Independent Pricing and Regulatory Tribunal

Provision of Advice on Recommended Capital and Operating Expenditure for the 2006 Bulk Water Price Review of State Water Corporation and the Department of Natural Resources

Final Report for Department of Natural Resources

May 2006

Halcrow Pacific Pty Ltd

McLennan Magasanik Associates Pty Ltd

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Executive Summary

Introduction

The Independent Pricing and Regulatory Tribunal (IPART) are currently undertaking a review of the bulk water charges set for the regulated businesses of State Water Corporation (SWC) and the Department of Natural Resources (DNR) for up to a four year period commencing 1 July 2006 (the price control period).

Halcrow Pacific Pty Ltd (Halcrow), in association with our subconsultants McLennan Magasanik Associates (MMA), were engaged by IPART to provide advice to the Tribunal. Our advice will assist the Tribunal in determining the appropriate levels of capital and operating expenditure for SWC and DNR over the price control period.

This report outlines the results of our assessment of the appropriate levels of capital and operating expenditure for the Department of Natural Resources.

Scope and Objectives

The scope of our review was to undertake a review of the final report prepared by PB Associates and identify any issues arising from this report, for example, where recommendations on appropriate levels of expenditure could not be made due to a lack of information. This process involved reviewing the PB Associates reports and identifying any data gaps, and then seeking to fill these data gaps in consultation with IPART and DNR.

We were also requested to consult with and review the comments provided by key stakeholders in the review process. As part of this we undertook consultation with the New South Wales Irrigators Council and Murray Irrigation Limited and reviewed submissions made by these organisations as part of IPART's review period.

On the basis of our review of the PB Associates reports, our consultations with IPART and DNR, our consultation with the key stakeholders, and our own experience, we have submitted our opinion on the appropriate levels of capital and operating expenditure for DNR.

Key Issues for DNR

The key issues we identified for DNR were:

- Some additional responsibilities have been placed on DNR under the National Water Initiative (NWI) and DNR are proposing major increases in staff numbers to deal with these new responsibilities.
- DNR have major role in the conversion of existing water licences to the new formats.
- DNR have a major role in the preparation of Water Sharing Plans.
- With the introduction of the Catchment Management Authorities, there appears to be some crossover in activities between the CMAs and DNR.
- DNR have a role in the delivery of natural resource management works for the Murray Darling Basin Commission (MDBC) and the Dumeresq Barwon Border Rivers Commission (DBBRC).

Recommended Operating Expenditure

Our review of DNR has led us to recommend different levels of operating expenditure than that recommended in the PB Associates report. Our recommendations are outlined in **Table 1** below and the process we used to develop our recommendations is explained in the following paragraphs.

Table 1 Recommended Operating Expenditure for DNR from 2006/07 to 2009/10

$'000 (2005$)	2006/07	2007/08	2008/09	2009/10	2010/11
Regulated Rivers	23,215	23,661	22,994	22,131	22,203
Unregulated Rivers	16,153	16,330	17,456	16,748	16,804
Groundwater Highly managed	11,690	11,599	11,564	11,554	11,552
Other Groundwater	2,093	2,286	1,978	1,998	1,979
Total WRM	53,151	53,876	53,992	52,431	52,538
less MDBC	4,441	3,913	3,652	2,965	2,965
less DBBRC	388	388	388	388	388
Forecast Direct EFTs	297	301	302	301	302
less shared services (refer Note 1)	8,987	9,108	9,139	9,108	9,139
less Regional assets depreciation	1,715	1,809	1,872	1,894	1,881
Net WRM for Regions (Valleys/waters sources)	37,620	38,658	38,941	38,076	38,165
DNR EFT Rate (calculated)	127	128	129	126	126
Baseline EFTs	274	274	274	274	274
WRM Adjusted for direct EFTs	34,707	35,191	35,330	34,660	34,626
Less CMA activity adjustment	682	1,269	946	257	257
Less WRM Development cost adjustment				2,518	2,518
Add MDBC modified	3,803	3,913	3,652	2,965	2,965
Add back DBBRC	388	388	388	388	388
Add back depreciation	752	791	818	828	825
Add shared (refer Note 1)	6,639	6,822	6,872	6,719	6,735
Halcrow/MMA Recommended Forecasts	45,606	45,836	46,115	42,787	42,765

Total proposed less MBDC, DBBRC and depreciation

DNR	46,607	47,766	48,080	47,184	47,304
Halcrow/MMA	40,663	40,744	41,257	38,605	38,587
Halcrow/MMA as % DNR costs	**87%**	**85%**	**86%**	**82%**	**82%**

Our process for determining the appropriate levels of operating expenditure for DNR followed the steps outlined in the points following:

- **Table 1** above shows the detail of how the operating expenditure for DNR has been calculated.
- The "Total WRM" is the sum of the components of operating expenditure listed by category in the first four rows of the table data. The proposed expenditure for MDBC and DBBRC is also shown. The operating expenditure is based on the "Forecast Direct EFTs" level shown.

- To develop our revised baseline operating expenditure, we must first remove the shared services and the regional assets depreciation components of the operating expenditure giving us the "Net WRM for Regions".
- We do not agree with DNR's assessment that they require up to 302 staff to fulfil their responsibilities. We propose to use the maximum historical level of EFTs over the period from 2001/02 to 2004/05, which is 274.
- DNR has been able to fulfil its responsibilities with this level of EFTs even including the new responsibilities under the NWI. It is important to note that, to date, DNR has not provided any robust justification for increasing the level of EFTs to those proposed over the price control period.
- The proposed operating expenditure ("Net WRM for Regions") is based on the "Forecast Direct EFTs" of 297 (in 2006/07). From this we can estimate a nominal cost or expenditure per EFT and this has been calculated at about $127,000 in 2006/07 as shown in **Table 1** as "DNR EFT Rate".
- We can then use this rate to determine the revised expenditure based on our "Baseline EFTs" level of 274 as discussed above. The result is shown in **Table 1** as the "WRM Adjusted for direct EFTs"
- We have proposed an adjustment to DNR's operating expenditure related to the cross over of activities between DNR and the newly formed CMAs. It is our opinion that some of these activities can be and should be transferred to the CMAs immediately. We have identified these activities as blue-green algae management and water & wetland recovery and planning activities.
- We have identified the proposed expenditure set aside for these two activities from DNRs submission and this is listed in **Table 1** as "Less CMA activity adjustment".
- We have also identified a reduction in the expenditure allocated to the development of the water sharing plans. DNR advised that all water sharing plans would be implemented by 2008/09 and from this date on there would be ongoing monitoring costs for the plans. However DNR has not reduced the level of expenditure to reflect this change in the activity and as such we have proposed to remove all expenditure related to this activity. We believe that any monitoring costs can be covered by the existing monitoring programs undertaken by DNR.
- We have identified the proposed expenditure set aside for this activity in DNRs submission and this is listed in **Table 1** as "Less WRM Development cost adjustment".
- We have then added back the MDBC and DBBRC operating expenditure which are pass through costs. It is noted that the MDBC expenditure was revised by MDBC for 2006/07.
- Our analysis of DNRs original submission indicates that DNR has been miscalculating the level of depreciation that it applies to its capital works items. We identified that DNR had been:

(i) including depreciation calculated on assets that were constructed prior to IPARTs "line in the sand" of 1 July 1997; and,

(ii) applying a depreciable life of only 10 years to groundwater bore assets when we would expect an asset life of around 40 years.

