such as the technical and other assessments carried out by the Department at the application stage, would be spread across all applicants. Also, there is no differentiation for areas of higher water allocation, so the higher costs of water resource management in these areas would also be spread across all licence holders. This approach would be likely to be opposed by licence holders, as it was in 2007, due to its lack of transparency, and inequities resulting from the spreading of costs across different types of licence holders.

Volumetric (per ML) Charge

Another option proposed by the Department in its submission is a purely volumetric charge, in which the total costs of water licensing are divided by the total volume of water

allocations, to derive a charge (\$ per ML allocation) which would be applied to all licence holders. Small users (allocations less than 2 ML) would not be charged.

The Department submitted that this approach, while being administratively simple, does not produce charges which correlate with the amount of effort involved for licences of different sizes and in different regions.

Authority Assessment

The Authority does not consider that water licensing costs should be recovered on a per ML volumetric basis. This approach would be highly unlikely to reflect the costs incurred by the Department for licences of different sizes. There may be situations where small licences require as much effort by the Department as large licences, particularly if they are in highly allocated catchments. The overall impact of such an approach is likely to be a disproportionately high allocation of costs to licence holders with large allocations.

Department of Fisheries Licensing

Commercial fisheries in Western Australia pay licence fees comprising:

- an application fee, reflecting the costs of different activities associated with applications (e.g. granting of a fishing boat licence, renewal of a fishing boat licence, application to fish for abalone); and
- an annual fee, reflecting the fish resource management costs for each type of fishery. The annual fees recover the costs of fish resource management activities by the Department of Fisheries, including research into fish stocks and sustainable yields, monitoring and compliance activities, industry consultation and information dissemination.

All commercial fisheries also pay a Development and Better Interest Fee, which is used by the Minister for Fisheries “in the better interest of fisheries generally and fish and fish habitat protection”.⁵¹

Recreational fishing licences (for activities for which licences are required) are allocated on an annual basis, with an annual charge. Currently, charges vary for different types of fish, but new charges are being introduced that will set a basic annual charge of \$40 for each recreational fishing activity.

Authority Assessment

The fisheries licensing regime in Western Australia is approaching full cost recovery of the fish resource management costs incurred by the Department of Fisheries, with costs recovered from licence holders. Most of these costs are recovered through an annual charge.

The process for consultation undertaken by the Department of Fisheries could provide some guidance on how to engage licence holders in the development and review of charges. Such consultation could improve the transparency and acceptability of charges to licence holders, provide additional scrutiny of costs and identify efficiency savings. This is discussed in more detail in Chapter 4.

⁵¹ Department of Fisheries (October 1999), *Cost Recovery Guidelines Under an Integrated Project and Activity Costing Framework*, p9.

The setting of charges on the basis of a share of gross production values is unlikely to be a concept that could be applied in the case of water licensing charges. Gross production values for each managed fishery are based on formulae for the landed price of that fish type. However, water licence holders would in many cases be involved in activities with multiple outputs, with multiple production values, and each licence holder would be different.

IPART

In NSW, water resource management and planning activities are carried out by the New South Wales Office of Water (**NOW**), which is part of the Department of Environment, Climate Change and Water.⁵² The prices charged by the NOW to water licence holders, to recover some of the costs it incurs in water management and planning, are reviewed and regulated by IPART. IPART last reviewed water licence charges in 2006, and has recently commenced its review of charges for 2010.⁵³

Water licensing charges in NSW vary by region, as defined by individual water sharing plans. Charges comprise some or all of the following elements:

- a fixed charge based on the entitlement volume;
- a usage charge (usage is metered); and
- a minimum charge of \$60.

In addition, there are administration charges to all licence holders (for example, for temporary transfers of water, new water access licences, and new or amended approvals).

IPART regulates the prices charges by NOW by determining the efficient level of costs to be recovered from licence holders (on the basis of an “impactor pays” approach).

Authority Assessment

It is possible that with the development of water allocation plans for proclaimed regions in Western Australia, water resource management charges could in future be based more closely on regional water costs, as is the case in NSW.

A key difference between the NSW and Western Australian water resource management frameworks is the prevalence of water meters in NSW, which provides for the possibility of charging on the basis of water usage. This can encourage efficiency in water use, as licence holders can reduce their costs by reducing their water use. In Western Australia, not all licence holders are metered, so any charges would need to be based on allocation volumes.

3.7 Conclusion

In this section, the Authority has considered the activities of the Department of Water for which it is appropriate to recover costs from private parties for whom services are

⁵² The New South Wales Office of Water carries out these activities on behalf of the Water Administration Ministerial Council, which is the body responsible for water resource management and planning activities in NSW. Until recently, the Department of Water and Energy carried out these activities.

⁵³ IPART (September 2006), *Bulk Water Prices for State Water Corporation and Water Administration Ministerial Corporation from 1 October 2006 to 30 June 2010 – Final Determination*; and IPART (July 2009), *Review of Prices for Water Administration Ministerial Corporation from July 2010 – Issues Paper*

provided. Only efficient costs related to the provision of services should be recovered. Where activities have a public good component, the costs are to be shared between the private parties and the general community.

For the water resource management and planning activities discussed in this chapter, cost recovery would mean that:

- for water source protection plans, costs are to be recovered from public drinking water suppliers;
- for advice on water management issues related to the assessment of subdivision applications referred to the Department by the Western Australian Planning Commission (WAPC), costs would be recovered from the WAPC;
- to expand the metering program in high demand areas (such as the Gnamptara Mound) from licence holders with 500 ML or more, to licence holders with 50 ML or more, cost would be recovered from licence holders, with the cost of purchasing and installing meters recovered over time through an annual charge, and ongoing operating and maintenance costs recovered through an annual charge;
- to assess and allocate water licences, costs are to be recovered from licence holders.
 - The costs of licensing, compliance and enforcement to be fully recovered from licence holders, while activities such as allocation planning, environmental water planning, groundwater and surface water assessment, investigation and review, and water measurement and information will have a public good component that should be paid for by the general community.
 - The Authority supports the further development of a “fee for service” approach to licence charges, with an up-front application fee reflecting the cost and complexity of assessing different licence applications, and an annual charge reflecting the on-going monitoring and planning costs for different licences.

