

# Inquiry on Competition in the Water and Wastewater Services Sector

Further Consultation Report on the Establishment of an  
Independent Procurement Entity

16 April 2008

Economic Regulation Authority



WESTERN AUSTRALIA

A full copy of this document is available from the Economic Regulation Authority web site at [www.era.wa.gov.au](http://www.era.wa.gov.au).

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# 1 Introduction

The Economic Regulation Authority (**Authority**) is undertaking an inquiry, at the request of the Treasurer, into competition in the water and wastewater services sector. As part of the inquiry, a Draft Report was released in December 2007.

The key recommendation in the Draft Report was the introduction of an Independent Procurement Entity (**IPE**) with responsibility for managing bulk water supply within the Integrated Water Supply Scheme (**IWSS**) in the South West. Submissions on the Draft Report were received in February 2008. The submissions were generally supportive of increased independence and transparency in bulk water procurement. However, many of the submissions sought additional information and requested that further consultation be undertaken before the Final Report.

The Terms of Reference (see Appendix 1) required that a Final Report be presented to the Government by 31 March 2008. However, based on the requests for further consultation, the Authority approached the Treasurer and received an extension for the Final Report until 30 June 2008 (see Appendix 2).

This Further Consultation Report provides additional detail on procurement options to ensure a balance is achieved between the amount of water supplied by bulk water providers and the amount of water demanded by consumers (the “supply/demand balance”). The report outlines the current procurement process, followed by the alternative process proposed by the Water Corporation (**Corporation**). The report then presents the IPE model as contained in the Draft Report, but modified to address some of the matters raised in submissions.

Other matters which the Authority considered in the Draft Report relating to water trading, third party access, retail issues, and regional and remote operations are not discussed here. The Authority is continuing to analyse these matters with the final recommendations to be contained in the Final Report.

## 1.1 Background

This inquiry has been referred to the Authority under Section 32 of the *Economic Regulation Act 2003 (Act)*, which provides for the Treasurer to refer to the Authority inquiries on matters related to regulated industries (i.e. water, gas, electricity and rail).<sup>1</sup>

The Authority released an Issues Paper in July 2007 and sought input from interested parties.<sup>2</sup> The 23 submissions received identified, among other things, a need for increased independence and transparency in the manner in which bulk water sources for the IWSS in the South West are established.

The Authority released a Draft Report in December 2007 and 27 submissions on the Draft Report were received in February 2008.

Following the receipt of submissions, the Authority requested and received from the Department of Water a letter that provided greater clarity of its role in source procurement.

<sup>1</sup> Section 38 of the Act also provides for the Treasurer to refer to the Authority inquiries on matters related to other industries (i.e. not only the regulated industries of water, gas, electricity and rail).

<sup>2</sup> The Issues Paper, and all other papers related to the inquiry, can be found at: [www.era.wa.gov.au/2/508/46/inquiry\\_into\\_co.pm](http://www.era.wa.gov.au/2/508/46/inquiry_into_co.pm)

The Authority then held a workshop with the Department of Water and Corporation to discuss the concept of an IPE. The Corporation subsequently provided the Authority with a letter outlining a proposal that differs from the option set out in its earlier submission. The letters from the Department of Water and the Corporation have been placed on the Authority's web site.

The Authority is seeking submissions on this Further Consultation Report by 16 May 2008. Based on these submissions (and those received on the Draft Report), the Authority will provide to Government a Final Report by 30 June 2008.

The Government will then have 28 days to table the report in Parliament.

## 1.2 How to Make a Submission

Submissions on any matters raised in this further consultation report should be in written form and electronic form (where possible) and addressed to:

Inquiry on Competition in the Water and Wastewater Services Sector  
Economic Regulation Authority  
PO Box 8469  
Perth Business Centre  
PERTH WA 6849

Email: [watercompetition@era.wa.gov.au](mailto:watercompetition@era.wa.gov.au)

Fax: (08) 9213 1999

Submissions must be received by 16 May 2008.

In general, submissions from interested parties will be treated as in the public domain and placed on the Authority's web site. Where an interested party wishes to make a confidential submission, it should clearly indicate the parts of the submission that are confidential. For more information about the Authority's submissions policy, see the Authority's web site.

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, whether the submission in whole or in 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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## 1.3 Structure of the Further Consultation Report

- Chapter 2 provides an overview of competition in bulk water supply and identifies the scope of the potential operation of the IPE;
- Chapter 3 outlines the current Corporation approach to bulk water supply;
- Chapter 4 presents the proposed Corporation procurement approach;
- Chapter 5 outlines the Authority's modified IPE arrangements; and
- Chapter 6 seeks submissions from interested parties.

## 2 Competition and Bulk Water Supply

This Chapter outlines the role competition can play in ensuring the supply/demand balance is maintained, provides a description of bulk water supply, and defines the scope of the proposed IPE arrangements.

### Role of Competition

The Terms of Reference requires the Authority to investigate possible competitive enhancements to the water and wastewater services sector. The benefits of greater competition and competitive pressures are three fold. First, greater competition compels businesses to supply at lower prices. Second, it more effectively directs resources of the economy to where they are valued most. Finally, greater competition can lead to new and improved ways of doing things as businesses seek to improve their competitiveness through innovation in the products offered and in the ways the products are produced and delivered. However, greater competition is not an end in itself. Rather, competition is the mechanism by which consumers receive benefits through the provision of goods and services at levels of price and quality suited to their needs.

Traditionally, the provision of water and wastewater services were viewed as natural monopoly services as competition was considered implausible. As such, water and wastewater service providers have been regulated. Regulation is a second best outcome relative to a well functioning competitive market as a regulated monopolist faces a reduced incentive to produce at low cost and has less incentive to seek new and improved ways of operating.

In the Draft Report, the Authority noted that the network (water and wastewater pipes) component of the supply chain was likely to be a natural monopoly and as such required regulation. However, the Authority identified that competition could be introduced in other areas of the supply chain. Greater competition in these areas, introduced appropriately, would lead to benefits to consumers. The Authority identified that, at least as an initial step, increased competition could be introduced to the provision of bulk water services.

The Authority noted that the introduction of competition via a decentralised bulk water market was possible and would provide benefits given increased levels of competition in bulk water supply. However, a number of factors were identified which meant that such a model would be problematic to introduce, at least in the near term. These factors related to the need to establish a competitive market (competing suppliers, third party access, and retail contestability) and uncertainty surrounding predictions of future water supply.

While the introduction of a competitive market is possible, it is likely to take time to develop a well functioning market. Uncertainty surrounding predictions of future supply are due to difficulties in establishing the extent of climate change (on top of 'normal' unpredictability regarding rainfall and temperature patterns – including the timing, severity and duration of droughts); the ability to abstract groundwater; and the volumes of water available via trading. While private sector investment is possible in the face of such uncertainty, it is likely that a significant 'risk premium' on private sector investment would be required if the commercial arrangements were to allocate all risk to these investors.

There are also significant complexities in determining the value that a specific supply project delivers to the whole of the supply system where there is a need for substantial investment to insure against threats to supply security, rather than simply to meet growth in demand. As a result of these factors, the Authority concluded that there was a need, at

least initially, to maintain some form of centralised procurement to balance supply and demand.

The Authority proposed the introduction of an independent agency which would be responsible for balancing supply and demand and facilitating competition in the provision of bulk water supply – the IPE. The aim of proposing the introduction of an IPE was to create an institutional structure which would increase competitive pressures in maintaining the supply/demand balance while maintaining centralised oversight given the impracticality of moving to a fully decentralised model at this time.

Similarly, a Discussion Paper released in March 2008 by the Productivity Commission on urban water reform identified potential benefits from increased competition in the provision of water and wastewater services.<sup>3</sup> Specifically, the Productivity Commission argued for:<sup>4</sup>

- a greater role for prices in signalling water scarcity and to allocate resources;
- removal of artificial impediments to rural-urban water trading; and
- removal of barriers to competition in the supply and retailing of urban water.

The Productivity Commission argued that the potential benefits of a more market based approach to water and wastewater services warranted further investigation.

### **Bulk Water Supply**

As noted above, in the Draft Report the Authority identified an opportunity to increase the level of competition in the provision of bulk water supplies. Bulk water may take the form of additional sources such as groundwater sources, desalinated water, recycled water, or water sourced via trading. Bulk water supply need not be restricted to large sources. Small sources which could be brought online quickly may also be suitable, and could offer highly cost effective support for management of some climate and drought risks. In addition, demand management initiatives such as rebate and restriction regimes can be “procured” to help to ensure the supply/demand balance is achieved.