- DNR stated that the reduced groundwater bore asset life was consistent with the life of the current water sharing plans. We dispute the assumption this explanation makes that the groundwater bore assets will be worthless after the current water sharing plans expire. We would expect that new water sharing plans would be developed and that the groundwater bores will be reused.
- We have adjusted the asset life for the groundwater bores to a conservative estimate of 25 years and recalculated the depreciation based on this adjusted asset life. The revised depreciation estimate is shown in **Table 1** as "Add back depreciation"
- Our analysis of DNR's submission indicates that they have included a shared services (overheads) cost to each activity at an average rate of about 19% of the total operating expenditure. Our experience and our benchmarking leads us to believe that this level is too high and we have proposed a more appropriate level of shared services (overheads) cost of 15% to be applied from 2006/07 onwards.
- This process results in recommended operating expenditure levels as shown in **Table 1** under "Halcrow/MMA Recommended Forecasts"
- We have also provided a comparison of our recommendations to DNRs proposed operating expenditure, excluding MDBC, DBBRC and depreciation.

Recommended Capital Expenditure

We have made no adjustments to DNRs proposed capital expenditure as the quantum of the expenditure is relatively small, some of the capital works are not ongoing, and others are externally funded. In addition, some of the capital works have historically been expensed or included simply as a depreciation component of the operating expenditure.

1 Introduction

1.1 Background

The Independent Pricing and Regulatory Tribunal (IPART) are responsible for determining the maximum prices that can be charged for the provision of bulk water in New South Wales (NSW). The two main suppliers of bulk water related services in NSW are State Water Corporation (SWC) and the regulated water resource management group within the Department of Natural Resources (DNR).

In its previous full determination, IPART set the maximum bulk water prices for the period from 1 October 2001 to 30 June 2004. IPART then set prices for the period from 1 July 2004 to 30 June 2005 by allowing a CPI increase on the prices from the previous review. This was done as the period covered by the review coincided with a period of major structural change for SWC related to its separation from the Department of Land and Water Conservation (DLWC) and subsequent corporatisation.

IPART then undertook a review of SWC and DNR for the purposes of setting new bulk water prices for the period commencing from 1 July 2005, however, the review process encountered some significant problems. This included the major structural change resulting from the corporatisation of State Water, a much delayed submission from DNR (then the Department of Infrastructure, Planning and Natural Resources or DIPNR) and a general lack of robust information available to IPART's consultant for the review.

IPART concluded that there was insufficient time available to undertake a comprehensive review and consultation period and consequently resolved to again set prices for only a single year from 1 July 2005 to 30 June 2006. IPART and again applied the consumer price index (CPI) to the prices set in the 2001 determination to calculate the maximum charges to apply for this single year period.

IPART are now undertaking a review of the bulk water charges set for SWC and DNR with the intention to set the maximum bulk water related prices for a period of up to four years commencing from 1 July 2006 (the price control period). IPART engaged consultants PB Associates to review the capital and operating expenditure for SWC and DNR, however, there were again a number of problems encountered.

These problems primarily related to a perceived lack of quality information available from SWC and DNR and the subsequent reluctance of PB Associates to give IPART firm recommendations on the appropriate levels of capital and operating expenditure. As a result, the Tribunal was not sufficiently confident to make a determination on prices and decided to seek further advice on the process.

Halcrow Pacific Pty Ltd (Halcrow), in association with our subconsultants McLennan Magasanik Associates (MMA), were then engaged to provide further advice to the Tribunal on the levels of capital and operating expenditure for SWC and DNR over the price control period.

This report outlines the results of our assessment for the Department of Natural Resources.

1.2 *Scope and Objectives*

We undertook this assignment in four distinct stages:

(i) A review of the final report prepared by PB Associates.
(ii) Consultation with DNR to seek any further information available.
(iii) Consultation with key stakeholders to discuss their submissions to IPART during the community/stakeholder consultation period.
(iv) Development of our recommended capital and operating expenditure levels for DNR.

The first stage of our work was to undertake a review of the final report prepared by PB Associates and identify any issues arising from that report, for example, where recommendations on appropriate levels of expenditure could not be made due to a perceived lack of information. We identified a number of issues arising from the PB Associates reports and we have summarised these issues in **Section 2** of this report. The list of issues was submitted to DNR to identify any further information that could be obtained.

The second stage of our work involved consulting with DNR to determine if any of the issues arising from our review of the PB Associates report could be resolved. We submitted a list of questions to DNR (refer **Appendix C**) and then met with DNR on 5 April 2006 to discuss the issues. Our consultation with DNR resulted in a number of outstanding issues being resolved and we have incorporated the responses received from DNR into **Section 2**.

For the third stage of our work, we were requested by IPART to consult with and review the comments provided by key stakeholders. As part of this we consulted with representatives of the NSW Irrigators Council and Murray Irrigation Limited and we reviewed the submissions made by these organisations as part of IPART's community/stakeholder consultation process. We met with the NSW Irrigators Council on 31 March 2006 and with Murray Irrigation Limited on 7 April 2006. The views expressed by these two key stakeholders are outlined in their respective submissions to the process. The views were also consistent in a number of areas with our initial opinions and were taken into account when forming our recommendations on the appropriate levels of capital and operating expenditure.

For the fourth and final stage of our work, we considered all the previous stages of this project, that is, our review of the PB Associates reports, our consultation with IPART and DNR, our consultation with the key stakeholders, and our own experience in forming our recommendations in respect to the appropriate levels of capital and operating expenditure for DNR.

2 Issues Arising from PB Associates Report

2.1 Identification of Issues

The first stage of our assignment was to undertake a review of the report "Review of Capital and Operating Expenditure of the Department of Natural Resources" prepared by PB Associates (10 March 2006) and to identify the key issues arising from this report. The issues we identified are listed in the first column of **Table 2**. For each issue identified, a reference to the relevant section (including page and paragraph numbers) of the PB Associates report was provided together with a summary of the identified issue.

2.2 Response to Identified Issues

The second stage of our assignment was to consult with DNR in order to resolve or clarify the identified issues, where this was possible. A summary of the pertinent points arising from DNR's response to each identified issue is presented in the second column of **Table 2**.

Where appropriate, we have provided further comments and/or recommendations in respect to the identified issues and these are identified by the bold type text in the second column of **Table 2**.

Prior to our consultation with DNR we submitted a list of questions related to the issues we had identified and a copy of this list has been included in **Appendix C**.

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Table 2 Issues Arising from PB Associates Report

Issue	Halcrow Comments / Recommendation
Comments on Section 2 – Business Drivers	
1 ***PBA Comment/Issue:*** Section 2.1.1, page 18, paragraph 3 – "PB Associates was unable to ascertain the incremental costs, or redirected effort, arising from changes in operating environment imperatives…" ***Discussion Points/Issues:*** (i) Need to identify the specific increases in costs/EFTs over the historical levels. (ii) DNR submission provides details of activities required but not specific EFT increases related to these activities. (iii) Need to view basis for increases, that is, what EFTs are required to undertake the specific new tasks.	DNR's approach to forecasting their budget is based on a bottom-up or zero based estimate of the resources required to meet their obligations. DNR claims that this budgeting process was required as their responsibilities and operations have changed so significantly that budgeting from previous year's accounts are not valid. While zero base budgeting may be a valid budgeting process, it does not provide any regulatory confidence that the budgeted resources are at an efficient level or even if it is actually sufficient for the tasks. DNR has not provided any evidence to indicate how the estimates were determined and we have no confidence that the budgeted resources are appropriate. The approach of applying a zero based estimate also does not allow for a comparison of historical EFT levels and the identification of the linkage between expenditure and the drivers for such expenditure, for example, additional WRM responsibilities brought about through the NWI. DNR had commissioned The Allen Consulting Group to review and document the processes involved in preparing DNR's submission to IPART. The Allen Consulting Group report indicated that the process for quantifying EFT requirements to fulfil DNR's nominated responsibilities was based on the estimates put up by Regional and Divisional Managers. These local managers provided estimates of the EFT's required to meet their obligations on a valley-by-valley basis. We understand that the estimates from each valley were then