4 Implementation of Water Resource Management and Planning Charges

4.1 Terms of Reference

In making its recommendations to the Government, the Authority is required under the Terms of Reference to consider and develop findings on:

the tasks or activities undertaken in the efficient management of the State's water resources, by the Department of Water, that would appropriately be recovered from water users...

4.2 Background

Once the principles and charging approaches for cost recovery of water resource management and planning activities have been established, the next step is to consider which of the Department of Water's costs can actually be recovered and how efficient these costs are.

This requires an assessment of the inputs and assumptions of the licence fees model, the cost efficiency of the Department's water resource management and planning activities and the effectiveness of the processes used by the Department to control its expenditure and align it with priorities.

4.3 Submissions

A number of stakeholders recommended in their submissions that checks be put in place to ensure that any costs to be recovered through licence holders are incurred efficiently by the Department.

The Water Corporation and the Department of Treasury and Finance recommended that the Authority conduct a review of cost efficiency of the Department of Water's activities as part of the inquiry.

Water Corporation

As a key customer of the Department of Water, the Corporation would support the introduction of water resource management and planning charges, subject to them being:

- Based on the efficient costs of delivering the services – it is the Corporation's view that it would be appropriate for the ERA to review the efficiency and effectiveness of the service delivery. (Water Corporation submission, p1)

Central to any charges will be the obligation to demonstrate that these costs have been incurred efficiently, with care taken to ensure only the costs from the relevant activities are captured. (Water Corporation submission, p5)

Department of Treasury and Finance

In considering what costs should be recovered it is essential to investigate the functions of the DoW with particular reference to the 'efficient costs' of these, which is similar to the approach taken in other industries, such as electricity, in relation to access pricing. (Department of Treasury and Finance submission, p1)

Rio Tinto Iron Ore and the Chamber of Minerals and Energy also recommended that mechanisms be put in place to ensure that any future charges are based on efficient costs.

Rio Tinto Iron Ore

Limiting unchecked increases in fees and charges: There is a danger in directly linking fees and charges to the cost of the provision of certain services that are provided by a single supplier (in this case the Government). If effective limits are not placed on the costs of the provision and the proper scrutiny and accountabilities established to ensure the efficient delivery of these services, the cost burden can grow unchecked. (Rio Tinto Iron Ore submission, p11).

Chamber of Minerals and Energy

CME emphasises the need to ensure that water licence administration fees and future water resource management and planning charges are appropriately capped or independently reviewed to prevent uncontrolled increases in the cost burden to those affected by the charges. (CME submission, p3)

The submission by Manjimup and Pemberton Landowners Group reflected a level of mistrust by some stakeholders that the activities carried out by the Department of Water are efficient.

It is difficult to understand how the Department of Water can justify a budget of \$93.57 million and 610 FTE in 2009-10 when they don't supply a drop of water to users, and consequently we do not accept that self-supply water users should fund the agency beyond that submitted above in relation to licensing, which for most users could be \$232 for a 10 year duration licence. (Manjimup and Pemberton Landowners Group submission, p3)

4.4 Discussion

The Authority engaged consultants Marsden Jacob Associates (MJA) to examine the cost efficiency of the Department's water resource management and planning activities, focusing on the activities for which the Department is seeking cost recovery within the next one to two years. The consultants have also reviewed the water licence fees model, which was developed by the Department of Water and ACIL Tasman, as well as examined the effectiveness of the processes used by the Department to control its expenditure and align it with priorities.

The report by MJA is available on the web site, and the key findings are summarised below.

4.4.1 *Review of the Water Licence Fees Model*

Following a review of the licence fees model, and discussions with staff in the Department of Water, MJA found that while the model that was developed by the Department and ACIL Tasman provides a good basis for the consideration of licence fees, there are a

number of issues that prevent it from being used to determine licensing fees in its current form.⁵⁴ These issues, which are outlined and discussed in the MJA report, include:

- the inability of the Department of Water to substantiate the cost estimates which underpin its licence fee model;
- the costs of some activities, such as groundwater and surface water assessments, which are closely linked to the preparation of allocation plans and assessments of licences, have not been included in the model;
- apart from a small proportion of regional overheads, head office corporate service cost shares have not been allocated to the activities in the licence fee model; and
- inclusion of model parameters, such as the units of effort, around which there is uncertainty and which cannot be verified.

As a result, the Authority asked MJA to assess if the issues in the licence fees model could be resolved to produce indicative charges for inclusion in this draft report. MJA found that a large amount of work was required to resolve these issues, and that the licence fees model could not be used as a basis for setting water resource management and planning charges until these issues have been resolved.

Suggested Way Forward

MJA has recommended that more rigorous collection and allocation of costs by the Department of Water is required before the model can be used as a basis for charging. In particular, the Department should:

- identify the full cost of licensing and allocation planning activities;
- collect additional information on staff activities in various branches; and
- ensure the effective assignment of allocation planning costs.⁵⁵

The Authority agrees with the findings and suggests that the Department of Water should establish processes and systems to enable it to provide information about the costs and levels of effort required to undertake the water resource management and planning activities identified for cost recovery in Chapter 3. The Department of Water has indicated that it will be able to provide substantiated cost estimates by the end of May 2010. Once this information has been received, the Authority would need to verify the data and calculate licence fees.