### **Scope of the IPE**

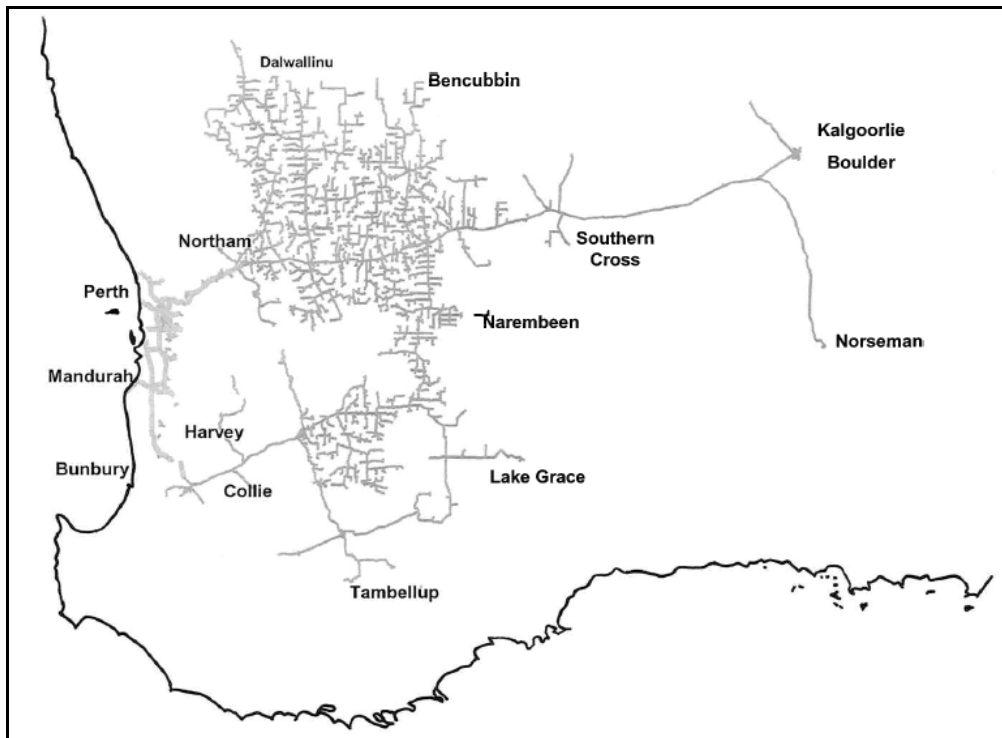
In the Draft Report, the Authority did not specify the scope of operations of the IPE. That is, whether the IPE would be responsible for sourcing bulk water supplies for the IWSS or for the State as a whole. Based on submissions and further consideration, the Authority considers that initially an IPE would be responsible for the IWSS only. However, it may be possible to expand the scope of the IPE’s operations at a later date.

Figure 2.1 shows the area served by the IWSS, for which the IPE would be responsible for balancing supply and demand.

<sup>3</sup> Productivity Commission, *Towards Urban Water Reform: A Discussion Paper*, March 2008.

<sup>4</sup> Productivity Commission, *Towards Urban Water Reform: A Discussion Paper*, March 2008, pg XIV

**Figure 2.1 The Integrated Water Supply Scheme**



### 3 Current Arrangements

The Corporation is responsible currently for sourcing bulk water for use in the IWSS. Figure 3.1 provides a stylised representation of the process. The entities involved include the:

- Minister for Water;
- Department of Water (**DoW**);
- Environmental Protection Agency (**EPA**);
- Department of Planning and Infrastructure (**DPI**);
- Economic Regulation Authority;
- Corporation; and
- Private Sector.

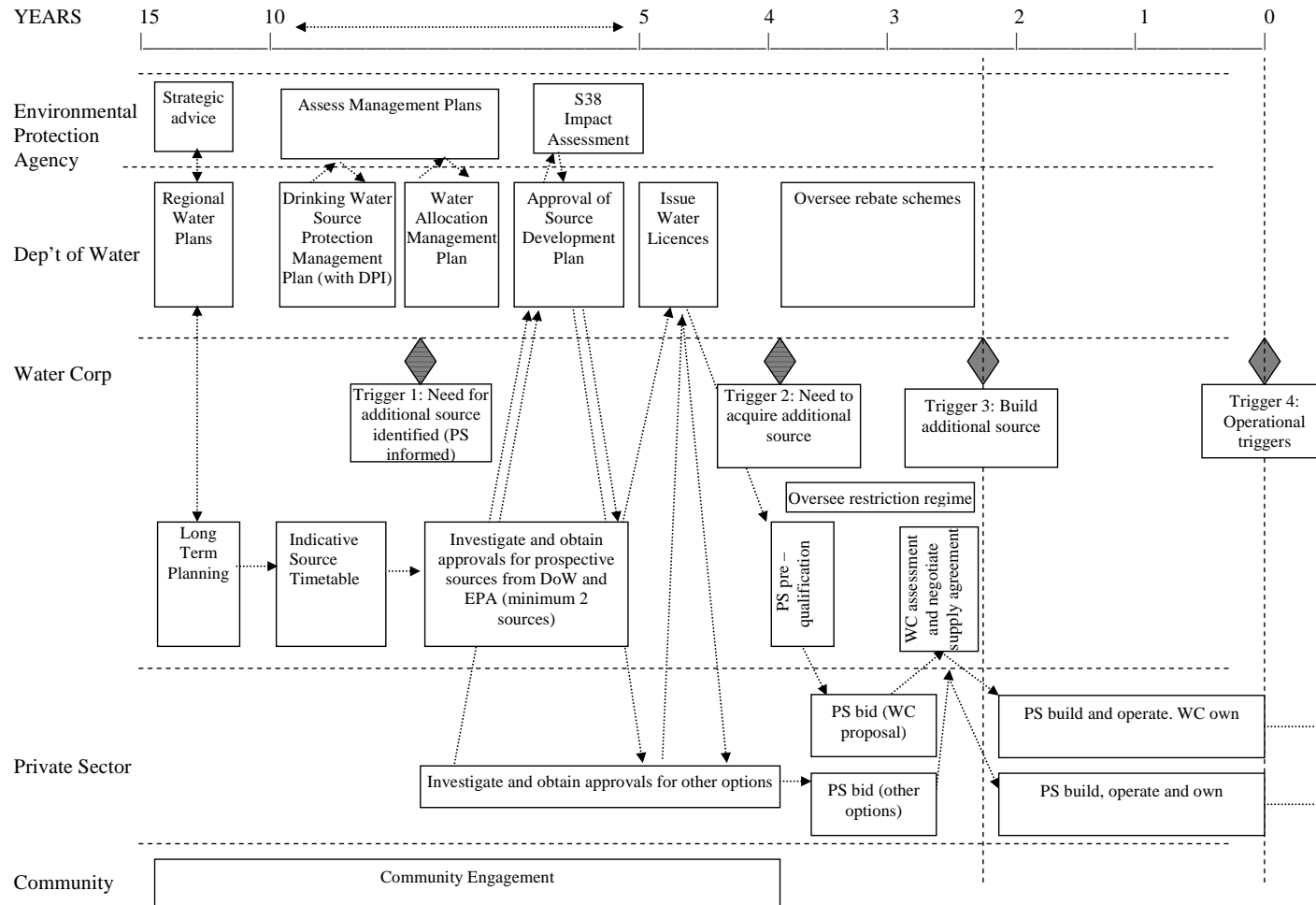
In addition, there is a level of community consultation regarding the development of each source.

The key element to note from Figure 3.1 are the four trigger points.

- Trigger 1 is the point at which it is identified that an additional source will be required. This allows time for necessary investigations and approvals for a range of sources to be obtained;
- Trigger 2 is the need to commit to the acquisition of a new source(s). This is the point at which bids are received from various proponents and the most suitable selected;
- Trigger 3 involves the decision to construct the preferred source; and
- Trigger 4 relates to the annual operational triggers of all sources (existing and new).

The roles of each of the entities involved and who has responsibility for the various trigger points are discussed in turn.

Figure 3.1 Status Quo



### 3.1 Minister for Water

The Minister for Water has various legislative powers in relation to bulk water procurement, including:

- powers under the *Water Agencies (Powers) Act 1984*. The Act grants the Minister a range of functions including conserving, protecting and managing water resources; planning for the use of water resources; promoting the efficient use of water resources; and promoting the efficient provision of water services. In addition, the Minister is to have regard to water recycling and efficient water use measures when planning the development of new water resources.
- powers under the *Water Corporation Act 1995*. The Act grants the Minister functions relating to oversight of the operation of the Corporation. For example:
  - Section 32 of the Act requires the Corporation to seek Ministerial approval for significant transactions (effectively granting the Minister a role in approving future source development);
  - Section 34 requires that the Corporation consult the Minister on major initiatives including matters that are likely to be of significant public interest;
  - Section 65 allows the Minister to direct the Corporation to undertake actions which are contrary to its commercial interest; and
  - Section 67 of the Act allows either the Minister or the Corporation to consult in relation to any aspect of the operation of the Corporation.

Examples of the Minister's role in bulk water procurement include:

- overseeing the level of watering restrictions imposed;
- endorsing the Corporation's bulk water procurement timetable, which is influenced by the level of security of the system. For example, the current timing of the construction of the second desalination plant for Perth provides for the risk of a total sprinkler ban to be kept below three per cent;<sup>5</sup> and
- deciding which sources are developed. For example, the Government made the decision to go ahead with a second desalination plant instead of the project to transport water from the South West Yarragadee.

The extent of the Minister's legislative powers in relation to source development going forward is somewhat uncertain given the current review of the water resources and water services legislation. However, it is understood the proposed legislation will generally increase the extent to which the Minister will be able to influence source development decisions.

### 3.2 Department of Water

The role of the DoW is to provide advice and assist the Minister in performing his/her legislative functions. In undertaking this task, the DoW currently undertakes four distinct tasks in the development of water sources. These are the:

- development of Regional Water Plans;

<sup>5</sup> Based on discussions with the Corporation.

