



Mr Colin Reid
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IPART
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Our ref: WS10/423

Dear Mr Reid

Response to Draft PWC/Halcrow Review of Office of Water's Water Management Expenditure

The Office has reviewed the published draft report and provides the following comments.

The Office is concerned that many of the conclusions drawn by the Review Team are on the grounds of lack of information/evidence provided by the Office. In most cases, the Office is not aware of any unfulfilled request for information or unfulfilled request for interpretation of the data and information provided.

The Review Team in its report recognises the additional workload of the Office due to the increasing complexity of water management issues. However on the basis of perceived lack of evidence, the Review Team have recommended substantial cuts to both the Office's base level number of staff and additional resources required over the next determination period.

The proposed reduction in recoverable costs, which is below that provided for in IPART's previous determination, will mean that the Office of Water will have to reduce services to water users.

The Office believes it is in the interests of licensed water users to have adequate water management services provided to them and that the benefit of these services far outweighs their cost to the licensees. The following services that the Office of Water considers are of direct benefit to the licensed water users would be reduced with cuts to available funding to the Office:

- Development of new water sharing plans that appropriately balance water for consumptive use and the environmental requirements in consideration of socio-economic impacts;
- Effective implementation of these water sharing plans, including timely and accurate announcements of available water and compliance;
- Data and information provision to enable licensees to understand water availability and enable self-regulation with respect to access rules;
- Effective water licence application assessment processes;

- Effective water trading approvals processes and licence administration systems;
- Monitoring the performance of these water sharing plans to fully inform their review and remake;
- Representing NSW interests in the face of significant changes to water availability and management as result of the Commonwealth's Basin Plan and other national water reforms.

Although the Review does not address the issue of the timeframe for the next pricing determination, the Office in its submission has indicated that a three year determination covering the period 2009/10 to 2011/12 is desirable. This is in the main as a result of the significant uncertainty surrounding the impacts of the Commonwealth's Basin Plan on NSW water management activities and the water management impacts resulting from the Commonwealth's proposed investment in areas such as metering and floodplain licensing and management.

Yours sincerely

A handwritten signature in blue ink, appearing to read "David Harriss". The signature is written in a cursive, flowing style.

David Harriss
Commissioner, NSW Office of Water

NSW Office of Water Response on PwC draft Review of Water Management Expenditure

Executive Summary

This response is to the draft Review of NSW Office of Water's water management expenditure, April 2010 prepared for the Independent Pricing and Regulatory Tribunal of NSW (IPART) by PricewaterhouseCoopers and Halcrow (the Review Team).

The scope of the Review was to clearly describe and define the Office's monopoly services, and assess the efficiency of the NSW Office of Water's (the Office or NOW where referenced in the Review) actual and forecast operating and capital costs for both licence transaction processing and water resource management. The costs which were subject to the Review were those costs submitted by the Office in its Pricing Submission of 2nd December 2009. The Review was also to recommend performance measures and indicators for the Office's monopoly services.

The Office accepts the following findings of the Review:

- § The proposed level of operating costs for licence transaction processing
- § The proposed level of capital costs required to support water resource management
- § The requirement for the Office to continuously improve its efficiency
- § The need to provide stakeholders with timely financial and performance information
- § The growing complexity and criticality of water resource management.

However the Office refutes a number of the Review's findings in relation to the proposed levels of water management operating costs and the performance monitoring measures.

The Review has proposed the following reductions in the level of resource and costs for undertaking water management activities for the period 2010/11 to 2014/15:

Summary of proposed reductions in water management resources and costs (\$09/10)

	2010/11		2011/12		2012/13		2013/14		2014/15	
	FTEs	\$'000	FTEs	\$'000	FTEs	\$'000	FTEs	\$'000	FTEs	\$'000
Proposed by the Office	267	50,180	284	53,913	303	56,807	318	59,036	323	59,797
Reductions proposed in the Review	-20.5	-3,967	-24	-4,801	-27.8	-5,753	-30.9	-6,591	-31.9	7,045
Resulting outcomes	246.5	46,213	260	49,112	275.2	51,054	287.1	52,445	291.1	52,752
% reduction	7.7%	7.9%	8.5%	8.9%	9.2%	10.1%	9.7%	11.2%	9.9%	11.8%

The cost reductions for 2012/13 disagree with the Table 1.3 in the Review as there is an error in that table.

Over the period 2010/11 to 2014/15 the Review is proposing an average reduction in excess of 9% to both forecast staff and costs in the Office's Pricing Submission. This apparent contradiction in the Review's findings will have significant impacts on the ability of the Office to deliver adequate water management services to NSW.

In making its conclusions the Review Team does not appear to have taken full account of the processes used by the Office in preparing the information contained in the Pricing Submission and has not used the information provided by the Office to the Review Team to support the Pricing Submission.