4.4.2 *Appropriateness and Efficiency of Costs to Be Recovered*

In considering the efficiency of the Department of Water, MJA:

- summarised the changes in the Department's budget over the period from 1998-99 to the current time in addition to the forward estimates until 2011-12;
- considered benchmarks against another water resource management agency; and

⁵⁴ Marsden Jacob Associates, October 2009, *Advice on the Department of Water's Cost Efficiency and Water Resource Management and Planning Charges: A report prepared for the Economic Regulation Authority*, p6.

⁵⁵ *Ibid*, p10.

- considered the Department's key performance indicators (**KPIs**) to assess whether these show efficiencies over time.⁵⁶

MJA has been unable to conclude whether or not the Department of Water is undertaking its water resource management and planning activities in an efficient manner. Due to the mergers and demergers with the Department of Environment and Conservation, coupled with internal reorganisations, it is difficult to review and assess the Department's expenditure levels over time. Furthermore, the Departments key efficiency indicators that are published in the State Budget have changed three times in the last three years.⁵⁷

MJA also found that it is difficult to benchmark the Department's costs against other resource managers in Australia to determine whether or not they are efficient.⁵⁸ This is partly due to some of the different water resource management activities undertaken in other jurisdictions, as well as the different frameworks that are in place.

Suggested Way Forward

MJA has recommended that there is a need to collect more detailed KPIs than what is currently available, which will allow some level of benchmarking with other jurisdictions.⁵⁹ The Authority agrees with this finding and has suggested a list of KPIs that could be considered for adoption by the Department of Water in section 5.3.1.

Given the difficulties that have been experienced to date with measuring the efficiency of the Department's costs and its performance more widely, the Authority agrees with MJA's other finding that changes to the relevant areas and the more detailed KPIs that will be adopted should be kept frozen for a period of time.⁶⁰

The Authority believes that all of the efficient costs incurred by the Department to prepare water source protection plans, assess subdivision referrals and undertake water metering activities should ideally be recovered from users. However, since it is not possible to conclude at this stage that these costs have been incurred efficiently, the Authority has not made any recommendations on the level of costs to be recovered. The amount of costs to be recovered from users will be reassessed in the second draft report, when the Authority believes it will be in a position to assess the level of efficient water resource management and planning costs incurred by the Department.

The costs to be recovered from users should include an allocation of corporate overheads, which are excluded from the current cost estimates for 2009-10. The Department of Water will need to provide the total costs to be recovered from users for water source protection, subdivision assessments, water metering, licensing and allocation planning activities by the end of May 2010.

⁵⁶ Ibid, p19.

⁵⁷ Ibid, p22.

⁵⁸ Ibid, pp22-23.

⁵⁹ Ibid, p32.

⁶⁰ Ibid, p33.

Implementation of Water Resource Management and Planning Charges

- 17) The Department is not able, at this stage, to provide the information needed for the Authority to determine the efficiency or cost reflectivity of the costs to be allocated to licence holders.
- 18) The Department of Water is therefore asked to provide detailed information to the Authority about how its costs are incurred and allocated to various functions by the end of May 2010.
- 19) The Department to recover from users all of the efficient costs incurred to prepare water source protection plans, the assessment of subdivision referrals and the undertaking of water metering activities, once the Authority has determined the level of efficient water resource management and planning costs incurred by the Department.
- 20) The Department to introduce detailed performance indicators that are more relevant than those that currently exist, which should remain unchanged for a period of time to allow analysis over time and benchmarking with other similar agencies.

4.4.3 *Effectiveness of the Department of Water's Processes to Control Expenditure*

MJA has reviewed the Department of Water's planning, budgeting and project management processes to consider whether these processes are likely to result in the efficient allocation and use of funds. MJA also considered how effective the Department's project management process is.

MJA found the internal and external systems utilised by the Department provide a sound basis for prioritising and managing individual projects once an overall budget has been determined. However, the breakdown of costs reported both externally and within the organisation do not provide sufficient information to allow robust benchmarking or for considering the efficiency of the organisation's operations.⁶¹

Suggested Way Forward

MJA recommended that a detailed process review of the Department of Water's functions should be undertaken to provide a more comprehensive understanding of the Department's efficiency and effectiveness. Ideally, this should be done by comparing the Department's processes with agencies in other Australian jurisdictions that are responsible for the provision of water resource management and planning services.⁶² The Authority supports the recommendation, and it is likely to engage a consultant to undertake a process review of the functions performed by the Department of Water, and is also considering benchmarking against another water resource manager.

⁶¹ Ibid, ppESi-ESii.

⁶² Ibid, p33.

4.4.4 Allocation of Overheads

A further consideration is the allocation of overhead (or indirect) costs, which includes the costs of activities such as financial services, human resources, records management and information technology, which support and enable the Department to carry out its key functions.

While the Department of Water has not allocated overheads to the activities in the licence fee model, the Department's general approach to cost recovery is guided by the Department of Treasury and Finance (DTF) April 2007 guidelines on *Costing and Pricing Government Services*. These guidelines state that:

The full cost of a service must be determined by explicitly considering all of its components, i.e. its direct costs, indirect costs (which may include resources received free of charge) and capital-related costs. (p8)

The DTF guidelines recommend a range of approaches to the allocation of overheads, including the "pro-rata approach", in which pooled costs are allocated to services on a proportionate basis, using measures such as the percentage of staff involved in the delivery of a service. Thus, the Department of Water's general approach to allocating overheads is to apportion them to the activities which they support, on the basis of the number of staff involved in those activities.

We do consider that [executive and corporate] functions are essential in enabling our water management and planning activities. Executive and corporate functions could be cost recovered through water resource management and planning functions. The extent that they are apportioned to core activities would be based on the number of staff working against each core function. (Department of Water submission, p27)

In its submission, DTF noted the apparently high level of administrative support roles in the Department of Water. However, the Department of Water queried DTF's interpretation of the administrative support roles, stating that 80 staff are in standard corporate service functions, rather than over 300, as submitted by DTF. In response, DTF acknowledged that many of the staff working in support services would be involved in providing key agency programs.