Issue	Halcrow Comments / Recommendation
	collected and aggregated into an overall resource requirement. This was then translated into an operating cost using set salary costs and on costs per EFT. We understand that there has not been any rigorous review of the efficiencies of the EFT requirements or allocations, for example, where activities overlap a number of valleys, the actual EFT requirement may be less than the sum of the individual estimates for each valley.
Comments on Section 3 – Business Planning and Procedures	
2 ***PBA Comment/Issue:*** Section 3.1, page 20, paragraph 3 – "PB Associates has been unable to establish whether a full justification business case is available for each of the 12 key activities…" ***Discussion Points/Issues:*** (i) Has the section on business drivers adequately covered the requirements? (ii) Is developing a business case for each activity a normal process and is it required?	DNR indicated that the 12 activity groups broadly mirror regional business plans. Generally, specific business cases are not required as the work is mandatory. DNR is developing an input-output matrix that will link to regional and divisional business plans, the Results and Services Plan recently submitted to Treasury and the corporate plan.
3 ***PBA Comment/Issue:*** Section 3.2, page 22, paragraph 3 & 4 – "PB Associates is unable to comment further [on the use of historical rates per EFT in forecasting estimates for cost items] other than to highlight a possible issue in the	DNR has a defined business process of allocating all shared costs as a set rate per EFT regardless of the resource position or skill level. We believe that this process is simplistic and inadequate in reflecting the complexities of the relationship between EFTs and their associated costs.

Issue	Halcrow Comments / Recommendation
estimation model" ***Discussion Points/Issues:*** (i) Is there any other method of forecasting expenditure for cost items? (ii) Not all EFTs will require a vehicle or accommodation – would assume these costs would increase but at a lower percentage than the increase in EFTs. (iii) Need explanation as to how these items are forecast.	
4 ***PBA Comment/Issue:*** Section 3.2, page 22, paragraph 6 – "PB Associates queried whether an increase in direct EFTs required to meet new or changed obligations should result in an automatic increase in the Regional and divisional indirect and overhead amounts…" ***Discussion Points/Issues:*** (i) Would expect these indirect and overhead amounts to increase but at a lower rate than the EFTs.	DNR has a defined business process of allocating all shared costs as a set rate per EFT regardless of the resource position or skill level. We believe that this process is simplistic and inadequate in reflecting the complexities of the relationship between EFTs and their associated costs.
5 ***PBA Comment/Issue:*** Section 3.3.1, page 24, paragraph 3 – "PB Associates is unable to comment further [on new WRM expenditure], other than to note that there is an	DNR have based their WRM expenditure forecasts on the forecast of EFT requirements. We are, however, unable to determine the linkage between the EFT requirements and the increased responsibilities related to WRM arising out of the NWI (refer previous comments above). For example, if DNR required say 5 EFT to convert say 50 Water Act consents to Water Access Licences in

Issue	Halcrow Comments / Recommendation
increasing trend in WRM expenditure." ***Discussion Points/Issues:*** (i) DNR submission includes review of changes to WRM activities required and identifies general resource requirements. (ii) DNR does not specifically provide information relating EFT increases to new WRM responsibilities.	2004/05 and expect to convert a further 70 licences in 2006/07, an additional 2 EFT to meet the increased workload in the year would be justified. DNR has, however, been unable to provide such justification.
Comments on Section 4 – Historical Expenditure	
6 ***PBA Comment/Issue:*** Section 4.2, page 30, paragraph 1 – "There is little information on the make up of this [capital] expenditure to assist the reviewers for the new price path period." ***Discussion Points/Issues:*** (i) There is no discussion on historical capital expenditure. (ii) Is there historical information available?	DNR have provided some details on the historical capital expenditure indicating that it has been insignificant amounting to a total of about $650,000 between 2003/04 and 2005/06.
7 ***Discussion Points/Issues:*** DNR was requested to advise the reason for: (iii) the 22% increase in Regulated Water operating costs between 2001/02 and 2002/03.	DNR have not provided any details on the historical operating expenditure.

Issue	Halcrow Comments / Recommendation
(iv) the 14% increase in Groundwater operating costs between 2001/02 and 2002/03. (v) the 19% increase in Licensing cost between 2002/03 and 2003/04.	
8 ***Discussion Points/Issues:*** DNR was asked to provide details of the historical level of corporate / shared cost. What is the budgeted and forecast levels of these costs? On what basis has the corporate / shared cost been allocated to the valley and water sources? What proportion of these costs is allocated to regulated vs unregulated products (if any)?	All shared/corporate costs are allocated on the basis of a $ rate per $ of salary based on the salary cost of direct staff. The cost of non-direct staff are considered shared costs. This cost is redistributed based on the salary cost of direct staff. This methodology of allocation is unlikely to reflect the true cost of providing WRM and licensing services as it does not take into account the relative use of shared/corporate services.
Comments on Section 5 – Forecast Expenditure	
9 ***PBA Comment/Issue:*** Section 5.1.1, page 32, paragraph 3 – "PB Associates believes that further information explaining how decisions on timing of achievement of the new responsibilities and the basis of directives given by others or established by DNR needs to be made apparent." ***Discussion Points/Issues:*** (i) Further information is required on how the forecast costs and EFTs relate to the new responsibilities.	DNR's approach to forecasting their budget is based on a bottom-up or zero based estimate of the resources required to meet their obligations. DNR claims that this budgeting process was required as their responsibilities and operations have changed so significantly that budgeting from previous year's accounts are not valid. DNR have based their operating expenditure forecasts on the forecast of EFT requirements. We are, however, unable to determine the linkage between the EFT requirements and the increased responsibilities, for example, new WRM obligations arising out of the NWI (refer previous comments above). In addition, the NWI does not stipulate a firm timing for implementation of the

Issue	Halcrow Comments / Recommendation
(ii) Further information on the timing deadlines for implementation of new responsibilities needs to be provided to justify proposed expenditure and timeframes.	obligations and further DNR has not set any firm internal deadlines to implementation. **Given that DNR is unable to provide the linkage between increased responsibilities and additional EFTs we concur with PBA's reasons for not accepting the DNR forecast EFT levels, however, we would recommend allowing the historical maximum baseline EFT level of 274 based on increased responsibilities.**
10 ***PBA Comment/Issue:*** Section 5.1.1, page 32, paragraph 8 – "PB Associates notes that the WSP's are due to be fully implemented by 2008/09 and on-going management (review/update) would follow in subsequent years… Given these aspects, the justification for DNR's proposition to expend the same level of cost in this work category beyond 2008/09 is queried." ***Discussion Points/Issues:*** (i) Development and implementation phase will be the most expensive phase. (ii) Expect that expenditure would decrease to lower levels reflecting on-going management responsibilities.	DNR have indicated that all WSPs are scheduled to be implemented by 2008/09 (a total of 97 WSPs) and will be followed by ongoing management of these plans. We would expect that the management and monitoring of WSPs would be less resource intensive than their development and may even be considered as part of the ongoing river flow monitoring programs. The total expenditure level for WSP Development should thus be eliminated post 2008/09 resulting in a reduction in DNR's total operating expenditure of approximately $2.5 million in 2009/10.
11 ***PBA Comment/Issue:*** Section 5.1.2, page 34, "Table 5-3 Valleys demonstrating upgrades in expenditure in the 3 WRM categories greater than 40% above historical	DNR has indicated that a total of around 300 EFTs are required to meet the WRM responsibilities in the valleys, an increase from historical levels of around 250 EFTs. DNR has provided some evidence that would indicate the main