- development of Drinking Water Source Protection Management Plans;
- development of Water Allocation Management Plans; and
- issuance of water resource licences.

In addition, the DoW has advised the Authority that it anticipates that its role under the revised water legislation will be expanded to include:

- approval of service providers' source development plans.

These functions are discussed in turn.

## Regional Water Plans

Regional Water Plans are designed to provide guidance on the development of future water sources in designated regions. According to the DoW, Regional Water Plans are:

designed to be regionally focussed. The plans identify the water-management issues faced, the strategies to tackle these issues and actions that will be implemented in each region.<sup>6</sup>

Further, Regional Water Plans are:

not statutory in nature and they will not make final decisions with respect to any specific water allocation or approval for the development of a new water source. Existing approval processes will continue to apply to these decisions, although they are expected to align with the direction of a Regional Water Plan.<sup>7</sup>

The first Regional Water Plan is being developed for the South West. The DoW state that the objectives of the plan are to:<sup>8</sup>

- assess the Region's achievement towards meeting the objectives outlined in the Water Policy Framework;
- provide summary information to the community outlining existing water cycle management and issues in the Region and options to address these issues;
- improve the understanding and certainty of the community with respect to the future outlook of the amenities they enjoy from local water resources;
- demonstrate the ability of our water management framework to meet the needs of this rapidly growing Region; and
- determine actions to implement policies and outcomes in the South West Region.

## Drinking Water Source Protection Management Plans

According to the DoW, the aim of Drinking Water Source Protection Management Plans is to:

protect water catchments and groundwater aquifers to minimise the risk of drinking-water contamination.<sup>9</sup>

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<sup>6</sup> Department of Water, *Water planning: Securing our water future*, December 2007.

<sup>7</sup> Department of Water Webpage, *Regional water plans*, <http://portal.water.wa.gov.au/portal/page/portal/PlanningWaterFuture/RegionalWaterPlans>

<sup>8</sup> Department of Water Webpage, *South West Water Plan*, <http://portal.water.wa.gov.au/portal/page/portal/PlanningWaterFuture/RegionalWaterPlans/SouthWestWaterPlan>



The DoW minimises the risk of drinking water contamination by reserving water for future use. For example, in the South West, water has been set aside for anticipated future growth:

The state government and the Department of Water have reserved groundwater for high value public water supplies to 2036 for the South West Region. The decision to reserve this water (largely from the Yarragadee aquifer) is to minimise the health risk of contaminating the future drinking water sources and to secure a source to meet the anticipated growth in demand.<sup>10</sup>

The key government department with which the DoW works to protect drinking water catchments is the DPI. The DPI, based on advice from the DoW, ensures that possible future sources are protected through its land use zoning functions.

### Water Allocation Management Plans

Water Allocation Management Plans are used to:<sup>11</sup>

determine how much groundwater and surface water can be taken for domestic or commercial purposes while leaving enough water in the environment to meet ecological, recreation and cultural needs.

The Authority sought additional clarification on this function from the DoW. The DoW stated that:<sup>12</sup>

a working definition of water resources development planning is the approximate matching of projected regional demands for water with broadly defined water source options on a fit-for-purpose basis.

The DoW, with regard to setting aside public water supplies, stated:<sup>13</sup>

A key principle is 'fit for purpose' water assignment – reserve higher quality and more protected (from a land use point of view) water for public water supply and assign lower quality water for lower grade use.

### Licensing

According to the DoW, licences are issued in one of two ways (as described in relation to the South West groundwater areas water management plan):<sup>14</sup>

1 In areas that are close to, fully allocated, or in any Yarragadee subarea, alternative mechanisms such as expressions of interest, auctions or merit selection will be used to release this water. This will support the establishment of a market and ensure that the value of water is recognised. The department will advertise well in advance when and how the release will be managed, and provide advice to all interested parties well in advance of the action.

<sup>9</sup> Department of Water, *Water planning: Securing our water future*, December 2007.

<sup>10</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 35.

<sup>11</sup> Department of Water, *Water planning: Securing our water future*, December 2007. Note that the Department has recently released for public comment a number of water allocation management plans. See for example, the South West groundwater areas water management plan, the Gngangara groundwater areas water management plan and the Upper Collie water management plan, which are available at <http://portal.water.wa.gov.au/portal/page/portal/PlanningWaterFuture/AllocationPlanning>

<sup>12</sup> Department of Water letter to ERA dated 28 February 2008.

<sup>13</sup> Department of Water letter to ERA dated 28 February 2008.

<sup>14</sup> Department of Water, *South West groundwater areas water management plan – allocation*, February 2008, pg 56.

2 In aquifers that are not fully allocated, other than for the Yarragadee aquifer, the department will adjust the allocation limit upwards and maintain the first-in first served approach.

The DoW also applies a public interest test when considering licence applications and states that:<sup>15</sup>

Allocation of groundwater for drinking water and domestic purposes has a higher priority than for other consumptive purposes.

In issuing licences, the DoW attempts to protect water resources and promote the sustainable and efficient use of water. In order to achieve these outcomes, the DoW places various licence conditions on usage and maintains an active role in monitoring water use. For example, the DoW monitors use and actively recoups unused water entitlements.

In addition, the DoW plays a role in water trading. The DoW states that:<sup>16</sup>

The ability to trade water entitlements is necessary when the available water is fully committed. Trading can occur in subareas that are not fully allocated, however it is unlikely when there is available water for licensing.

Trading rules and restrictions are designed to protect the water resource from unacceptable impacts. Therefore all trades will be assessed as a new licence application.

The DoW must approve all trades before they are allowed to occur. Some of the principles adopted by the DoW include:<sup>17</sup>

you can only trade water if you can successfully demonstrate that you have used (measured through meter readings or other approved method) the water in accordance with your licence conditions and comply with the policies stated in this plan (section 4.3.4) and Statewide policy no. 6 –Transferable (Tradable) water entitlements for Western Australia (WRC 2001).

With respect to trading efficiency gains, the plan states that:<sup>18</sup>

Water efficiency gains can be traded and will not be recouped by the department. Water efficiency gains are a result of implementing more efficient distribution systems for using a licensed entitlement; as a result the excess can be traded. Where a change of purpose occurs for a licensed entitlement (e.g. pasture irrigation converting to irrigation of wine grapes) the subsequent excess allocation can be traded, provided that use has been proven.

### **Approval of service providers' source development plans**

Service providers are expected under the proposed legislative changes to gain approval from the DoW for their source development plans. In seeking this approval, service providers are required to provide the following information:<sup>19</sup>

- Targets per capita water use levels and the proposed demand management measures to achieve these levels of efficient water use;

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<sup>15</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 36.

<sup>16</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 63.

<sup>17</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 51.

<sup>18</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 65.

<sup>19</sup> Department of Water letter to ERA dated 28 February 2008.

- Current and projected water demands taking account of target per capita use levels;
- Supply capacity of existing sources, taking account of climate change;
- Proposed new supply sources, their estimated system yield benefit, and proposed timing for development;
- Identification of redundant sources previously used;
- New supply source investigation and approvals timetable;
- Analysis of supply security level and probability of restrictions, including any variations from proscribed design criteria;
- Contingency plans and restriction trigger points; and
- Triggers for initiating new source development construction.

The recently released South West groundwater areas water management plan illustrates how the DoW intends to undertake these tasks. For example, the plan states that:<sup>20</sup>

Any future water use for public drinking water will be required to meet water use efficiency targets in line with the per person consumption targets (<100kL/person) identified in the State Water Plan (DPC 2007). Although the target is specifically for Perth based household consumption the department encourages all water service providers to meet this target across the State.

Similarly, in relation to water efficiency, Objective 9 of the plan states that:<sup>21</sup>

Water service providers are expected to develop plans to achieve and implement improvements to water delivery and efficiency (usage per capita) by 20% by 2011.

### 3.3 Environmental Protection Agency

The role of the EPA is to prepare environmental protection policies and assess proposals for development as necessary. With regard to water source development, this involves providing preliminary advice under Section 16 of the *Environmental Protection Agency Act 1986 (EPA Act)* at the initial stage of consideration, typically between seven and 15 years before a source is developed. Section 16 refers to the functions of the EPA and requires, among other things, that the EPA assist planners in undertaking their activities in such a manner as to minimise the effect on the environment by publishing guidelines. In addition, Section 16 provides general scope for the EPA to promote and encourage the protection of the environment.

Once a potential source has been identified, a referral to the EPA is made under Section 38 of the EPA Act to undertake an Environmental Impact Assessment. This task is normally undertaken four to five years before a source is expected to be brought online.

The EPA is not an environmental regulator and as such only provides advice to government. Based on this advice, the Minister for the Environment issues approvals.

<sup>20</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 34.

<sup>21</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 54.

### 3.4 Department of Planning and Infrastructure

The role of the DPI in bulk water source development relates to land use planning. Land use planning plays a crucial role in maintaining and protecting water catchments. At present, the DoW via its strategic planning role identifies potential future public drinking water sources. The DPI then implements a planning policy that protects these potential future sources.

### 3.5 Economic Regulation Authority

The Authority, when requested to do so, provides recommendations to government on water and wastewater tariffs. In making its recommendations on the total amount of revenue that the Corporation should earn, the Authority reviews the appropriateness of the Corporation's costs, including its proposed source development schedule, to establish whether it is prudent. In addition, the Authority provides advice on the structure of water tariffs. Usage charges are being set to reflect long run marginal cost, which is based on the source development schedule.