The Authority's view is that while the Department of Water's general approach to cost recovery is guided by the DTF April 2007 guidelines on *Costing and Pricing Government Services*, the Authority is not able to confirm that this approach has been used to allocate overheads to the water resource management and planning activities which have been identified for cost recovery. Nor is it possible to determine whether the level of corporate overheads is efficient. The Department should provide sufficient information by the end of May 2010, to enable the Authority to assess the efficiency of its overhead costs.

4.4.5 Legislative Powers Regarding Fees and Charges

The Authority has been asked under the terms of reference to consider opportunities for implementation of its recommendations under the Department's existing legislative responsibilities and any responsibilities under the National Water Initiative (NWI).

In Chapter 3, the Authority outlines the activities carried out by the Department, and the costs that the Authority considers should be recovered from licence holders, water service providers, water meter owners and urban planners. In order to consider the opportunities for recovering the costs of these activities under existing legislative responsibilities, legal advice would be required. The Authority has not sought legal advice regarding the

provision under legislation to recover different types of costs, as it is the role of the Authority to make independent recommendations to government and for government to implement those recommendations should it choose to do so. To the extent that there is any legal ambiguity regarding the recovery of each of these types of costs indicated by the Authority, the legislation should be amended to provide for their recovery.

Regarding the State's obligations under the NWI, as noted in section 1.1, the National Water Commission has cited the lack of progress in Western Australia towards cost recovery in water resource management and planning as a failure by the state to meet its obligations under the NWI. The Commission states that:

The NWI requires states and territories to bring into effect consistent approaches to pricing, including attributing the costs of water planning and management. This commitment was originally meant to be delivered by 2006 but is yet to be completed.⁶³

The Authority's view is that the recovery of costs for the water resource management and planning activities outlined in Chapter 3 would represent a key step towards meeting the State's obligations under the NWI.

Legislative Powers

- 21) The Government should ensure that State legislation provides for the appropriate recovery of water resource management and planning costs.

4.5 Conclusion

The consultants have identified a number of issues with the licence fees model that has been developed by the Department of Water and ACIL Tasman, with the most significant being that the Department is unable at this stage to substantiate the cost estimates which underpin its licence fees model or verify some of the parameters in the model around which there is some uncertainty.

The Authority is therefore of the view that the proposed licence fees model cannot be used at this stage, and while the method of the licence fees model is supported, the Department will need to undertake a substantial amount of work on its recording of costs and the assumptions used in the water licence fees model before it can be assessed by the Authority. The Department of Water has indicated that it should be able to address the issues in the licence fees model, and provide detailed information by the end of May 2010, about how its costs are incurred and allocated to various functions.

Once this information has been received, the Authority would need to verify the data and calculate licence fees. The Authority would then produce a second draft report for public comment, which sets out the proposed licence fees.

The Authority supports the introduction of fees by the Department for the preparation of drinking water source protection plans, assessment of subdivision referrals and undertaking water metering activities, once the Authority has determined the level of efficient water resource management and planning costs incurred by the Department.

⁶³ National Water Commission (2009), *Australian Water Reform 2009: Second Biennial Assessment of Progress in Implementation of the National Water Initiative*, p178.

Lastly, the Authority is likely to engage a consultant to undertake a process review of the functions performed by the Department of Water prior to the release of the final report, and is also considering benchmarking against another water resource manager.

5 Regulatory Arrangements and Service Standards

5.1 Terms of Reference

The Authority is required by the Terms of Reference to:

- provide the Government with a range of options and recommendations for the most appropriate regulatory arrangements for the setting of service standards for the resource manager, the setting of the charges and the subsequent recovery of those charges from water users.

5.2 Background

In the Issues Paper, the Authority raised the issue of what regulatory arrangements should be considered to assist the Department of Water achieve high service standards and efficiency in operations and govern the setting of charges.

The regulatory arrangements that govern the resource manager are important because they influence the efficiency of the resource manager and can provide confidence that there is alignment between the service standards that users are willing to pay for and the service standards that are achieved.

Currently in Western Australia, the Department of Water carries out water resource management and planning activities on behalf of the Minister for Water. Service standards for the Department are developed by the Department and reviewed and approved by the Government's Outcome Structure Review Group.

5.3 Discussion

This chapter considers the Department's existing service standards and key performance indicators and how they can be improved. The appropriate regulatory arrangements that should be adopted to oversee the performance of the Department in delivering water resource management and planning activities that are being paid for by the users are also considered.

5.3.1 Service Standards and Performance Indicators

The Department of Water's key objectives in relation to water resource management and planning are set out in a number of Acts as specified in the Authority's Issues Paper, including the *Rights in Water and Irrigation Act 1914*, *Water Agencies (Powers) Act 1984*, *Metropolitan Water Supply, Sewerage, and Drainage Act 1909* and the *Water Services Licensing Act 1985* (see Appendix C).

The Department of Water is responsible for ensuring that the State's water resources are planned, managed and developed to meet the community's requirements now and into

the future.⁶⁴ This report has identified the water resource management and planning activities, and the costs of these activities, that should be recovered from users:

- preparation of water source protection plans;
- assessments of subdivision plans referred from the Western Australian Planning Commission;
- purchase and installation of water meters and the ongoing maintenance and meter reading;
- water licensing, compliance and enforcement;
- development of allocation plans;
- environmental water planning;
- groundwater and surface water assessments, investigations and reviews; and
- water measurement and information.

It is difficult to establish appropriate and relevant service standards that should apply to the Department of Water's activities listed above. The Authority believes that the existing key performance indicators for the activities that have been identified for cost recovery in this report, which the Department reports against as part of the annual State Budget process and in its Annual Report, are not very useful to measure the Department's efficiency. The lack of relevant measures is largely due the limited information available since the Department does not collect information about the time spent or level of effort required to undertake different tasks, such as the level of effort required to assess a licence application.