Issue	Halcrow Comments / Recommendation
4 year average" ***Discussion Points/Issues:*** (i) Table shows valleys that have very large step increases in expenditure. (ii) DNR justification for expenditure increases is vague and does not relate to specific tasks, EFTs, etc.	reason for the increased expenditure is for additional works in over-exploited groundwater source areas and for increased monitoring of unregulated streams and groundwater, however, the information provided has not allowed us to quantify the increase as the linkage between the additional responsibilities and the required EFT and expenditure levels has not been established.
12 ***PBA Comment/Issue:*** Section 5.1.3, page 36, paragraph 7 – "However it is not apparent: a) how the allocations [to WRM activities] are likely to change with time given apparent stability in the price period forecasts; b) what is the assessed and justified basis of the magnitude of resource allocation?; c) the component of the forecast expenditure allocated to each new activity compared with on-going requirements and savings from old activities no longer being undertaken has not been provided." ***Discussion Points/Issues:*** (i) Consult with DNR to determine if allocations are likely to change or if WRM responsibilities are likely to change. (ii) Review EFT allocation specific to responsibilities for each year and identify any changes. (iii) Compare old and new activities.	DNR has indicated that the changes in expenditure envisaged in 2005/06 and 2006/07 are required to meet their new responsibilities and no further changes in responsibility are expected to be required after this transitional period. As a result the EFT and expenditure levels beyond 2006/07 remain relatively constant. DNR have not provided details on the resources required and the link between the resources required and the changes in responsibilities. In addition, DNR have revised their resource requirements from a zero base making comparisons with previous resources levels difficult. The complete redefinition of product codes also renders resource comparisons meaningless.

Issue	Halcrow Comments / Recommendation
13 ***PBA Comment/Issue:*** Section 5.1.4, page 39, paragraph 1 – "PB Associates considers that this matter [rate of implementation of WSPs] has not been demonstrated in the submission as a negotiated point with Government over the consequential additional resources needed to complete the work within 'imposed' timelines. Evidence of directives to meet certain deadlines would satisfy this matter." ***Discussion Points/Issues:*** (i) We would assume that the reason for requesting the timeframe for delivery of the WSPs is to investigate whether the timeframe can be delayed therefore deferring costs of WSP program. (ii) The justification of timelines, though, would assist in the review of forecast expenditure for the WSP program.	The NWI does not stipulate a firm timing for implementation of the WSPs but DNR has set an internal deadline of 2008/09 for the implementation of the WSPs.
14 ***PBA Comment/Issue:*** Section 5.1.5, page 40, paragraph 2 & 3 – "PB Associates suggests on the basis of the processing workload as at past years levels and the inability to quantify factors increasing or decreasing workload, that forecasts [for licence transaction costs] be adjusted to historic levels as shown for the two years 2003/04, 2004/05…"	In Appendix 6 of the DNR submission, historical and forecast volumes of licence transactions have been provided. The number of licence conversions from WA to WMA each year are also provided and are expected to fall from 7,000 in 2004/05 to about 5,250 per annum over the period 2006/07 to 2009/10. WMA licence approvals commenced in 2004/05 at just under 10,000 and are expected to increase with the number of WA licence conversions. The number of WMA dealings (transactions) is expected to increase from an historical average of about 190 to an average of 350 over the same period. The number of new WA licences issued averaged about 6,800 per annum over 2002/03 to 2005/06 and is expected to decrease on average by 55% per annum

Issue	Halcrow Comments / Recommendation
Discussion Points/Issues: (i) PB Associates have essentially recommended that the costs be set to historical levels for two years and then IPART would revisit the costs and make another determination. (ii) We would think that the preference is for a full four year determination to avoid on-going changes to submissions and costs. (iii) Some data on existing levels of licence conversion costs, evidence of government directives on deferment of conversions, and historical levels of expenditure would be useful.	until 2009/10 after which it is forecast that no WA licences will be issued. The number of total works and use approvals (excluding basic rights bores) in 2005/06 was 75 and is expected to increase rapidly to over 1,200 per annum by 2009/10. The number of basic rights bores in 2005/06 was 72 and is expected to increase rapidly to over 5,500 per annum by 2008/09. WA licence renewals are expected to be phased out by 2009/10 from average historical levels of around 4,000 per annum. WMA approval extensions will commence from 2006/07 and are expected to average about 3,600 per annum over the regulatory period. **We are of the opinion that there are significant conversion works and new licence issues to justify the higher costs than those that applied historically. It is our expectation that at the end of this regulatory period (that is beyond 2009/10) the only remaining licence related costs would be new WMA related licences and works approvals, and extensions to existing WMA licences. As a result the costs for licence related activities should stabilise at a lower level.**
15 ***PBA Comment/Issue:*** Section 5.1.6, page 40, paragraph 4 – "PB Associates sought clarification as to why the opportunity was not taken to include the former cost (i.e. Water consent administration) in the proposed 'fee for service' (i.e. licence transactions) proposals."	DNR have advised that the water consent administration cost is a fixed administrative cost present even if no licence transactions occur. The cost is independent of the number of transactions. This cost is thus distributed over all users to minimise the impact in the event that the number of licence transactions in any particular year is low.

Issue	Halcrow Comments / Recommendation
Discussion Points/Issues: (i) DNR's response does not sufficiently answer PB Associates' queries – there is no specific explanation as to why the two costs cannot be incorporated. (ii) Need to identify the difference between water consent administration and licence transaction costs.	
16 ***PBA Comment/Issue:*** Section 5.1.7, page 41, paragraph 4 – "No allowance has been made for any expected Salary Award/Employment rises net above CPI." ***Discussion Points/Issues:*** (i) This compares to State Water who have allowed a 4% salary increase which has been dictated by government agreement. (ii) Are salary rises offset by efficiency gains – if so then both need to be clearly set out in submission?	DNR have advised that no allowances have been made for salary increases in the forecast WRM expenditure. These nominal salary increases will be affected by CPI rises and thus the impact is not expected to be significant and maybe absorbed by work efficiencies.
17 ***PBA Comment/Issue:*** Section 5.1.10, page 43, dot point 2 – "There is no capex related to WRM" ***Discussion Points/Issues:*** (i) Does this mean that DNR's submission does not include any allowance for capital expenditure or is this purely related to MDBC work?	DNR has advised that there is some capex related to WRM, however capital expenditure over the past few years is not significant relative to the capex program for the forecast years. In addition, past capital expenditure on gauging stations maintenance and replacement has not been capitalised and is treated as recurrent expenditure (opex) rather than capex. The capital expenditure over the last three years (2003/04 to 2005/06) was approximately $650,000 in total.

Issue	Halcrow Comments / Recommendation
18 ***PBA Comment/Issue:*** Section 5.1.10, page 43, dot point 3 – "If it is required to extend the detailed information to 2007/08 – 2009/10, detailed schedules of information similar to that for 2006/07 will need to be obtained from MDBC." ***Discussion Points/Issues:*** (i) Detailed information on MDBC costs is required for this review as it is essential that the costs are appropriately accounted for.	DNR is the appointed NSW authority for MDBC contracts. These contracts appoint DNR to provide water resource management services. The costs of DNR's contract with MDBC is determined and paid for by MDBC/ River Murray Water (RMW). The cost of MDBC contracts thus do not factor into DNR's resource estimates for WRM activities submitted to IPART. MDBC contributions, however, are NSW's share of total MDBC/RMW's annual operating and capital costs. The cost of these contributions for MDBC works is funded largely by bulk water entitlement holders through bulk water prices. DNR allocates these contributions based on the cost of MDBC's works in the appropriate NSW valleys. DNR used the MDBC 2006/07 budget and projected it forward for its forecast costing. At the time of the submission, no other data was available from MDBC.
19 ***PBA Comment/Issue:*** Section 5.1.12, page 44, paragraph 3 – "Confirmation of the actual condition of bores and hence estimated remaining service life will enhance the depreciation calculation." ***Discussion Points/Issues:*** (i) Asset life for bores are generally longer than 10 yrs, however, DNR submission states that for bores within 5 yrs of the end of design life a default value of 5 yrs has been adopted. (ii) There is no assessment of the condition of the bores to determine actual remaining asset life.	DNR have advised that they do not have an asset management plan at this stage that can designate asset condition. **We are of the opinion that the asset life for the groundwater bores is of the order 40 years or more, depending on local conditions, from the time they are installed. (Note this design life is actually listed in the DIPNR BORES- ASSET 2005.xls sheet supplied by DNR). Depreciating these assets over the 10 year WSP period is front-end loading the costs to the detriment of current customers and is not indicative of the likely future use of the asset irrespective of the WSPs.**