The Authority also issues licences to water (potable and non-potable), wastewater, drainage, and irrigation service providers. These licences are issued under the *Water Services Licensing Act 1995*. Under this Act, the Authority is also responsible for monitoring the performance of licence holders to ensure standards are maintained in relation to drinking water quality and pressure, sewerage service standards, irrigation and drainage standards, and customer service and complaint procedures.

### 3.6 Water Corporation

The Corporation plans for the development of sources over a 15 year timetable (as well as compiling forward projections for up to 50 years). This includes:

- undertaking long term planning;
- producing indicative source timetables which provide information on sources likely to be developed;
- identifying a future imbalance between supply and demand and therefore the need for an additional source (Trigger 1 from Figure 3.1);
- investigating and obtaining approvals from the EPA and DoW for prospective water source projects;
- triggering the need to commit to the acquisition of a specific additional source (Trigger 2);
- conducting a prequalification process for potential private sector proponents to develop the identified additional source (this is necessary given that the Corporation has stated that it does not wish to build, operate - or in the future own - additional sources)<sup>22</sup>;

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<sup>22</sup> Water Corporation submission on Issues Paper, pg 7-13.

- assessing the bids from the prequalified private sector proponents (as well as undertaking negotiations with alternative suppliers)<sup>23</sup>, and negotiating supply contracts;
- triggering the commitment to build the additional source (Trigger 3); and
- determining the operational triggers for all existing sources (Trigger 4).

Under this approach, the Corporation identifies the need for an additional source, develops up and gains the necessary approvals for two potential sources (to ensure at least one is viable), and then approaches the private sector to build and operate the preferred source. The Corporation retains ownership of the source under its current model although it has expressed an interest in no longer owning sources in the future.

### 3.7 Private Sector

The private sector has two main ways of entering the bulk water market.<sup>24</sup>

- The private sector can elect to enter the prequalification process undertaken by the Corporation with regard to its preferred source. The prequalification process entails the Corporation seeking expressions of interest from the private sector and then identifying the two most qualified proponents. These proponents are then funded to develop detailed tenders for the construction and operation of the source. For example, this process has been used to develop the Corporation's desalination plants.
- The private sector has the ability to enter into negotiations with the Corporation to provide an alternative source. The Corporation would assess the alternative source option against its preferred source. For example, this process has been used by Harvey Water to provide bulk water to the Corporation.

Based on the outcomes of these two processes, the Corporation develops a schedule for operating the source.

### 3.8 Discussion

There are various aspects to the current approach which may limit its effectiveness in ensuring the supply/demand balance is maintained in the most cost effective manner.<sup>25</sup> These relate mainly to a lack of incentive for the private sector to develop new and potentially innovative supply options. In addition, aspects of the DoW's role may be unnecessary and counterproductive to the promotion of competition, and under the National Competition Policy agreement could be viewed as anticompetitive. Specifically, concerns with the current approach relate to:

<sup>23</sup> Negotiations between Harvey Water and the Corporation resulted in a trade of water from Harvey Water to the Corporation for use in the IWSS.

<sup>24</sup> In addition, the private sector could seek access to the Corporation's network under provisions of the Trade Practices Act to provide bulk water into one part of the network and provide water from another part of the network directly to its customers. The Authority recommended in its draft report to establish a State-based access regime to facilitate this process. Further, the ERA is undertaking currently a review of operating licence conditions which may result in the cessation of exclusive and sole provider operating areas allowing the private sector to provide services in competition with existing service providers. Such competition is already possible in the metropolitan area.

<sup>25</sup> It is important to note that when the Authority refers to costs (and benefits), it is referring to social and environmental costs (and benefits) in addition to purely financial costs (and benefits).

- a lack of transparency and independence in the assessment of alternative sources;
- an uneven playing field for the private sector;
- uncertainty about factors that impact on commercial decision-making; and
- some potentially unnecessary and counterproductive roles of the DoW.

### **Lack of Transparency and Independence**

There is a lack of transparency in the process used to assess alternative options. It is not clear on what grounds the Corporation assesses alternative proposals developed by the private sector. Any uncertainty or ambiguity from the perspective of the private sector will diminish the incentive for it to invest in developing alternative options to submit to the Corporation.

The Corporation may also be viewed as having a potential conflict of interest when assessing alternative proposals. Under the current approach, the Corporation proves up what it considers to be the two most appropriate sources. It is then also responsible for assessing these options against any others proposed by the private sector.

Another potential conflict of interest may exist due to the Corporation's role in developing the annual source operation plans. A private sector proponent may not have confidence that its option, if developed, would be treated on an impartial basis.

While the Corporation argues that there is no actual conflict of interest in it undertaking the assessment or developing annual operating plans, merely the perception that it may have a vested interest in developing and operating its preferred sources may be sufficient to deter the private sector from offering alternative sources. An example was the attempt of United Utilities Australia (**UUA**) to establish a desalination plant in Esperance and provide water to the Kalgoorlie-Boulder. The Authority was requested by the Government to undertake an inquiry into the proposal, partly because of the UUA's perceptions that the Corporation was not assessing the proposal on an impartial basis.

Moreover, the lack of transparency and potential perceptions of a conflict of interest may be exacerbated by the role of the Minister in the supply source decision. In order for the private sector to invest in identifying and proving-up a source it needs to have confidence that decisions will be made on a commercial basis. Any ambiguity regarding the role of the Minister can create uncertainty for the private sector and will reduce the likelihood that the private sector will invest time and money in developing alternative options.

### **Uneven Playing Field**

The private sector does not have access to the same detailed information as the Corporation. The Corporation has well developed models providing information on projected demand and supply. While the Corporation does release long term supply/demand projections, a lack of access to the detailed modelling complicates the task of the private sector in developing business plans for alternative options.

However, if the private sector does decide to invest in an alternative option with the intention of entering into negotiations with the Corporation, it is at a competitive disadvantage as it has to spend its own time and money proving up the option and gaining the necessary approvals. The private alternative would then be considered against bids

from pre-qualified private sector proponents bidding on the Corporation's preferred source who would not have had to incur these costs.

### **Uncertainty**

The extent of rebates on water efficient technologies and levels of restrictions on water use influence the demand for water and therefore the potential market for options the private sector may be considering developing. Greater certainty over the rebate and restrictions policies would provide greater certainty for proponents of alternative water supply options and demand management solutions.

### **Roles of the Department of Water**

The DoW is responsible for many functions that are important for the sustainable management of the State's water resources. These functions include its role as the lead agency responsible for identifying and developing a detailed scientific understanding of the numerous and varied water resources across all regions of Western Australia. Furthermore, the DoW is responsible for ensuring the sustainable use of these resources through its role in allocating this water and monitoring usage.

As legislation governing the water sector is currently being reviewed, the DoW's role in relation to bulk water procurement may change in the future. The DoW has indicated that:

Part of the reform process is to create a level playing field for all water service providers, including revision to the authority of the Minister over, for example, the Water Corporation so that all service providers are to be subject to the same governance arrangements. There is to be extensive reform to the management of water resources which will support the development of water markets.<sup>26</sup>

As the new legislation is developed, it will also be necessary to address some of the DoW's current administrative functions that are inadvertently counterproductive to the promotion of competition and, under National Competition Policy, could be viewed as anticompetitive. The DoW's current tasks that might be better left to markets relate to aspects of the preparation of Water Allocation Management Plans and the consequential impacts these plans might have on the DoW's licensing functions. In addition, under the proposed legislative changes, there may be aspects of the DoW's proposed role in source development plan approvals that may be counterproductive to the promotion of competition. These matters are further discussed below.

#### *Water Allocation Management Plans*

The Water Allocation Management Plans are formulated to match water supply and demand on a "fit-for-purpose" basis. In cases where a water resource is close to fully allocated (and in the Yarragadee aquifer), the DoW has stated that it will allocate water via expressions of interest, auctions, or merit selection as opposed to the first-in first-served approach it adopts elsewhere. The risk the DoW faces by using methods other than neutral auctioning processes is that it may inadvertently allocate water to those who do not value it most, resulting in the inefficient use of water.

Current practices that may be counterproductive to the promotion of competition include:

- the reservation of water for future public water suppliers, rather than maintenance of a certain amount of water at a standard that is suitable for potable supply. For example, the South West groundwater areas water allocation management plan

<sup>26</sup> Department of Water letter to ERA dated 11 April 2008.

proposes to set aside water for public water suppliers, excluding other users from seeking an entitlement to the resource (although other users may be able to use a proportion of the water on a temporary basis until it is required for drinking water purposes, provided that use does not compromise the quality of the resource);<sup>27</sup> and

- unequal treatment of existing water users. For example, in the draft Gngangara groundwater areas water management plan, the DoW is proposing to require the Corporation to reduce its abstraction from the Gngangara and Jandakot systems while not imposing similar reductions on other users.<sup>28</sup> The DoW has noted that:

The Corporation is in a privileged position in that it is the only licensed service provider that has access to both the superficial and confined aquifer(s), with other service providers only having access to the superficial aquifer. Secondly, and as previously explained, the Corporation is in deficit and has to pay back over drawn water to the Mound under the variable draw-down rule which accommodates higher draw downs during periods of lower rainfall adversely affecting supply options from other (surface) water sources.<sup>29</sup>

In undertaking these tasks, the DoW is attempting to ensure that the water resources of the State are used in the most efficient manner. The efficient use of any given product is generally best assured by leaving the allocation of the product to market mechanisms. For example, in relation to the Gngangara and Jandakot systems, market mechanisms could be designed to achieve a reduction in usage by those users of the systems that value the water least.