It is also difficult to benchmark the Department's performance against other water resource managers in Australia since there are no common service standards across the jurisdictions. This is partly due to different water resource management activities being undertaken in other jurisdictions, as well as the different frameworks that are in place. For example, in NSW, the key performance indicators for water management undertaken by the Department of Water and Energy (DWE) in 2007-08 included:

- the proportion of water taken out (volume) covered by water sharing plans;
- the proportion of *Water Act 1912* licenses converted to tradeable Water Access Licences under the *Water Management Act 2000*; and
- the level of compliance with legislation and statutory instruments.⁶⁵

IPART does not have a system of performance measurements for the DWE (recently replaced by the New South Wales Office of Water) but will be seeking in the current price review to establish a regulatory mechanism to set service standards and link performance to prices.

In its issues paper, IPART notes the difficulty in setting performance measurements for water resource management activities. Comparisons between water resource managers between States can be uninformative, due to the differences in management techniques, water resources and impacts of water use between jurisdictions. However, liaison with other regulators will be useful in developing a set of performance indicators that could be

⁶⁴ Department of Water, 2009, *Annual Report 2008-2009*, p6.

⁶⁵ Department of Water and Energy, 2008, *2007-08 Annual Report*.

generally applied to water resource management and planning, and that could in future be compared across agencies.

Consequently, more detailed measures need to be developed, preferably in conjunction with other jurisdictions to promote benchmarking. The Authority is therefore suggesting that the following KPIs could be considered for implementation, and is seeking feedback on what the appropriate KPIs should be.

Table 5.1 Proposed Key Indicators

Key Indicators

Performance Measures

- Average cost of all water licences, reduced by x percent each year⁶⁶
- Average processing time for a new licence, by catchment category and volume
- Average cost per new water licence, by catchment category and volume
- Average processing time for a water licence renewal, by catchment category and volume
- Average cost per water licence renewal, by catchment category and volume
- Average time taken to assess hydrological and hydrogeological studies, by catchment category and volume
- Average time taken to assess operating strategies, by catchment category and volume
- Percentage of compliance monitoring inspections carried out, by volume, and compared against the standard
- Average cost of preparing a water source protection plan
- Average cost of installing water meters that meet the national standards
- Average cost per subdivision assessment
- Overhead cost per licence holder

Informative Indicators

- Number of new licence applications processed, by catchment category and volume
- Number of water licence renewals processed, by catchment category and volume
- Number of hydrological and hydro geological studies assessed, by catchment category and volume
- Number of operating strategies assessed, by catchment category and volume
- Number of FTEs in each area
- Number of allocation plans prepared, compared against target
- Number of water source protection plans prepared, compared against target
- Number of water meters installed, compared against target
- Ongoing costs of water metering, such as meter reading and maintenance, per water meter
- Number of statutory subdivision referrals received from the WA Planning Commission
- Number of statutory subdivision referrals assessed and responded to within agreed timeframe (currently 28 days)

⁶⁶ The Office of the Gas and Electricity Markets (Ofgem) in the United Kingdom recovers its costs from the licensed companies it regulates. Licensees are obliged to pay an annual licence fee which is set to cover its costs. Ofgem operates under a five-year cost control regime, which pegs its expenditure growth at 3 percentage points below the retail price index. (www.ofgem.gov.uk)

Setting Service Standards and Performance Indicators

- 22) The Department of Water to develop service standards and performance indicators for the relevant water resource management and planning activities in conjunction with a water industry committee or existing key stakeholder groups.

5.3.2 Regulatory Oversight

There was general support in submissions for an independent regulator (such as the Authority) to be involved in the oversight of water resource management and planning services.

Some submissions support the independent setting of charges, and the associated service standards, by the Authority. This is the model used in New South Wales, where IPART determines the charges of the New South Wales Office of Water (NOW). IPART sets the prices that NOW can charge, by:

- establishing the future revenue to be recovered (which is the amount needed to cover operating and maintenance expenses, administration expenses, a return on capital, and depreciation). Efficient costs are assessed by examining cost drivers, planning processes, cost allocation methods, cost benchmarking with comparative organisations, and water management outcomes; and
- determining the costs to be recovered from licence holders or the public for each water management activity (based on who is causing the costs to be incurred).

Support for this model was provided in the submissions from the Department of Water, the Department of Agriculture and Food and Rio Tinto.

The Department of Water submitted that this approach would help to minimise any conflict of interest related to the Department advising on its own charges or the setting of charges to support the Budget process.⁶⁷ Similarly, Rio Tinto submitted that it would be inappropriate to give the Department of Water the power to set fees that would determine the level or resources available to the same organisation without some independent scrutiny or regular review.⁶⁸

In submissions received from the Water Corporation and the Department of Treasury and Finance (DTF), there is support for periodic reviews by the Authority through its inquiry function. This is similar to the model used by the Authority to recommend tariffs for the Water Corporation, Aqwest and Busselton Water, where the Minister retains the responsibility for setting the tariffs.

The Water Corporation submitted that the Authority is best placed to provide the regulatory oversight to ensure deliverable and efficient service standards, as part of a periodic review of the charges (e.g. every three years).⁶⁹ DTF submitted that periodic reviews of the charging regime of the Department of Water would ensure that the services

⁶⁷ Department of Water's submission on the Issues Paper, p95.

⁶⁸ Rio Tinto's submission on the Issues Paper, p12.