In particular the Office rejects the following:

1. The proposed reduction of 18.3 FTEs and the removal of these costs from the baseline forecasts. This results in the cost of staff such as the Commissioner for Water and individuals providing executive management and administrative support being excluded from the cost base on which prices will be calculated. The adoption of generally accepted accounting practices supports the inclusion of these costs in the price base.
2. The proposed reduction by 20% of the additional staff proposed by the Office in order to undertake the full scope of its forecast water management activities. The Office contends that:
 - § The process used by the Office in preparing its forecast costs broadly follows best practice as set out in the Review
 - § The Office provided to the Review Team evidence of its continual review and prioritisation process to ensure efficient delivery of outcomes
 - § The information provided to the Review Team allowed for the comparison of historical and forecast costs on a consistent basis.
3. The recommended efficiency savings of 0.5%. The Review has attributed efficiency as a reason for reducing total costs by an average of 8.4% (9% in FTEs). This does not take into account the efficiency savings already incorporated into the Office's forecasts.
4. Many of the recommended performance measures as they are not appropriate or meaningful for the Office activities. The Office has proposed a set of alternative performance indicators which it considers, "SMART", provide meaningful information to stakeholders and are efficient in terms of resource needs.

If the proposed reductions in costs are reflected in the price of water resource management services the Office, unlike price regulated utility corporations, has no mechanism to fund cost variations above that included in the price. As a result the Office will have to reduce its water management services.

1. Introduction

PricewaterhouseCoopers and Halcrow (the Review Team) have undertaken a review of the NSW Office of Water's (the Office, or NOW where referenced by the Review) water management expenditure on behalf of the Independent Pricing and Regulatory Tribunal of NSW (IPART). The findings of their review are included in the draft report Review of NSW Office of Water's Water Management Expenditure (the Review).

The scope of the Review was to clearly describe and define the Office's monopoly services, and to assess the efficiency of the Office's actual and forecast operating and capital costs. The costs which were subject to the Review were those submitted by the Office in its Pricing Submission of 2nd December 2009. The Office presented costs separately for its water management activities and licence transaction processing.

The Office accepts the Review's proposed adjustments to transaction processing and capital costs. However, the Review has recommended a number of adjustments to the staffing levels proposed by the Office in its Pricing Submission. The Review divided the proposed staff and other cost adjustments into two groups:

1. Adjustments to the 2009/10 baseline staff
2. Adjustments to the additional staff requested by the Office

These are shown in Table 1.

Table 1: Summary of proposed adjustments to the operating costs for water management (\$09/10)

	20010/11		2011/12		2012/13		2013/14		2014/15	
	FTE	\$'000	FTE	\$'000	FTE	\$'000	FTE	\$'000	FTE	\$'000
Adjustments to 2009/10 baseline resources										
Metro Water	-3.5	-470	-3.5	-465	-3.5	-465	-3.5	-465	-3.5	-465
Business administration	-1.3	-175	-1.3	-173	-1.3	-173	-1.3	-173	-1.3	-173
Resources not allocated to activities in 07/08	-18.3	-2,458	-18.3	-2,433	-18.3	-2,433	-18.3	-2,433	-18.3	-2,433
Error in overhead calculation		-245		-250		-267		-280		-280
Adjustments to additional resources requested by the Office										
FTEs for additional workload	-2.2	-295	-5.7	-756	-9.5	-1,263	-12.6	-1,675	-13.6	-1,808
Overhead adjustment for FTES for additional workload		-92		-228		-380		-503		-543
Efficiency factor		-232		-495		-774		-1,062		-1,339
Total	-25.3	-3,967	-28.8	-4,800	-32.6	5,755	-35.7	-6,591	33.2	6,576

The Office notes that the total of savings in Table 1.1. Of the Review is \$200k in error for 2013/14.

This response presents the Office's arguments against these reductions and other key issues in the following sections:

Process (Section 2) The Review Team has noted in the Review a number of deficiencies in the Office's processes in preparing its forecast costs. Some of these deficiencies related to the basis upon which the historical costs have been prepared and the Review Team has concluded that such deficiencies should be used as a basis for reducing the Office's forecast staffing needs.

Efficiency (Section 3) The Review Team has adjusted the staffing requested by the Office based upon the need to drive efficiencies.

Monopoly
Services
(Section 4)

The Review has identified a number of services that the Review Team considers not to be monopoly services and proposes they be excluded from the monopoly service costs.

Errors in
calculation
(Section 5)

The Review has made an error in the overhead component used in the calculation of costs associated with the Review's proposed FTE reductions.

Performance
measures
(Section 6)

The Review has recommended 22 critical performance measures.

2. Process

2.1. Development of the Office's forecast operating costs

The Office adopted a robust bottom up methodology in preparing its operating cost forecasts

The Office rejects that:

- § *the use of 2009/10 as a base year rather than the last year of actual expenditure (2008/09) results in a disconnect between the base year and actual expenditure, leading to difficulties in determining whether the base level is efficient. (Review page 26)*
- § *there was no bottom up analysis of resources needed to complete the required activities and that there were "inconsistencies" between the historical and forecast costs. (Review page 49)*
- § *inconsistencies with the historical expenditure and creates difficulties in undertaking comparisons (Review page 26)*
- § *The 20 per cent reduction applied [to the baseline 2009/10 forecast] by NOW is arbitrary and it is difficult to determine whether the resultant request for additional FTEs is prudent and efficient when there is no clear process of what additional obligations these additional FTEs will be addressing. (Review page 49)*
- § *The approach of having a standard 20 per cent reduction across all activity codes for the regulatory period indicates that there is no risk management being undertaken by NOW to determine where resources would be best allocated. (Review page 49)*

The base year forecasts were developed using 2008-09 historical costs. The forecast costs were prepared using the 2006 list of Water Management Activity codes before being converted to the rationalised 2010 Activity codes that were developed to better reflect the Office's current water management activities.