### *Licensing*

The DoW considers all trades to be applications for new licences and in some cases places restrictions on such trades. There is a clear role for the DoW to ensure water resources are not over allocated, are not being used in a way that compromises water quality and are not being used in an environmentally unsustainable manner. Restrictions on trades may be appropriate in these circumstances. However, in all other circumstances, trades should be permitted.

This includes in circumstances where the DoW currently requires a licence holder to demonstrate they have used their entitlement before allowing a trade. While this may be considered fair because it prevents windfall profits, reallocating this water administratively will be less efficient than having it reallocated on a commercial basis.

Similarly, the DoW recoups unused allocations. It does this to address concerns that:

licensees may be granted access to large volumes of water without having the intention of using their water entitlements within a reasonable timeframe and be given windfall gains should they later trade their unused water entitlements.<sup>30</sup>

The recoupment and reissuing of unused allocations can override the ability of market mechanisms to allocate water to those who value it most.<sup>31</sup> It might also override the ability of market mechanisms to efficiently allocate risk. For example, a water user may

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<sup>27</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 43.

<sup>28</sup> Department of Water, *Gngangara groundwater areas, Water management plan, Draft for public comment*, February 2008, pp 49-53.

<sup>29</sup> Department of Water letter to the ERA dated 11 April 2008.

<sup>30</sup> Water and Rivers Commission (and subsequently adopted by the Department of Water), *Statewide Policy No 11: Management of Unused Licensed Water Entitlements*, November 2003, pg 2.

<sup>31</sup> Similarly, recouping an unused allocation and auctioning it, while ensuring water is used by those who value it most, provides a windfall gain to the DoW.



wish to hold an entitlement in excess of their normal demands as insurance against the risk of drought. This may be appropriate if the water user had invested heavily in water reliant crops.

#### *Source Development Plan Approval*

Under proposed legislative changes, a service provider would need to have its source development plan approved by the DoW. Before granting approval, the DoW will require the service provider to demonstrate, among other things, that it has targets for per capita use and the demand management measures it will implement to achieve these targets.<sup>32</sup>

With respect to these targets, the DoW stated in the South West groundwater areas water management plan that:<sup>33</sup>

Any future water use for public drinking water will be required to meet water use efficiency targets in line with the per person consumption targets (<100kL/person) identified in the State Water Plan (DPC 2007). Although the target is specifically for Perth based household consumption the department encourages all water service providers to meet this target across the State.

Reducing the *inefficient* use of water is a legitimate way in which to ensure the supply/demand balance is maintained. However, interference in source development planning by requiring administratively-determined efficiency targets, or by any other means, is potentially counterproductive to the promotion of competition because it will impact on commercial decision making and the efficient use of water.

Reducing water consumption and/or increasing the efficiency of water use requires an investment by the service provider or consumer to reduce their water use. While it is efficient to invest in cheap ways of reducing water use, there is a point at which the cost of achieving water savings becomes greater than the cost of accessing the next available source.<sup>34</sup> This point can be expected to vary substantially across regions, water sources, and water usage patterns.

Requiring a service provider to meet an administratively-determined efficiency target may lead to either under or over investment in water efficient technology. A more appropriate long-term way of ensuring efficient investment is by allowing a market to develop whereby investment is guided by the cost of investing in water efficiencies relative to the cost of other ways of ensuring water supply and demand are balanced.

Similarly, the application of the Perth 100 kL per person per year target to areas outside of Perth is problematic. A 'one size fits all' approach is likely to lead to an inefficient outcome. For example, there may be areas where water is not in scarce supply. In such areas, there is no need to impose any form of restriction on use or requirement to increase efficiency. The imposition of such restrictions or requirements would incur a significant loss to consumers for no benefit.

On a further matter related to water use targets and water efficiency, Objective 9 of the South West groundwater areas water management plan states that:<sup>35</sup>

<sup>32</sup> Department of Water letter to ERA dated 28 February 2008.

<sup>33</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 34.

<sup>34</sup> The next available source would be that which had gained all the necessary environmental approvals and could most cheaply be introduced to the system.

<sup>35</sup> Department of Water, *South West groundwater areas water management plan – allocation, Draft for public comment*, February 2008, pg 54.

Water service providers are expected to develop plans to achieve and implement improvements to water delivery and efficiency (usage per capita) by 20% by 2011.

As noted previously, care should be taken when requiring reductions in water usage as it may not be the most effective way in which to ensure the supply/demand balance is maintained and may result in perverse outcomes such as significant unwarranted investment in water efficiency technology.

### *Conclusion*

The concerns raised regarding aspects of the DoW's role which may be unnecessary and counterproductive to the promotion of competition must be addressed regardless of the procurement model adopted. Addressing these concerns as part of the package of reforms to water resource and services legislation will help to ensure water is allocated to those who value it most, a consequence of which may be the more cost effective provision of bulk water supplies.

## 4 Water Corporation's Proposed Approach

Following the receipt of submissions on the Draft Report, the Corporation submitted an alternative model which increases the independence and transparency with which decisions regarding bulk water procurement are taken.<sup>36</sup> The Corporation suggested the establishment of an Independent Panel which would act as a review body with regard to future water sources. A stylised representation of this model is shown in Figure 4.1.

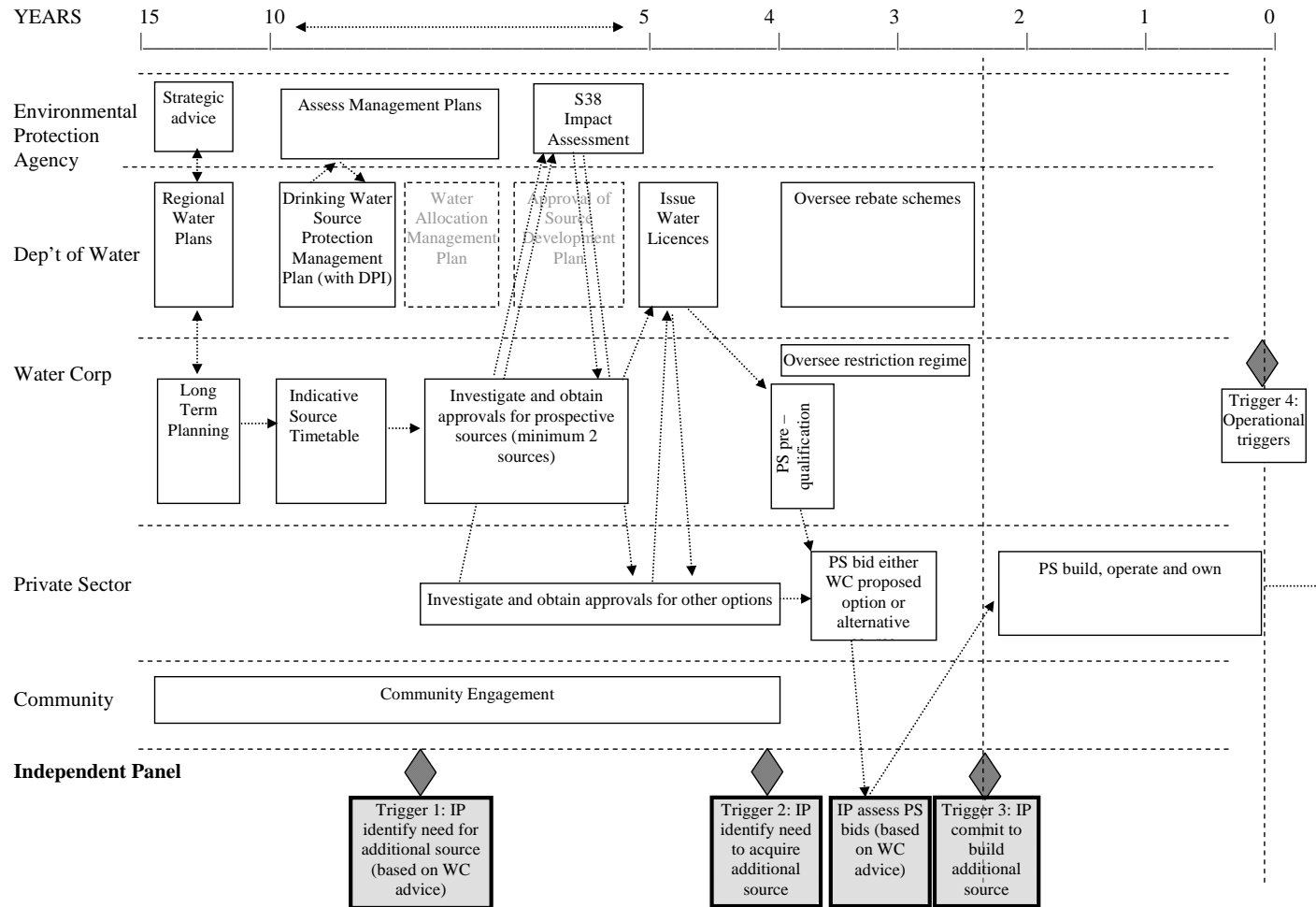
Under the proposed approach, the roles of the EPA, the private sector, and the Authority remain unchanged. As discussed in the previous Chapter, the role of the DoW needs to be adjusted regardless of the approach adopted to bulk water procurement. This is represented in Figure 4.1 by the dotted lines around the boxes showing the DoW's roles regarding Water Allocation Management Plans and approval of Source Development Plans.