⁶⁹ Water Corporation's submission on the Issues Paper, p6.

being delivered, the costs incurred and the charges levied on its licence holders (as customers of its services) are appropriate and efficient.⁷⁰

DTF also submitted that it is important that the licence holders who pay the charges have an appropriate level of involvement in the ongoing process of management and planning to help ensure the efficiency of services and charging. For example, the Western Australian Department of Fisheries sets its levels of service and cost recovery through extensive stakeholder consultation and agreement. DTF recommended that the Authority should investigate such a model for possible application to the water industry and examine resource management, financing and governance within the fisheries industry (and other relevant industries).⁷¹

The Authority considers that there could be benefits if a water industry committee⁷² was established to represent water licence holders, which could work with the Department of Water to make sure that licence holders are able to have an effect on the services delivered and the standards that they require from the Department and for which they may be paying. Such an industry committee could represent all of the key stakeholders (such as service providers, irrigators, horticulturalist, and mining companies) as well as the different regions. Alternatively, the Department could work closely with the key stakeholder and industry groups that already exist.

An example of where such a relationship has been useful is the recent reduction in the access fee for the West Coast Rock Lobster Managed Fishery, where the industry pays the full cost of management, compliance and research services provided by the Department of Fisheries. The 2009-10 access fee has been reduced to \$112 per unit, down from \$147 per unit in 2008-09. This was the result of discussions between the Department and the Western Rock Lobster Council, to determine which of the activities could be cut-back or done differently to decrease costs, which reduced the cost recovery component of the access fee from \$125 to \$106 per unit. This was achieved mainly through reductions in the compliance budget. In particular:

- one patrol boat has been removed from West Coast Rock Lobster Managed Fishery operations; and
- there have been significant reductions in hours allocated to rock lobster work by land-based Fisheries and Marine Officers.

The reductions will mean that rules that are in place for equity reasons (for example rules relating to pulling other people's pots) will not be given priority. Instead, the available compliance resources will be focused towards enforcing rules that are important for sustainability.⁷³

The Authority's preferred approach to regulation of water resource management and planning charges is one where the Authority has an ongoing role to undertake reviews of the Department of Water's operating and capital expenditure and determine any charges (every three years), with an industry committee to work with the Department of Water to ensure that service standards and performance measures are appropriate and achieved.

⁷⁰ Department of Treasury and Finance's submission on the Issues Paper, p3.

⁷¹ Ibid, p4.

⁷² A water industry committee could be established that is similar to the Urban Development Advisory Committee, which provides advice to the Water Corporation's Board on land development issues. It could be chaired by a senior officer in the Department of Water and the Department could also perform the secretariat functions of the committee.

⁷³ Department of Fisheries, 2009, *West Coast Rock Lobster Newsletter – September 2009*, pp1-2.

The Authority is of the view that if it is to have an ongoing oversight role of the Department's water resource management and planning charges, charges should be independently determined by the Authority, as there are no social objectives that would need to be included in the charging structure. The Authority does not believe that subsidies to particular groups of water resource users are required, as licence holders generally use water for commercial purposes. However, if any groups who use the water only for non-commercial purposes cannot afford the charges, subsidies would be better provided by grants rather than through the design of the charging regime. Independently determined charges would reduce any potential conflicts of interest in the Department of Water and is also likely to be a more transparent process.

However, the independent setting of charges would require legislative change, so prior to this change the Authority could provide regulatory oversight of the resource manager by way of periodic reviews through its Inquiry function.

Regulatory Oversight

- 23) Water resource management and planning charges be set and reviewed every three years by the Authority.

5.4 Conclusion

As a substantial amount of work is required before appropriate service standards and performance indicators for the Department of Water can be established, the Authority suggests that the Department of Water should develop service standards to be implemented in three years time, to coincide with the implementation of any recommendations in the Authority's next efficiency review of the Department. The Department should work with the water industry in the meantime, either through existing stakeholders or a new water industry committee, to develop relevant and appropriate service standards and performance indicators, which could then be assessed by the Authority, or another independent body. The Authority has suggested a number of performance measures in this chapter as a starting point for discussion.

The Authority or the Department of Water should also work with other regulators to develop common performance indicators for water resource management and planning activities, which will allow benchmarking to be undertaken in the future.

In regard to the appropriate regulatory arrangement that should be adopted, the Authority's preference is for an approach where the Authority undertakes efficiency reviews of the Department of Water and determines any charges independently, and where a water industry committee works with the Department of Water to ensure that service standards and performance measures are appropriate and achieved.

APPENDICES

6 Appendix A. Terms of Reference

INQUIRY INTO WATER RESOURCE MANAGEMENT AND PLANNING CHARGES

TERMS OF REFERENCE

I, TROY BUSWELL, Treasurer, pursuant to section 32(1) of the *Economic Regulation Authority Act 2003*, request that the Economic Regulation Authority (ERA) undertake an inquiry and provide the Government with a range of options and recommendations for:

- the recovery of the planning and management expenses incurred by the Department of Water for the sustainable management of the State's water resources; and
- the most appropriate regulatory arrangements for the setting of service standards for the resource manager, the setting of the charges and the subsequent recovery of those charges from water users.

The options are to include:

- the implementation impacts for various types of users, including a sensitivity analysis on capacity to pay assumptions; and
- opportunities for implementation under both the existing legislative responsibilities of the Department of Water as well as those specified by the National Water Initiative.

In doing so, the Authority is requested to consider and develop findings on:

- the tasks or activities undertaken in the efficient management of the State's water resources, by the Department of Water, that would appropriately be recovered from water users;
- the most appropriate level (or percentage) of cost recovery from water users; and
- the most appropriate allocation of costs between licence holders and other water users (licensed entitlement or actual use).

In developing its recommendations, the Authority will have regard to:

- the Government's social, economic and environmental policy objectives;
- the Government's obligations as a signatory to the National Water Initiative Intergovernmental Agreement; and
- any relevant pricing principles arising from the 1994 Council of Australian Governments water reform agreement and the National Water Initiative.

The Authority will release an issues paper as soon as possible after receiving the reference. The paper is to facilitate public consultation on the basis of invitations for written submissions from industry, government and all other stakeholder groups, including the general community.