Issue	Halcrow Comments / Recommendation
	When the current WSPs expire we would expect that either the existing WSPs are extended or a new set of arrangements equivalent to the current WSPs would be implemented. The bores will then continue to be in use, and thus have an asset value, in either of these situations. We recommend that the assets be depreciated over an average of 25 years rather than the 10 years proposed by DNR. **Our analysis of the bores asset register supplied by DNR has also indicated that assets constructed prior to 1 July 1997 have been included in the asset base for pricing purposes. We understand that this is inconsistent with the framework established as part of IPARTs 2001 Bulk Water Price Determination which provided for an asset cut-off date of 1 July 1997. The depreciation values included in DNR's operating expenditure should be recalculated with the pre-1 July 1997 assets removed.**
20 ***Discussion Points/Issues:*** How do DNR's responsibilities differ from the CMAs and are there areas that DNR's activities should be undertaken by the CMAs?	CMAs are responsible for delivering incentive programs funded by State and Commonwealth Governments to land managers to restore and improve the State's natural resources. The CMAs have largely concentrated on issues relating to: • Biodiversity, rehabilitation and native vegetation. • Ecosystems and salinity. • Sustainability. • Flood mitigation and landscapes.

Issue	Halcrow Comments / Recommendation
	WRM activities undertaken by DNR concentrate on the provision of data and information relating to the extraction of water, development of policies to manage water resources and the allocation of water resources. Some activities, however, do seem to cross over including flood mitigation, blue-green algae management and management of wetlands. These activities may be better managed by the CMAs and the costs removed from bulk water charges. **The impact of removing these activities from DNRs responsibilities is shown in the following points:** • **Blue green algae operational planning – reduction of $175,000 per annum** **Water and wetland recovery/management – reduction of approximately $2.5 million over the regulatory period.**
21 ***Discussion Points/Issues:*** Impact of the review of shared costs on the forecast expenditure.	DNR indicated that overhead or shared services are based on a set rate of $30,260 per EFT per year. This translates to an overhead factor of over 19%. In its 2005 determination on metropolitan water agency prices, IPART allowed Sydney Water's corporate costs to amount to 18.6% of its total operating expenses over the 2005/06 to 2008/09 regulatory period while Hunter Water's corporate costs amounted to 23.5% of its total operating expenses over the same period.

Issue	Halcrow Comments / Recommendation
	In January 2005, Victoria's Essential Services Commission (ESC) published studies conducted by PB Associates on Victoria's metropolitan Water Businesses which recommended average corporate cost allocations of around 13% of total operating expenses for the three metropolitan businesses. In November 2004, Barwon Water, in Victoria, provided data in its Water Plan to the ESC that indicated that its corporate costs amount to approximately 20% of its operating expenses. In 2005 during the review of Victoria's rural water businesses by the ESC, Southern Rural Water estimated that some 15% of its operating expenditure were corporate costs while Goulburn-Murray Water estimated that approximately 8% of its operating expenditure were corporate costs. These figures suggest that the DNR's allocation of corporate costs is significantly higher than comparable water businesses. **On the basis of the greater similarity between DNR and the Victorian Rural Water businesses, we would recommend setting the overhead factor to 15% applied to total operating expenditure.**

3 Recommended Expenditure

3.1 General

The final stage of our work is to consider our review of the PB Associates reports, our consultations with IPART and DNR, our consultation with the key stakeholders, and our own experience, in order to develop our opinion in respect to the appropriate levels of capital and operating expenditure for DNR.

3.2 Recommended Operating Expenditure

Our review of DNR has led us to recommend different levels of operating expenditure than that recommended in the PB Associates report. Our recommendations are outlined in **Table 3** below while the process we used to develop our recommendations is explained in the following paragraphs.

IPART provided us with a template sheet, which had originally been developed by PB Associates, and asked us to update the figures with our recommendations. The template sheet is in the form presented in **Table 3**.

The "Total WRM" is the sum of the four components of operating expenditure listed by category in the first four rows of the table data. The proposed expenditure for MDBC and DBBRC is also shown. The proposed operating expenditure listed under the "Total WRM" row is based on the "Forecast Direct EFTs" levels shown.

In **Table 2**, under Item 9, we commented that DNR's proposed level of EFTs was unjustified and in particular, that DNR had failed to provide a clear and direct linkage between any increased responsibilities under the National Water Initiative (NWI) and the requirement to increase staffing levels from 2006/07 onwards.

PB Associates, however, recommended that the historical average (2001/02 to 2004/05) EFT level of 257 be used. We believe that DNR has clearly taken on increased responsibilities in the period prior to 2005/06 (under the implementation of the NWI), and that using the average historical level of EFTs does not account for this.

We recommend that the historical maximum level of EFTs of 274 be adopted as the baseline staffing level.

Table 3 Recommended Operating Expenditure for DNR from 2006/07 to 2009/10

$'000 (2005$)	2006/07	2007/08	2008/09	2009/10	2010/11
Regulated Rivers	23,215	23,661	22,994	22,131	22,203
Unregulated Rivers	16,153	16,330	17,456	16,748	16,804
Groundwater Highly managed	11,690	11,599	11,564	11,554	11,552
Other Groundwater	2,093	2,286	1,978	1,998	1,979
Total WRM	53,151	53,876	53,992	52,431	52,538
less MDBC	4,441	3,913	3,652	2,965	2,965
less DBBRC	388	388	388	388	388
Forecast Direct EFTs	297	301	302	301	302
less shared services (refer Note 1)	8,987	9,108	9,139	9,108	9,139
less Regional assets depreciation	1,715	1,809	1,872	1,894	1,881
Net WRM for Regions (Valleys/waters sources)	37,620	38,658	38,941	38,076	38,165
DNR EFT Rate (calculated)	127	128	129	126	126
Baseline EFTs	274	274	274	274	274
WRM Adjusted for direct EFTs	34,707	35,191	35,330	34,660	34,626
Less CMA activity adjustment	682	1,269	946	257	257
Less WRM Development cost adjustment				2,518	2,518
Add MDBC modified	3,803	3,913	3,652	2,965	2,965
Add back DBBRC	388	388	388	388	388
Add back depreciation	752	791	818	828	825
Add shared (refer Note 1)	6,639	6,822	6,872	6,719	6,735
Halcrow/MMA Recommended Forecasts	45,606	45,836	46,115	42,787	42,765
Total proposed less MBDC, DBBRC and depreciation					
DNR	46,607	47,766	48,080	47,184	47,304
Halcrow/MMA	40,663	40,744	41,257	38,605	38,587
Halcrow/MMA as % DNR costs	**87%**	**85%**	**86%**	**82%**	**82%**

To develop our revised operating expenditure, based on our adjusted level of EFTs, we must first remove the shared services and the regional assets depreciation components of the operating expenditure which are not directly related to EFTs. This process gives us the operating expenditure shown under "Net WRM for Regions".