The role of the Independent Panel, the altered role of the Corporation, and the role of the Minister are discussed below.

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<sup>36</sup> The alternative model was presented in a letter dated 11 March 2008 and is available on the Authority's web page.

Figure 4.1 Corporation Proposal



## 4.1 Independent Panel

The Corporation proposed that an Independent Panel be established to take over responsibility for identifying the need for an additional source (Trigger 1), triggering the need to acquire the additional source (Trigger 2), assessing the bids from private sector proponents, and triggering the commitment to build the additional source (Trigger 3). Each of these tasks would be undertaken based on advice from the Corporation. On these matters, the Corporation described the role of the Independent Panel as being one which would:<sup>37</sup>

issue guidance as to the likely timing of a new source based on planning assumptions. This will provide project proponents with an indicative timetable to allow them to develop their projects and obtain approvals in readiness to place bids;

independently exercise the trigger to acquire based on the prevailing conditions (e.g. dam levels, groundwater access, and demand projections) and the Government's security policy;

determine the successful bid. The panel would be responsible for the assessment of the bids. This would involve input from the Corporation to ensure a successful water supply agreement can be negotiated as part of the bid process.

The Corporation proposed that:<sup>38</sup>

The Chair and members of this panel could be appointed on an independent basis with the authority to make the decision on the next water source. This decision would need to be consistent with transparent Government policy advice on supply security and other service objectives. The panel would convene as necessary.

## 4.2 Water Corporation

The role of the Corporation under the proposal:

would be to run a planning and prequalification process that would ensure there will be at least two and up to four competitive bids to be assessed. This process provides the Corporation with the comfort that a source will be available when required.<sup>39</sup>

The Corporation also stated that in its assessment, the:<sup>40</sup>

prequalification process will maximise the private sector's willingness to commit their best available skills to develop their bids.

The Corporation would retain responsibility for determining the operational strategy of existing sources (Trigger 4).

## 4.3 Minister for Water

Under the proposed Corporation model, the Minister for Water's primary role in source development would be to determine the level of security of bulk water supply. The security requirement would influence the trigger point at which additional sources would

<sup>37</sup> Water Corporation letter to ERA dated 11 March 2008.

<sup>38</sup> Water Corporation letter to ERA dated 11 March 2008.

<sup>39</sup> Water Corporation letter to ERA dated 11 March 2008.

<sup>40</sup> Water Corporation letter to ERA dated 11 March 2008.

be required. The more conservative the security requirement, the earlier additional supplies would need to be sought.

The Minister would make this assessment based on advice from the DoW and Corporation, which would likely draw on community expectations regarding the risk of avoiding a total sprinkler ban.

## 4.4 Discussion

This section discusses how the Corporation's proposed model addresses the concerns identified earlier.

### **Lack of Transparency and Independence**

The proposal from the Corporation would increase the transparency with which decisions regarding water sources are made. It would also allay concerns that the Corporation has a conflict of interest in assessing bids relative to its preferred option.

In addition, the clarified role of the Minister would alleviate private sector concerns regarding the Minister's uncertain influence on the assessment process. As such, the introduction of an Independent Panel would increase the incentive for the private sector to offer alternative solutions.

However, the Corporation's proposed model does not address the potential conflict of interest related to the Corporation being responsible for the development of the annual source operating strategy, where the character of that operating strategy has implications for the need for additional sources and the relative value of different forms of new supply.

In addition, the Independent Panel would rely heavily on advice from the Corporation (although it may have the ability to seek wider advice if considered necessary). As such, the Independent Panel, which would only convene as necessary, may lack the ability to develop and maintain the necessary expertise to undertake an appropriately independent and rigorous investigation of additional water source issues.

### **Uneven Playing Field**

Under the Corporation's proposal, the private sector continues to lack access to the same detailed modelling information as the Corporation, in turn reducing the ability of the private sector to develop detailed business plans for alternative sources.

Similarly, the Corporation's proposal does not address the competitive disadvantage experienced by a private sector proponent who would have to invest their time and money in identifying and proving up a source relative to one developed by private sector proponents who enter the Corporation's prequalification process.

### **Uncertainty**

The Corporation's proposed model does not address the matter of uncertainty regarding the extent of future rebates and levels of restrictions. As such, difficulties for the private sector in evaluating the viability of potential sources remain.<sup>41</sup>

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<sup>41</sup> These uncertainties could be addressed through contracts that assign some or all of the commercial risks of changes in demand management to the Government – but this would not necessarily be the optimal assignment of risks.

### **Role of the Department of Water**

As noted previously, the role of the DoW needs to be addressed regardless of the procurement model adopted.

### **Concluding Comments**

The nature of the Independent Panel is that of a review board for decisions taken by the Corporation regarding additional sources. As such, the panel is likely to focus on the procurement of additional large sources of supply to the detriment of smaller source options or alternative ways of ensuring the supply/demand balance is maintained such as demand management solutions. The effectiveness of the Independent Panel in establishing a market aimed at ensuring the supply/demand balance is met in the most cost effective manner would be limited.

In the Draft Report, the Authority proposed the introduction of an IPE to ensure the cost effective procurement of additional bulk water supplies and demand management options. A modified version of the IPE is presented in the following Chapter.

## 5 Independent Procurement Entity

In the Draft Report, the Authority proposed the introduction of an IPE. The IPE would be responsible for ensuring least expected cost provision of bulk water services. It would achieve this by conducting a procurement process that would facilitate competition to maintain the supply/demand balance.

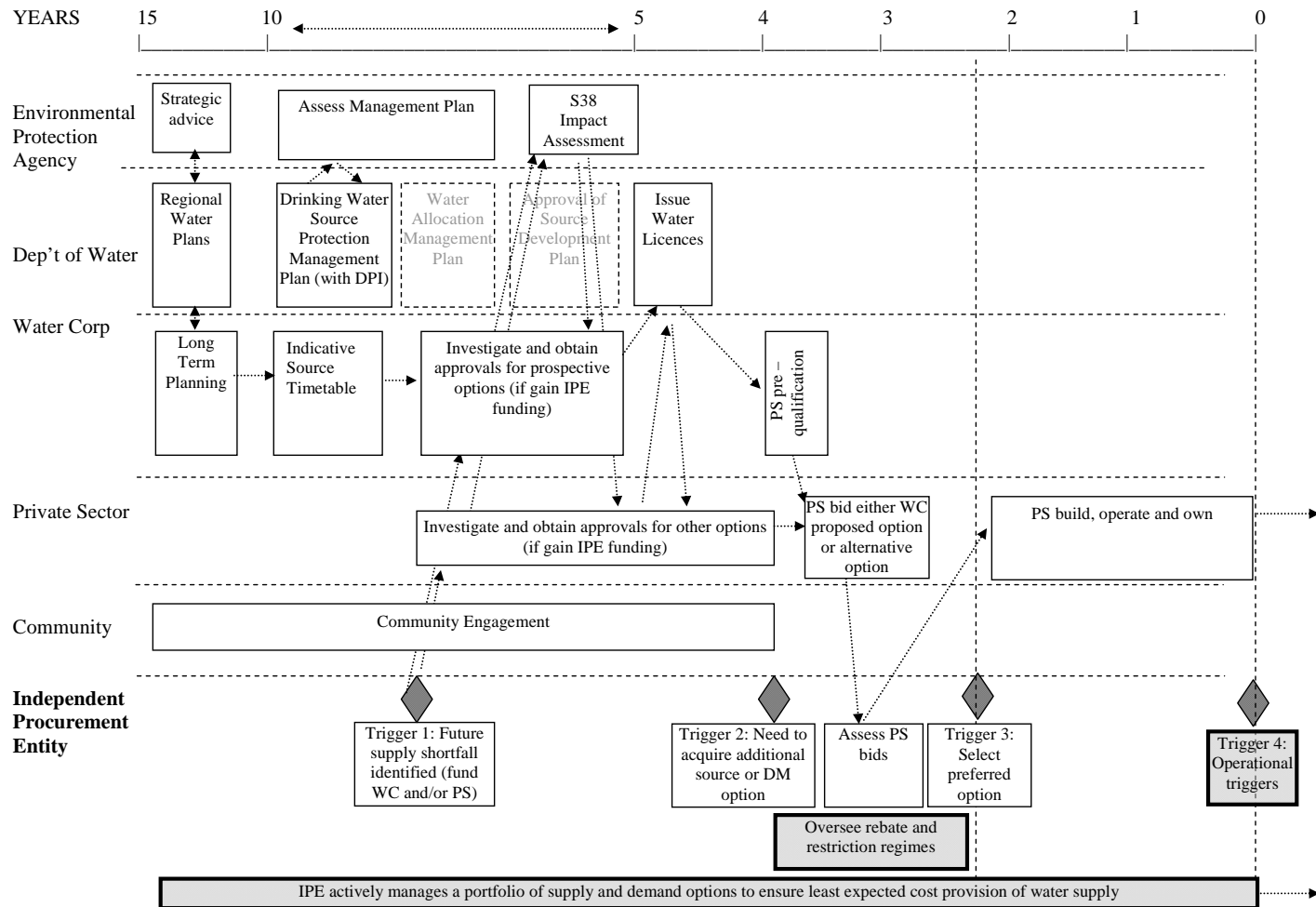
The procurement process under an IPE is represented in Figure 5.1.