A draft report is to be available for further public consultation on the basis of invitations for written submissions.

The ERA will complete a final report no later than nine months after receiving the Terms of Reference.

**TROY BUSWELL MLA
TREASURER, MINISTER FOR COMMERCE;
SCIENCE AND INNOVATION; HOUSING AND WORKS**

The Treasurer has approved an extension, to 29 October 2010, for the Authority to deliver the final report for its inquiry into water resource management and planning charges.

7 Appendix B. Other Approaches to Cost Recovery for Natural Resource Management

7.1 Water Resource Management Fees in NSW

In New South Wales, water resource management and planning activities are the responsibility of the Water Administration Ministerial Corporation (WAMC), and have until recently been carried out by the Department of Water and Energy (DWE). The New South Wales Office of Water (NOW) is now responsible for carrying out water resource management and planning activities. The prices charged by WAMC, including the charges by the NOW to water licence holders to recover some of the costs it incurs in water management and planning, are reviewed and regulated by the Independent Pricing and Regulatory Tribunal (IPART). IPART last reviewed water licence charges in 2006, and has recently commenced its review of charges for 2010.⁷⁴

Water resource management charges in NSW vary by region, as defined by individual water sharing plans. Charges comprise some or all of the following elements:

- a fixed charge based on the entitlement volume;
- a usage charge (usage is metered); and
- a minimum charge of \$60.

In addition, there are administration charges to all user (for example, for temporary transfers of water, new water access licences, and new or amended approvals).

IPART sets the prices that the NOW can charge, by:

- establishing the future revenue to be recovered (which is the amount needed to cover operating and maintenance expenses, administration expenses, a return on capital, and depreciation). Efficient costs are assessed by examining cost drivers, planning processes, cost allocation methods, cost benchmarking with comparative organisations, and water management outcomes; and
- determining the costs to be recovered from licence holders or the public on the basis of an “impactor pays” approach for each water management activity (who is causing the costs to be incurred).

IPART does not have a system of performance measurements for the NOW but will be seeking in the current price review to establish a regulatory mechanism to set service standards and link performance to prices.

IPART's Approach to the Allocation of Costs

IPART engaged ACIL Consulting (ACIL) for its 2001 bulk water review, to develop a framework for allocating costs between water users and the broader community. An ‘impactor pays’ approach to cost sharing, which seeks to allocate costs to different individuals or groups in proportion to the contribution that each individual or group makes

⁷⁴ IPART (September 2006), *Bulk Water Prices for State Water Corporation and Water Administration Ministerial Corporation from 1 October 2006 to 30 June 2010 – Final Determination*; and IPART (July 2009), *Review of Prices for Water Administration Ministerial Corporation from July 2010 – Issues Paper*

to create the costs (or the need to incur the costs, was developed by ACIL and adopted by IPART.⁷⁵

Following a review of these cost sharing principles by the Centre of International Economics (CIE) for the 2006 bulk water review, many of the cost share ratios adopted in 2001 were maintained in the 2006 determination. Where a new activity did not correspond to an activity code used in the 2001 determination, IPART developed cost share ratios after considering CIE's recommendations and the 'impactor pays' principle.

Table 7.1 Selected Department of Water and Energy (DWE) Activities and 2006 User Share of Costs

Activity	User Share of Costs (%)
Water Resource Management Planning	
Water Sharing Plan Development	70
Water Use Plans	70
Environmental Water Management Planning	0
Water Sharing Plan Implementation	
Limits to Availability of Water	100
Rules for Managing Access Licences	100
Environmental Water Provisions	0
Monitoring and Reporting	50
Water Consent Administration (Licensing)	
Head Office Systems Administration	100
Regional Administration	100
Head Office Register Administration	100
Compliance	100
Systems Development	100
Business Administration	
Metering and Billing Water Usage	100

Source: IPART, 2009, Review of Prices for Water Administration Ministerial Corporation

In its 2006 determination, IPART attributed approximately 65 per cent of the Department of Water and Energy's (DWE) water management costs to users. However, after taking into account requirements in its Act, such as the need to consider potential impacts on users, IPART set DWE's prices so that the target revenue from users was less than the users' share of DWE's revenue requirement (the users' share was subsequently set at 52%).⁷⁶

In the issues paper for the 2010 review of bulk water prices, IPART continues to favour the 'impactor pays' approach, since it signals to water users the costs of their activities, including any environmental costs that are a consequence of those activities.⁷⁷

⁷⁵ Independent Pricing and Regulatory Tribunal, 2009, Review of Prices for Water Administration Ministerial Corporation, p30.

⁷⁶ Ibid, p31.

⁷⁷ Ibid, p32.

7.4 Department of Fisheries Licence Fees

Fishing licence fees in Western Australia have two components:

- licence administration fees; and
- fish resource management fees.

7.4.1 Administration Fees

Fishing licence administration fees recover the administration costs associated with the granting, renewal, variation and transfers of different types of licences. These costs include the administrative costs of registering and processing applications, and maintaining the licensing data base. For example, the fee in 2008-09 for the granting or renewal of a fishing boat licence was \$82, and for transfer or variation of such a licence \$453.

7.4.2 Resource Management Fees

Fisheries resource management fees recover the costs of fish resource management activities by the Department of Fisheries, including research into fish stocks and sustainable yields, monitoring and compliance activities, industry consultation and information dissemination. Fisheries resource management fees can amount to tens of thousands of dollars per year (e.g. \$33,912 for a Shark Bay prawn managed fishery licence, or \$27,223 for per boat for a Class A boat for a Shark Bay scallop managed fishery licence).

Fisheries resource management fees are determined on the basis of full cost recovery for the major commercial fisheries, and as a contribution towards resource management costs for the minor commercial fisheries. Any under-recovery by the minor fisheries is paid from by Government.