As indicated previously, the proposed operating expenditure, "Net WRM for Regions", is based on the "Forecast Direct EFTs" of 297 (in 2006/07). We can use these two figures to recalculate the revised operating expenditure. The nominal cost or operating expenditure per EFT is shown as "DNR EFT Rate". This rate has no meaning in itself and is only a step in allowing us to calculate the revised operating expenditure based on our new baseline staffing level.

Using the "DNR EFT Rate" and our "Baseline EFTs" we calculated the revised operating expenditure, which is shown as "WRM Adjusted for direct EFTs".

IPART have requested that we consider the function of the newly formed Catchment Management Authorities (CMAs) and especially where the functions of the CMAs may potentially cross over the existing functions of DNR. IPART has received advice from the National Water Commission (NWC) that, in time, the NWC sees that the natural resource management functions currently undertaken by DNR will be transferred to the CMAs. With these comments as the background we undertook a review of the responsibilities of the CMAs.

Our brief review allowed us to identify some cross over of activities between DNR and the newly formed CMAs. We identified some such activities under Item 20 in **Table 2** and it is our opinion that these activities can, and should, be transferred to the CMAs. We have identified these activities as blue-green algae management and water & wetland recovery and planning activities. With additional time we feel that we could have undertaken a more detailed review of the activities of both organisations and identified additional areas where responsibilities could be transferred from DNR to the CMAs.

We have identified the proposed expenditure set aside for these two activities from DNRs submission and listed this expenditure in **Table 3** under the heading "Less CMA activity adjustment". We were able to derive the proposed operating expenditure by interrogating the file "ForecastDatabase5yrPivotNew221105.xls" and filtering the data for the relevant activity descriptions.

We have also identified a reduction in the expenditure allocated to the development of the water sharing plans ("WSP development"). DNR advised that all water sharing plans would be implemented by 2008/09 and from this date on there would only be general ongoing monitoring costs for the plans. Our review of DNR's submission, however, indicates that DNR has not reduced the level of expenditure to reflect this change in the activity. They have proposed to maintain the current level of expenditure.

We believe that this proposed expenditure should not be related to the ongoing monitoring of the water sharing plans and as such we have proposed to remove all expenditure related to this activity. We believe that any monitoring costs for the plans can be rolled into the existing monitoring programs undertaken by DNR, that is, we do not accept that the monitoring costs for the water sharing plans will require additional resources in DNR's existing activities related to monitoring.

We have identified the proposed expenditure for this activity in DNR's submission and this is listed in **Table 3** as "Less WRM Development cost adjustment".

We have then added back the MDBC and DBBRC operating expenditure which are pass through costs related to the contributions made by DNR on behalf of the NSW State Government. It is noted that the MDBC expenditure was revised by MDBC for 2006/07 but not for any other years.

Our analysis of DNR's original submission indicates that they have been miscalculating the level of depreciation that it applies to its capital works items. We made some comments on this issue under Item 19 in **Table 2** where we identified that DNR had been:

- including depreciation calculated on assets that were constructed prior to IPARTs "line in the sand" of 1 July 1997; and
- applying a depreciable life of only 10 years to groundwater bore assets when we would expect an asset life of around 40 years.

For our analysis we reviewed the file "DIPNR BORES- ASSET 2005.xls" to identify the assets that were used in the depreciation calculations and subsequently the build date of the asset and the DNR proposed asset life used in the calculations.

We note that during our analysis DNR submitted a revised depreciation calculation which appeared to have removed the depreciation from pre-1 July 1997 assets.

DNR provided an explanation that the reduced groundwater bore asset life of 10 years was consistent with the life of the current water sharing plans. However, we dispute the assumption this explanation makes that the groundwater bore assets will be worthless after the current water sharing plans expire. We would expect that new water sharing plans would be developed and that the groundwater bores will be reused under this new system. DNR's proposal brings forward the costs of depreciation which are then passed onto the customers.

We have adjusted the asset life for the groundwater bores to a conservative estimate of 25 years and recalculated the depreciation based on this adjusted asset life. An asset life of 25 years takes into account the various components of the groundwater bores and their relative asset lives, for example, the groundwater bore may last about 40 years, however, the electrical components of the bore may only last 10-15 years. The revised depreciation estimate is shown in **Table 3** as "Add back depreciation".

Our analysis of DNR's submission indicates that they have included a shared services (overheads) cost to each activity at an average rate of about 19% of the total operating expenditure. We made some comments on this issue under Item 21 in **Table 2**.

Our experience and our benchmarking lead us to believe that the level proposed by DNR is too high. Our benchmarking of comparable water businesses (refer Item 21 in **Table 2**) leads us to propose a more appropriate level of shared services (overheads) cost of 15% to be applied from 2006/07 onwards.

This process results in recommended operating expenditure levels as shown in **Table 3** under "Halcrow/MMA Recommended Forecasts". We have also provided a comparison of our recommendations to DNR's proposed operating expenditure, excluding MDBC, DBBRC and depreciation.

3.3 Recommended Capital Expenditure

We have recommended no adjustments to DNR's proposed capital expenditure for the following reasons:

- The quantum of the expenditure is quite small.
- Typically the capital works included have been expensed as a component of the operating expenditure.
- The program is generally not ongoing with one item being completed in 2005/06 and another major item expected to be completed in 2007/08.
- The water monitoring network enhancement program is to be externally funded through a Government grant. If it is successful, there will be an ongoing operating cost to operate the network.

Table 4 outlines the recommended capital expenditure program for DNR.

Table 4 Recommended Capital Expenditure Program for DNR over the period from 2006/07 to 2009/10

DNR PROPOSED CAPITAL EXPENDITURE PROGRAM ($'000, $2005/06)

	2006/07			2007/08			2008/09			2009/10			**TOTALS**		
	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	**UNREG**	**GW**	**TOTAL**
Border	$ 26	$ 75	$ 101	$ 18	$ 70	$ 88	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 163**	**$ 243**
Gwydir	$ 26	$ 75	$ 101	$ 18	$ 70	$ 88	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 163**	**$ 243**
Namoi	$ 26	$ 198	$ 224	$ 18	$ 255	$ 272	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 470**	**$ 550**
Peel	$ 12	$ 5	$ 18	$ 8	$ 3	$ 11	$ 8	$ 3	$ 11	$ 8	$ 3	$ 11	**$ 36**	**$ 15**	**$ 51**
Lachlan	$ 52	$ 271	$ 323	$ 34	$ 262	$ 296	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	**$ 154**	**$ 566**	**$ 719**
Macquarie	$ 52	$ 271	$ 323	$ 34	$ 355	$ 389	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	**$ 154**	**$ 658**	**$ 811**
Far West	$ 63	$ 216	$ 279	$ 42	$ 205	$ 247	$ 42	$ 21	$ 63	$ 42	$ 21	$ 63	**$ 188**	**$ 464**	**$ 652**
Murray	$ 43	$ 451	$ 494	$ 29	$ 506	$ 535	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	**$ 129**	**$ 985**	**$ 1,115**
Murrumbidgee	$ 43	$ 451	$ 494	$ 29	$ 506	$ 535	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	**$ 129**	**$ 985**	**$ 1,115**
North Coast	$ 143	$ 441	$ 584	$ 95	$ 319	$ 414	$ 96	$ 48	$ 144	$ 96	$ 48	$ 144	**$ 430**	**$ 856**	**$ 1,286**
Hunter	$ 113	$ 488	$ 602	$ 76	$ 407	$ 483	$ 76	$ 38	$ 114	$ 76	$ 38	$ 114	**$ 341**	**$ 972**	**$ 1,313**
South Coast	$ 133	$ 496	$ 629	$ 89	$ 358	$ 446	$ 88	$ 43	$ 131	$ 88	$ 43	$ 131	**$ 398**	**$ 940**	**$ 1,337**
	$ 731	**$ 3,439**	**$ 4,170**	**$ 487**	**$ 3,318**	**$ 3,805**	**$ 490**	**$ 240**	**$ 730**	**$ 490**	**$ 240**	**$ 730**	**$ 2,198**	**$ 7,237**	**$ 9,435**

3.4 *Summary of Recommended Expenditure*

Our recommended levels of capital and operating expenditure for the Department of Natural Resources are shown in **Table 5** and **Table 6** below.