Under the IPE arrangements, the EPA continues to undertake its role as key environmental advisor to government and the Minister continues to set the security requirement of the system. However, by comparison with the Corporation's proposal, the Independent Panel is replaced with an IPE and the roles of the Corporation, the Private Sector, and the Authority are altered.

The trigger points remain the same as those under the current arrangements and the Corporation's proposal. However, the IPE would place a greater emphasis on maintaining a portfolio of supply and demand options. As such, the trigger points (as shown in Figure 5.1) would make explicit mention of demand management options.



Figure 5.1 Independent Procurement Entity



## 5.1 Independent Procurement Entity

### Modification Since Draft Report

The IPE model described below is the same as that presented in the Draft Report except for one aspect regarding the requirement for the Corporation to submit a bid to the IPE on its preferred source. Following the submission from the Corporation on the Draft Report, the Authority no longer considers that the Corporation should be required to submit a bid (although the Corporation would provide a proposal on possible source options so as to ensure that the approvals process was progressed). As such, the Corporation would be able to assist the IPE on an impartial basis in assessing the various bids and negotiating supply contracts. This is consistent with the Corporation's preference for not owning new sources and is discussed in greater detail in the following section.

### Discussion of Role and Functions

As discussed in the Draft Report, the IPE would be an independent statutory authority. The role of the IPE would be to manage the procurement process to achieve the least expected cost way of ensuring the supply/demand balance is maintained while ensuring that the security requirement for the IWSS, as determined by the Minister, was met.

The security requirement would be set following advice from the IPE, DoW and Corporation. The IPE's advice would be based on its analysis of the marginal costs of additional supply and demand options relative to a shift in the security requirement.

The IPE would actively manage a portfolio of water supply and demand options.<sup>42</sup>

The IPE would be responsible for identifying a future supply shortfall (Trigger 1). It would make this decision based on a detailed source timing model which it would construct with the assistance of the Corporation. The model would be made available freely which would allow the private sector to make its own judgements regarding likely future instances when additional supply would be required.

Once the IPE had concluded that an additional source(s) or demand management option might need to be commissioned within reasonable planning times, it would seek proposals from the Corporation and the private sector for ways in which to address the supply shortfall. The IPE would conduct a degree of due diligence on the potential options offered by the Corporation and the private sector, and would fund the investigation and approvals for the most promising options, potentially excluding the Corporation's option if other more cost effective viable alternatives were proposed. This funding of investigation and approvals of sources and demand management options would make explicit the payments for the work currently undertaken in-house by the Corporation in the development of its preferred supply and demand options.

The IPE would then be responsible for identifying a need to acquire an additional source(s) or demand management option (Trigger 2). It would seek bids from the private sector on the Corporation's preferred source (if it had been successful in gaining funding for proving-up) as well as bids by the private sector on alternative sources or demand management solutions.<sup>43</sup>

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<sup>42</sup> A detailed discussion of an options approach can be found in the Draft Report and a consultants report from ACIL Tasman entitled 'Frameworks for Water Source Procurement in WA'. These reports can be found on the Authority's web page: [www.era.wa.gov.au/2/508/46/inquiry\\_into\\_co.pm](http://www.era.wa.gov.au/2/508/46/inquiry_into_co.pm)

<sup>43</sup> As discussed, this differs from the approach proposed in the Draft Report.

It is expected that the assessment process undertaken by the IPE would be consistent with the State Sustainability Strategy (2003), as the IPE would base its decisions on the project that has greatest total net benefit to the community. The total net benefit of a project to the community is the sum of net private benefits and net public benefits. Private benefits and costs accrue to parties directly engaged in the project (such as potential suppliers, shareholders, employees, or customers).<sup>44</sup> Public benefits and costs accrue to the wider community, for example from environmental impacts or the provision of public amenities.

- Private benefits and costs associated with each project would obviously be reflected in the value of the bid.
- Public benefits and costs that relate to the environment would be taken into account through the involvement of the EPA in undertaking Environmental Impact Assessments and the DoW in granting licences and monitoring usage. The costs associated with meeting EPA and DOW requirements would be reflected in the value of the bid as would costs incurred to comply with meeting the requirements of the Department of Health.
- To the extent that other benefits and costs (often referred to as social benefits and costs) outside of those identified above exist, these would need to be identified by the proponent through appropriate consultation processes and included as part of its bid. The IPE could be given the power to undertake further consultation to ensure the assessment process incorporates all public benefits and costs.<sup>45</sup>

Once the IPE determined that there was a need to commit to an additional source and therefore select the preferred option (Trigger 3), it would oversee negotiations between the Corporation and the successful bidder(s) regarding the relevant supply contracts to ensure they are consistent with the bid. In the event of a dispute, the IPE would act as an arbitrator.

In addition, the IPE would take over responsibility from the DoW and Corporation for implementing demand management programs such as restrictions, rebates and programmes such as the Corporation's 'WaterSmart' project.<sup>46 47</sup>

Based on advice from the Corporation, the IPE would be responsible for approving the annual source operating plan (Trigger 4), subject to pre-existing contracts. This is necessary to ensure confidence that sources are operated in an impartial and competitively-neutral manner.

<sup>44</sup> It should be noted that because benefits are defined as private does not mean the community does not benefit. Rather, it means that the members of the community who gain comprise the consumers, producers, employees, suppliers, etc who are party to the project.

<sup>45</sup> Note that some public benefits cannot easily be quantified in monetary terms, but they should be identified, described and taken into account in cost-benefit analysis, even if they cannot readily be given a dollar value. Note also that the economic impacts of a project, which can be quantified, such as the employment consequences of a project, are not typically included in the cost-benefit analysis for the reason that if the project did not go ahead the resources that were to be used in the project would not lay idle but would be used elsewhere in the economy to create economic value.

<sup>46</sup> The DoW would assist the IPE by providing advice on rebates which have an influence on water resources, such as rebates for bores.

<sup>47</sup> It is envisaged that a schedule regarding trigger points at which restrictions would be introduced would be published. With regard to rebates, it is expected that the IPE would have little involvement given that demand management solutions are a way of maintaining the supply/demand balance which could be bid by the Corporation or private sector. The cost of demand management solutions would be assessed against other ways of ensuring the supply/demand balance is maintained such as additional sources.

The IPE would be funded by the Corporation with these costs recovered from water customers through tariffs (with oversight by the Authority). This is consistent with the current arrangement where the Corporation recovers its source development and demand management costs from customers through water tariffs.

## 5.2 Water Corporation

While the Corporation's role under the IPE approach would in many respects be similar to its role under the Independent Panel approach, there are some important differences.

Upon establishment of the IPE, the Corporation would assist with the development of the source timing model. This is envisaged as incorporating existing Corporation modelling within a framework that more explicitly and transparently recognises the value of flexible readiness options in which strategies are formally developed to cost effectively deal with a wide range of possible future inflow scenarios. Greater transparency in approach could encourage private water providers to innovate in ways suited to delivering a least cost strategy reflective of the uncertainties and risks that need to be managed.

The Corporation, like any other potential water provider, would submit to the IPE a proposal regarding potential future sources or demand management options. If the Corporation's proposal(s) was successful, the IPE would provide the Corporation with funding to prove-up the source(s) or alternative options.

For any Corporation proposals that proceed to the approval stage, the approvals would become public property that could be utilised by the private sector as they develop their options. In the event that the private sector did not wish to take up these approvals and develop an option, the IPE would have the ability to run a procurement process similar to the one currently underway for the Southern Seawater Desalination Plant.

Based on the alternative bids provided by the private sector (based on either the Corporation's approvals or alternative private sector sources), the Corporation would assist the IPE in assessing the bids. However, the Corporation would enter into the detailed negotiations regarding the supply contract.

The Corporation would also assist the IPE with the development of its annual system operating plan. However, final sign-off of the plan would reside with the IPE which would need to assess its implications for source and operating costs as well as its potential impact on alternative supply and demand options.

## 5.3 Private Sector

The private sector would have two ways of providing options. First, once the IPE had identified a future shortfall in supply and gone to the market, a private sector proponent could seek funding from the IPE to prove-up a source or demand management option and gain the necessary approvals. If the source or demand management option passed the due diligence test of the IPE, the private sector proponent would then be able to offer the option to the IPE once the IPE identified a need to acquire an option.

Second, a private sector proponent could wait until the Corporation (if the Corporation was successful in gaining funding from the IPE) obtained the necessary approvals associated

with its preferred source and released these publicly. Based on the approvals, the private sector proponent could design a possible source for submission to the IPE.<sup>48</sup>

The IPE would assess the bids with the assistance of the Corporation and act as an arbitrator in the negotiation of any supply contracts.