- For six major commercial fisheries, management fees are based on the full cost recovery of the resource management costs associated with those fisheries (abalone, Exmouth Gulf prawn, Shark Bay prawn, Shark Bay scallop, pearling and West Coast rock lobster). The Department of Fisheries determines the direct costs of management, compliance and research activities, plus allocated overheads, for each type of fishery and determines management fees per unit to recover those costs.
- The other (minor) commercial fisheries pay management fees that are a weighted average contribution towards management costs. These fees are determined as a percentage of the gross production value of the fishery. The percentage used is based on the average percentage of gross production value paid by the major (full cost recovery) fisheries; i.e.
 - Percentage contribution to cost recovery by minor fisheries =
 (total costs recovered from the major fisheries, \$million)
divided by
 (total gross production value of the major fisheries, \$million) x 100.
- In addition to the cost recovery element of the management fees, all major and minor commercial fisheries also pay a contribution to the community through the Development and Better Interest Fee, which is used by the Minister for Fisheries

“in the better interest of fisheries generally and fish and fish habitat protection”.⁷⁸
The total annual contribution across the fishery industry to Development and Better Interest fees is calculated as 0.65 per cent of the gross value of production of the fishery industry, or \$3.5 million, whichever is the higher.

- Fisheries resource management fees may also include specific industry levies, deductions for any subsidies or non-recoverable items, and an adjustment for under or over-recovery in the previous year.

As an example, in 2008-09, Western rock lobster licence holders paid a management fee of \$147 per lobster pot, covering direct management costs (\$83.37), allocated costs (\$44.37), Development and Better Interest fee (\$25.16), industry contribution to the Western Rock Lobster Council (\$2), and deductions of \$3.02 for licensing revenues, \$2.90 for the Serious Offences Unit (a cost not recovered from licence holders), and \$1.96 for over-recovery in the previous year.

⁷⁸ Department of Fisheries (October 1999), *Cost Recovery Guidelines Under an Integrated Project and Activity Costing Framework*, p9.

8 Appendix C. Water Resource Management and Planning Legislation

Some guidance on the key elements of water resource management and planning is provided in the objects clause of that part of the *Rights in Water and Irrigation Act 1914 (RiWI Act)* which refers to the control of water resources:⁷⁹

- (a) To provide for the management of water resources and in particular
 - 1) for their sustainable use and development to meet the needs of current and future users; and
 - 2) for the protection of their ecosystems and the environment in which water resources are situated, including by the regulation of activities detrimental to them;
- (b) To promote the orderly, equitable and efficient use of water resources;

This objects clause needs to be interpreted within the context that all water courses, wetlands and underground water sources are vested in the Crown unless they are allocated in accordance with a statutory function.⁸⁰

Another act that provides guidance on what water resource management and planning involves is the *Water Agencies (Powers) Act 1984*. Section 9 of this act states:

- 1) The Minister [for Water] has the general functions of -
 - a) conserving, protecting and managing water resources;
 - b) assessing water resources;
 - c) planning for the use of water resources;
 - d) promoting the efficient use of water resources;
 - e) promoting the efficient provision of water services;
 - f) developing plans for and providing advice on flood management.

The Department of Water has been established to support the Minister, and the CEO may act under delegated power, to undertake the following functions:

- *Country Areas Water Supply Act 1947*
 - under Part II, making by-laws for the prevention of pollution in catchment areas or water reserves;
 - under Part IIA, administering a scheme for clearing licences for certain controlled land and, where a licence is rejected, for payment of compensation for injurious affection;⁸¹
 - under Part VII, setting service charges for the functioning of country water supply systems.

⁷⁹ Two other objects are also included in the legislation: (c) to foster consultation with members of local communities in the local administration of this part, and to enable them to participate in that administration; and (d) to assist the integration of the management of water resources with the management of other natural resources.

⁸⁰ Section 5A of the RiWI Act vests unallocated natural water in the Crown.

⁸¹ Injurious affection means the effect caused to neighbouring land from a public project.

- *Metropolitan Water Supply, Sewerage, and Drainage Act 1909*
 - under Part IV, making by-laws for the prevention of pollution in catchment areas or water reserves;
 - under Part VI, making by-laws for underground water pollution control areas in the metropolitan area; and licensing wells in public water supply areas in the metropolitan area.
- *Metropolitan Water Authority Act 1982*
 - planning for, and the administration of arterial drainage, and for the declaration of drainage courses.
- *Rights in Water and Irrigation Act 1914*
 - licensing, or giving directions as to, the use of surface waters; and
 - licensing artesian wells and, in certain areas, non artesian wells.
- *Waterways Conservation Act 1976*
 - a conservation and resource management function, and associated powers, in respect of waterways and adjoining land in management areas under that act.
- *Water Services Licensing Act 1985*
 - setting policy for the water industry, via regulations, exemptions and policies, whereas the Authority has powers to license water service providers.
- *Water Agencies Powers Act 1984*
 - conserving, protecting and managing water resources;
 - assessing water resources;
 - planning for the use of water resources;
 - promoting the efficient use of water resources;
 - promoting the efficient provision of water services; and
 - developing plans for and providing advice on flood management.

9 Appendix D. Glossary

ACCC	Australian Competition and Consumers Council
Act	<i>Economic Regulation Authority Act 2003</i>
CoAG	Council of Australian Governments
DSE	Department of Sustainability and Environment (Victoria)
DWE	Department of Water and Energy (NSW)
GL	Gigalitre, which is one billion litres
IPART	Independent Pricing and Regulatory Tribunal (NSW)
kL	Kilolitre, which is one thousand litres
ML	Megalitre, which is one million litres
NOW	New South Wales Office of Water
NWC	National Water Commission
NWI	National Water Initiative
PRAMS	Perth Regional Aquifer Modelling System
RiWI Act	<i>Rights in Water and Irrigation Act 1914</i>
WAPC	Western Australian Planning Commission