Table 5 Recommended Operating Expenditure for DNR from 2006/07 to 2009/10

	Proposed Operating Expenditure ('000 $2005/06)				
	2006/07	2007/08	2008/09	2009/10	TOTAL
DNR Proposed Opex (inc MDBC & DBBRC)	53,151	53,876	53,992	52,431	**213,450**
Recommended Opex (inc MDBC & DBBRC)	**45,606**	**45,836**	**46,115**	**42,787**	**180,343**
Diff. Recommended to Proposed	-7,545	-8,040	-7,877	-9,644	**-33,107**
% Diff. Recommended to Proposed	-14%	-15%	-15%	-18%	**-16%**

Table 6 Recommended Capital Expenditure for DNR from 2006/07 to 2009/10

DNR PROPOSED CAPITAL EXPENDITURE PROGRAM ($'000, $2005/06)					
	2006/07	2007/08	2008/09	2009/10	**TOTALS**
Border	$ 101	$ 88	$ 27	$ 27	**$ 243**
Gwydir	$ 101	$ 88	$ 27	$ 27	**$ 243**
Namoi	$ 224	$ 272	$ 27	$ 27	**$ 550**
Peel	$ 18	$ 11	$ 11	$ 11	**$ 51**
Lachlan	$ 323	$ 296	$ 50	$ 50	**$ 719**
Macquarie	$ 323	$ 389	$ 50	$ 50	**$ 811**
Far West	$ 279	$ 247	$ 63	$ 63	**$ 652**
Murray	$ 494	$ 535	$ 43	$ 43	**$ 1,115**
Murrumbidgee	$ 494	$ 535	$ 43	$ 43	**$ 1,115**
North Coast	$ 584	$ 414	$ 144	$ 144	**$ 1,286**
Hunter	$ 602	$ 483	$ 114	$ 114	**$ 1,313**
South Coast	$ 629	$ 446	$ 131	$ 131	**$ 1,337**
	$ 4,170	**$ 3,805**	**$ 730**	**$ 730**	**$ 9,435**

Appendices

Appendix A Detailed Operating Expenditure Tables

$'000 (2005$)	2006/07	2007/08	2008/09	2009/10	2010/11
Regulated Rivers	23,215	23,661	22,994	22,131	22,203
Unregulated Rivers	16,153	16,330	17,456	16,748	16,804
Groundwater Highly managed	11,690	11,599	11,564	11,554	11,552
Other Groundwater	2,093	2,286	1,978	1,998	1,979
Total WRM	53,151	53,876	53,992	52,431	52,538
less MDBC	4,441	3,913	3,652	2,965	2,965
less DBBRC	388	388	388	388	388
Forecast Direct EFTs	297	301	302	301	302
less shared services (refer Note 1)	8,987	9,108	9,139	9,108	9,139
less Regional assets depreciation	1,715	1,809	1,872	1,894	1,881
Net WRM for Regions (Valleys/waters sources)	37,620	38,658	38,941	38,076	38,165
DNR EFT Rate (calculated)	127	128	129	126	126
Baseline EFTs	274	274	274	274	274
WRM Adjusted for direct EFTs	34,707	35,191	35,330	34,660	34,626
Less CMA activity adjustment	682	1,269	946	257	257
Less WRM Development cost adjustment				2,518	2,518
Add MDBC modified	3,803	3,913	3,652	2,965	2,965
Add back DBBRC	388	388	388	388	388
Add back depreciation	752	791	818	828	825
Add shared (refer Note 1)	6,639	6,822	6,872	6,719	6,735
Halcrow/MMA Recommended Forecasts	45,606	45,836	46,115	42,787	42,765

Total proposed less MBDC, DBBRC and depreciation

DNR	46,607	47,766	48,080	47,184	47,304
Halcrow/MMA	40,663	40,744	41,257	38,605	38,587
Halcrow/MMA as % DNR costs	**87%**	**85%**	**86%**	**82%**	**82%**

Correct depreciation	1,715	1,809	1,872	1,894	1,881

DNR's proposed opex	46,607	47,766	48,080	47,184	47,304
Proportion of shared services to proposed opex	19.28%	19.07%	19.01%	19.30%	19.32%
Proposed opex minus shared services	37,620	38,658	38,941	38,076	38,165
Recommended opex with 15% shared services	44,259	45,480	45,813	44,795	44,900
Recommended shared services	**6,639**	**6,822**	**6,872**	**6,719**	**6,735**
Recommended shared services % of opex	**15%**				

Appendix B Detailed Capital Expenditure Tables

WATER EXTRACTION MONITORING/METERING FUNDING ($'000, $2005/06)

	2006/07			2007/08			2008/09			2009/10			TOTALS		
	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	**UNREG**	**GW**	**TOTAL**
Border	$ 26	$ 13	$ 40	$ 18	$ 9	$ 26	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 40**	**$ 120**
Gwydir	$ 26	$ 13	$ 40	$ 18	$ 9	$ 26	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 40**	**$ 120**
Namoi	$ 26	$ 13	$ 40	$ 18	$ 9	$ 26	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 40**	**$ 120**
Peel	$ 12	$ 5	$ 18	$ 8	$ 3	$ 11	$ 8	$ 3	$ 11	$ 8	$ 3	$ 11	**$ 36**	**$ 15**	**$ 51**
Lachlan	$ 52	$ 25	$ 77	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	**$ 154**	**$ 74**	**$ 227**
Macquarie	$ 52	$ 25	$ 77	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	**$ 154**	**$ 74**	**$ 227**
Far West	$ 63	$ 32	$ 94	$ 42	$ 21	$ 63	$ 42	$ 21	$ 63	$ 42	$ 21	$ 63	**$ 188**	**$ 95**	**$ 283**
Murray	$ 43	$ 21	$ 64	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	**$ 129**	**$ 63**	**$ 193**
Murrumbidgee	$ 43	$ 21	$ 64	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	**$ 129**	**$ 63**	**$ 193**
North Coast	$ 143	$ 73	$ 215	$ 95	$ 48	$ 144	$ 96	$ 48	$ 144	$ 96	$ 48	$ 144	**$ 430**	**$ 217**	**$ 647**
Hunter	$ 113	$ 58	$ 171	$ 76	$ 38	$ 114	$ 76	$ 38	$ 114	$ 76	$ 38	$ 114	**$ 341**	**$ 173**	**$ 513**
South Coast	$ 133	$ 66	$ 199	$ 89	$ 44	$ 133	$ 88	$ 43	$ 131	$ 88	$ 43	$ 131	**$ 398**	**$ 196**	**$ 594**
	$ 731	**$ 366**	**$ 1,097**	**$ 487**	**$ 243**	**$ 730**	**$ 490**	**$ 240**	**$ 730**	**$ 490**	**$ 240**	**$ 730**	**$ 2,198**	**$ 1,089**	**$ 3,287**

GROUNDWATER MONITORING NETWORK (ENHANCEMENT) FUNDING ($'000, $2005/06)