## 5.4 Economic Regulation Authority

The Authority could monitor the effectiveness of the new institutional arrangements by undertaking periodic reviews of the competitiveness of the bulk water market. This is a similar function to that which it performs in the wholesale electricity market with respect to the operation of the Independent Market Operator. The Authority could also oversee the funding arrangements between the IPE and Corporation.

In addition, the Authority would continue to provide recommendations to government on water and wastewater tariffs and advice on the structure of water tariffs. Similarly, the Authority would continue its licensing function.

## 5.5 Summary

Table 5.1 sets out the key roles in the Corporation's proposal and the IPE model.

**Table 5.1 Key roles with the Corporation and IPE models**

Task	Corporation Proposal	IPE
Who identifies future supply shortfall (Trigger 1)?	Independent Panel (based on Corporation advice)	IPE
Who identifies possible sources or Demand Management (DM) options?	Corporation and DoW (limited Private Sector)	IPE, Corporation and Private Sector
Who funds proving-up of option?	Corporation (Private Sector)	IPE
Who controls DM?	Corporation and DoW	IPE
Who identifies need to acquire additional source or DM option (Trigger 2)?	Independent Panel (based on Corporation advice)	IPE
Who assesses bids?	Independent Panel (based on Corporation advice)	IPE
Who negotiates supply contract?	Corporation	Corporation
Who commits to build additional source or prepare for DM roll-out (Trigger 3)?	Independent Panel (based on Corporation advice)	IPE
Who manages annual source strategy (Trigger 4)?	Corporation	IPE (based on Corporation advice)

<sup>48</sup> The IPE could consider whether there was a need to provide funding to prospective proponents to ensure sufficient interest given the degree of cost associated with preparing a bid.

## 5.6 Discussion

This section discusses how the IPE model addresses the concerns identified with the current arrangements and the Corporation's proposed model.

### **Lack of Transparency and Independence**

Like the Independent Panel proposed by the Corporation, the IPE would ensure independence and transparency in decision making and therefore provide an incentive for the private sector to develop supply and demand management options.

As with the Corporation's Independent Panel proposal, the IPE approach also addresses the conflict of interest related to the Corporation assessing proposals from the private sector on an impartial basis relative to its preferred proposal.

Furthermore, like the proposal of the Corporation, the role of the Minister relates to setting the security requirement of the system.

However, in addition to the Independent Panel proposal, the IPE addresses the potential conflict of interest related to the Corporation approving the annual source operating plan given that this function would now be undertaken by the IPE (based on advice from the Corporation).

### **Uneven Playing Field**

The IPE would develop and release a detailed supply/demand model. This would address the lack of detailed information available to the private sector identified under both the current and Corporation-proposed approaches.

In addition, the IPE would fund the private sector (subject to due diligence processes) to investigate and obtain approvals for alternative sources and demand management options. Such an approach would address the competitive disadvantage under both the current and Corporation-proposed approaches faced by a private sector proponent wishing to offer an alternative option.

Providing funding to investigate and obtain approvals for alternative sources or to develop potential alternative demand management solutions is consistent with the current approach. Under the current approach, any costs incurred by the Corporation in proving up sources or developing demand management solutions are recovered from customers through tariffs. For example, the Corporation is funding currently two consortia which are developing bids to construct and operate the second desalination plant. A further example relates to the Corporation's demand management programs where it runs trials testing alternative demand management programs before deciding whether or not to implement them more broadly across the community.

### **Uncertainty**

The IPE would be responsible for implementing restrictions and rebates and would state publicly its approach to applying each of these. This is necessary given that the imposition of restrictions and rebates will influence demand and subsequently the viability of projects being considered by the private sector. Clarification on the imposition of restrictions and rebates will increase further the incentive for the private sector to develop alternative supply and demand options relative to the current and Corporation proposed model.

## **Role of the Department of Water**

As noted previously, the role of the DoW would need to be modified regardless of the procurement model adopted. In addition to the functions discussed in Chapter 3, and as noted above, there is a need to transfer responsibility for rebate schemes and the funding of other demand management programmes to the IPE.

## **Concluding Comments**

A crucial difference between the Corporation's proposed model and the IPE model is the extent to which innovative supply augmentation and demand management alternatives will be investigated. This is due to the earlier active engagement of the private sector and by addressing the matter of competitive neutrality under the IPE model relative to the Corporation's proposed model.

While the Corporation's model would ensure competition among potential providers on a least cost basis for the development of a given source, it is limited in the extent that it will identify new and innovative ways of ensuring the supply/demand balance is maintained. The IPE model is able to capture the benefits of the Corporation's model in ensuring least cost development of a given source. However, the IPE model might also increase the range of new and innovative options from which to choose.

A challenge in establishing the IPE is to ensure that the IPE has the expertise (and be seen to have the expertise) necessary to be able to make truly independent decisions. Locating the IPE within the Independent Market Operator, given the similar roles and functions of the two organisations, would reduce the time taken by the IPE to gain the required expertise.

It would also be important that the IPE develop a good working relationship with the Corporation. As the conflict of interest matters raised by the Corporation have been addressed, this relationship should be effective given the complimentary roles of the two organisations.

## 6 Submissions on Further Consultation Paper

The Authority has presented the current approach, the Corporation's proposed approach, and the IPE approach as alternative models for ensuring an adequate supply of water is provided to meet demand. It has outlined what it considers to be the strengths and weaknesses of these approaches. In addition, the Authority has discussed the role of the DoW and has identified a need to modify this role regardless of the approach adopted.

The Authority is seeking input from interested parties on the appropriateness of the Corporation's proposed model and the IPE model in ensuring the balance between supply and demand is maintained, including unidentified strengths and weaknesses of each model, practical problems with their implementation, and any other matters considered relevant.



## APPENDICES

## Appendix 1: Terms of Reference

### INQUIRY INTO COMPETITION IN THE WATER AND WASTE WATER SERVICES SECTOR

#### TERMS OF REFERENCE

I, ERIC RIPPER, Treasurer, pursuant to section 32(1) of the *Economic Regulation Authority Act 2003* (the ERA Act), request that the Economic Regulation Authority (the Authority) undertake an inquiry into, and provide advice on possible competitive enhancements for the delivery of water and wastewater services, with a view to making recommendations for providing these services in the most efficient, effective and sustainable way.

Key areas of focus will include:

- enhancing the efficiency of future water source procurement (and other significant capital investment) processes, including issues associated with current market structures and mechanisms, such as competitive tendering models, and determining the trigger conditions for committing to the acquisition of a new source;
- opportunities for enhanced competition by introducing third party access regimes to existing water and waste water-related infrastructure, including identifying appropriate principles and mechanisms to implement efficient and effective regimes; and
- other reforms to the water and wastewater market which may enhance competition, including the establishment of water trading mechanisms and the benefits, costs and issues associated with them (e.g. inter-regional trades, market dominance and water hoarding) and arrangements for community service obligations paid by the State Government to service providers.

In conducting the inquiry and developing recommendations, the Authority is to have regard to:

- the roles and responsibilities of participants in the industry, both Government and private sector recognising that certain services (e.g. water transmission and distribution) have strong natural monopoly characteristics;
- approaches taken in other jurisdictions;
- the costs and benefits of alternative industry structures, including transitional costs that may be incurred in changing to a new structure;
- any impacts, including service provision, operational or financial impacts, on existing asset owners and operators; and
- any impact of these reforms on the Government's social, economic and environmental policy objectives, including ensuring environmental and social criteria are taken into account in market structures, tendering processes and access regimes; commitments to the *National Water Initiative* and the Government's response to *A Blueprint for Water Reform in Western Australia* compiled by the Water Reform Implementation Committee.

In undertaking the inquiry, the Authority is to recognise section 26 of the Act, which requires the Authority to have regards 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.

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 made available for further public consultation on the basis of invitations for written submissions.

A final report is to be completed by no later than 31 March 2008.

ERIC RIPPER MLA  
DEPUTY PREMIER: TREASURER:  
MINISTER FOR STATE DEVELOPMENT

## Appendix 2: Amendment to the Terms of Reference

### Economic Regulation Authority (Water and Wastewater Services Reference) Notice 2008

Given by the Economic Regulation Authority under the *Economic Regulation Authority Act 2003* section 34 (1).

#### 1. Citation

This notice is the *Economic Regulation Authority (Water and Wastewater Services Reference) Notice 2008*.

#### 2. Reference Amended

- (1) Under the *Economic Regulation Authority Act 2003* section 33 the Treasurer has amended the reference for the Inquiry into Competition in the Water and Wastewater Services Sector.
- (2) The particulars of the amendment are set out in Schedule 1.

#### Schedule 1 – Particulars of amendment

[cl. 2(2)]

#### NOTICE OF AMENDMENT TO REFERENCE FOR INQUIRY INTO COMPETITION IN THE WATER AND WASTEWATER SERVICES SECTOR

I, Eric Ripper, under the *Economic Regulation Authority Act 2003* section 33, amend the reference for the Inquiry into Competition in the Water and Wastewater Services Sector (notice of which was published in Gazette 24 July 2007 at p.3660) so that the final report is to be completed by no later than 30 June 2008 instead of 31 March 2008.

ERIC RIPPER MLA  
DEPUTY PREMIER; TREASURER;  
MINISTER FOR STATE DEVELOPMENT

LYNDON ROWE  
CHAIRMAN  
ECONOMIC REGULATION AUTHORITY