	2006/07			2007/08			2008/09			2009/10			TOTALS		
	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	**UNREG**	**GW**	**TOTAL**
Border		$ 61	$ 61		$ 62	$ 62			$ -			$ -	**$ -**	**$ 123**	**$ 123**
Gwydir		$ 61	$ 61		$ 62	$ 62			$ -			$ -	**$ -**	**$ 123**	**$ 123**
Namoi		$ 184	$ 184		$ 246	$ 246			$ -			$ -	**$ -**	**$ 430**	**$ 430**
Peel		$ -	$ -		$ -	$ -			$ -			$ -	**$ -**	**$ -**	**$ -**
Lachlan		$ 246	$ 246		$ 246	$ 246			$ -			$ -	**$ -**	**$ 492**	**$ 492**
Macquarie		$ 246	$ 246		$ 338	$ 338			$ -			$ -	**$ -**	**$ 584**	**$ 584**
Far West		$ 184	$ 184		$ 185	$ 185			$ -			$ -	**$ -**	**$ 369**	**$ 369**
Murray		$ 430	$ 430		$ 492	$ 492			$ -			$ -	**$ -**	**$ 922**	**$ 922**
Murrumbidgee		$ 430	$ 430		$ 492	$ 492			$ -			$ -	**$ -**	**$ 922**	**$ 922**
North Coast		$ 369	$ 369		$ 271	$ 271			$ -			$ -	**$ -**	**$ 639**	**$ 639**
Hunter		$ 430	$ 430		$ 369	$ 369			$ -			$ -	**$ -**	**$ 799**	**$ 799**
South Coast		$ 430	$ 430		$ 314	$ 314			$ -			$ -	**$ -**	**$ 744**	**$ 744**
	$ -	**$ 3,073**	**$ 3,073**	**$ -**	**$ 3,075**	**$ 3,075**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,148**	**$ 6,148**

DNR PROPOSED CAPITAL EXPENDITURE PROGRAM ($'000, $2005/06)

	2006/07			2007/08			2008/09			2009/10			TOTALS		
	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	UNREG	GW	TOTAL	**UNREG**	**GW**	**TOTAL**
Border	$ 26	$ 75	$ 101	$ 18	$ 70	$ 88	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 163**	**$ 243**
Gwydir	$ 26	$ 75	$ 101	$ 18	$ 70	$ 88	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 163**	**$ 243**
Namoi	$ 26	$ 198	$ 224	$ 18	$ 255	$ 272	$ 18	$ 9	$ 27	$ 18	$ 9	$ 27	**$ 80**	**$ 470**	**$ 550**
Peel	$ 12	$ 5	$ 18	$ 8	$ 3	$ 11	$ 8	$ 3	$ 11	$ 8	$ 3	$ 11	**$ 36**	**$ 15**	**$ 51**
Lachlan	$ 52	$ 271	$ 323	$ 34	$ 262	$ 296	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	**$ 154**	**$ 566**	**$ 719**
Macquarie	$ 52	$ 271	$ 323	$ 34	$ 355	$ 389	$ 34	$ 16	$ 50	$ 34	$ 16	$ 50	**$ 154**	**$ 658**	**$ 811**
Far West	$ 63	$ 216	$ 279	$ 42	$ 205	$ 247	$ 42	$ 21	$ 63	$ 42	$ 21	$ 63	**$ 188**	**$ 464**	**$ 652**
Murray	$ 43	$ 451	$ 494	$ 29	$ 506	$ 535	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	**$ 129**	**$ 985**	**$ 1,115**
Murrumbidgee	$ 43	$ 451	$ 494	$ 29	$ 506	$ 535	$ 29	$ 14	$ 43	$ 29	$ 14	$ 43	**$ 129**	**$ 985**	**$ 1,115**
North Coast	$ 143	$ 441	$ 584	$ 95	$ 319	$ 414	$ 96	$ 48	$ 144	$ 96	$ 48	$ 144	**$ 430**	**$ 856**	**$ 1,286**
Hunter	$ 113	$ 488	$ 602	$ 76	$ 407	$ 483	$ 76	$ 38	$ 114	$ 76	$ 38	$ 114	**$ 341**	**$ 972**	**$ 1,313**
South Coast	$ 133	$ 496	$ 629	$ 89	$ 358	$ 446	$ 88	$ 43	$ 131	$ 88	$ 43	$ 131	**$ 398**	**$ 940**	**$ 1,337**
	$ 731	**$ 3,439**	**$ 4,170**	**$ 487**	**$ 3,318**	**$ 3,805**	**$ 490**	**$ 240**	**$ 730**	**$ 490**	**$ 240**	**$ 730**	**$ 2,198**	**$ 7,237**	**$ 9,435**

Appendix C List of Questions for DNR

C.1 Business Drivers

(a) DNR to provide details showing specific increase in EFTs and how they were estimated given the new tasks/operating environment.

C.2 Business Planning and Procedures

(b) DNR to confirm whether business cases for each of the 12 key activities are required or planned and if a Strategic Business Plan is to be developed.

(c) DNR to provide explanation of forecasting method for cost items such as materials, accommodation, vehicles, etc.

(d) DNR to explain what the relationship is between EFT increases and Regional and divisional indirect and overhead amounts.

(e) DNR to provide details showing specific increase in EFTs and how they were estimated given the new WRM responsibilities.

C.3 Historical Expenditure

(f) DNR to advise if there is any historical capital expenditure information available.

(g) DNR to advise the reason for the 22% increase in regulated Water and 14% increase in Groundwater costs between 2001/02 and 2002/03

(h) DNR to advise the reason for the 19% increase in Licensing cost between 2002/03 and 2003/04

(i) DNR to provide details of the historical level of corporate / shared cost. What is the budgeted and forecast levels of these costs? On what basis has the corporate / shared cost been allocated to the valley and water sources? What proportion of these costs is allocated to regulated vs unregulated products (if any)?

C.4 Forecast Expenditure

(j) Need DNR to provide specific details on how the proposed EFT increases relate to the new responsibilities and how the timing for implementation of the responsibilities has been derived.

(k) Need DNR to provide specific details of how expenditure on WSP's is to be allocated after 2008/09.

(l) DNR need to provide details to justify expenditure increases, for example:
  (i) which groundwater sources are over-exploited and require action?
  (ii) what are the specific actions required?
  (iii) how many EFTs are required to develop and implement actions?
  (iv) are the EFTs to be relocated from existing groups or are they new?
  (v) which groundwater areas need significant increases in monitoring?
  (vi) how many EFTs are required to implement monitoring systems?
  (vii) what is existing level of monitoring?

(m) Need DNR to provide details of old and new resource allocations highlighting areas of difference. DNR to also provide summary of which activity codes have changed and new and old codes.

(n) DNR needs to provide details on the timeframe for implementing the WSPs (goal date of 2008/09) and evidence of government / legislative directives to have plans implemented.

(o) DNR need to provide specific details on:
- number of licences remaining to be converted from WAs to WALs
- evidence of government directives on timing of conversions.

(p) DNR need to provide specific explanation of the differences between water consent administration and licence transaction costs and the reasons why they cannot be incorporated in a single cost.

(q) DNR to provide explanation of whether any salary increases have been factored into the proposed expenditure.

(r) DNR to clarify what is meant by statement – "There is no capex related to WRM".

(s) DNR to provide detailed information on MDBC costs for period from 2007/08 to 2009/10.

(t) DNR to explain why actual asset conditions are not included in asset life calculations.

(u) DNR to explain the reason for the following major increases in the operating expenditure between the historical average (2002-05) and the forecast levels (2007-11)
  (i) Regulated 7%
  (ii) Unregulated 20%
  (iii) Groundwater 7%
  (iv) Licensing 56%

(v) DNR to explain if any opex efficiency targets have been set

C.5 MDBC & DBBRC Costs

(w) MDBC and DBBRC expenditures are passed through. DNR to explain how this process occurs and how are revenues received accounted for in the submission.

C.6 DNR / CMA Crossover

(x) How does DNR's responsibilities differ from the CMAs and are there areas that DNR's activities should be undertaken by the CMAs?