The Office provided the Review Team with a financial model that contained forecast cost information on both the 2006 and proposed 2010 activity structure. This would have enabled the Review Team to make a direct comparison of historical and forecast costs. The Office used this information to compare the historical and forecast costs in its quality management of the cost forecasts and validation of the cost drivers and cost allocation criteria.

The Office explained to the Review Team that the forecast operating expenditure for 2009/10 (the baseline expenditure) was based on the staff time (by job and activity code) and other expenditure needs identified by each Director to meet the legislated water resource management outcomes and NSW Government policy requirements. As a basis for this assessment Directors were provided with the 2008/09 actual costs and resource levels.

The Review has questioned whether there was a robust assessment of the forecast costs required to meet the identified water management outcomes. A Steering Committee was established as part of the internal governance process for the preparation of the Pricing Submission. This Committee comprised the Commissioner for Water, the Chief Financial Officer and the Director of Water Policy and Planning. This Committee reviewed the Directors' staffing and cost forecasts across all activities, as a result of which the base year staff needs were adjusted down by a standard factor of 20%. This reflected the fact that future cost and staffing levels are commonly impacted by temporary staff secondments and extended delays in filling vacant positions.

The Office could have chosen not to present the initial Directors' forecasts. However, in the interests of transparency, all relevant information was provided to the Review Team. Indeed it could be argued

that if the reduction had not been shown the Review may have drawn the conclusion that the additional FTEs represented a “wish list” rather than a robustly validated forecast.

The Review’s states that “each Director was provided information on 2008/09 actual costs and resource levels in an attempt to inform their decisions” (Review page 30. The Office’s Directors have significant (over 100 years between them) experience in water management. Their assessment of resource needs to undertake the necessary aspects of water management are based on extensive expertise and experience.

2.2. Resource adjustment for staff time not assigned to jobs in 2007/08

The Review has not recognised that the Office has used generally accepted costing practices in the preparation of its historical and forecast costs.

The indirect cost of FTEs assigned by the Office’s costing process to price regulated water management activities is fully justified and supported by the detailed analysis provided to the Review Team by the Office.

The Office concludes that the 18.3 FTEs (and their associated costs) should be included in the baseline forecast water resource management costs for each of the years of the price determination.

It needs to be firstly pointed out that the 18.3 FTEs do not represent 18.3 staff, but a combined proportion of the time of various staff that did not assign their time to a specific job code in 2007/08, but instead their time (all or a proportion of it) was costed to an overall branch cost centre. The Office rejects the Review’s proposed reduction of 18.3 FTEs on the grounds that this time was not costed to a specific job code. (The Office adopted 2007/08 as the base year for its analysis of overhead costs as this was the one year in the current price determination period where the overhead costs were not impacted by a structural reorganisation. The overhead costs in the other years would have been at a higher level in real terms reflecting the additional costs of the restructures.)

A summary of this breakup of the 18.3 FTEs is shown in Table 2:

Table 2: Summary of 2007/08 staff time not assigned to specific water management activities

	FTEs	Number of staff represented
Number of staff not assigning any time to direct jobs	27.5	28
Time allocated to extended time off or workers compensation	5.1	72
Proportion of staff not costing all their time	10.8	61
	43.4	
Proportion attributed to water management activities based upon the Office’s (then DWE) average allocation of staff time between IPART regulated activities and other activities	24.0	
Less Review Team’s adjustment for allowed admin staff	(5.7)	
Proposed reduction in Review	18.3	

In a costing environment it is generally accepted that not all time will be allocated to specific job activities. There are a range of reasons for this including:

- the task undertaken applies to a large range of activities such that it is impractical to appropriately allocate time to each specific output e.g. supervision and management of staff, general administrative support.
- where staff undertake activities that are not specific to an output e.g. staff performance reviews,
- the activity is new or short term and does not have an appropriate cost code.

The Review Team would be aware that in its own professional services business, not all staff time is allocated to direct jobs but costs are attributed to all jobs as an overhead cost. To recover this cost,

professional firms generally include a factor within their charge rates to reflect this “loss” of time thereby ensuring that the total cost of the operation is included. The Office operates as a cost recovery business and has not included an allowance in its cost recovery factor for such time, but rather allocates this cost to its activities using a cost disaggregation formula.

The Office had a documented process that required that time which could not be specifically assigned to specific job numbers was to be attributed to a branch cost centre (as an indirect cost). Prior to 2006 the costing system allocated these costs across all jobs at a cost centre level thereby reflecting the total costs of the work being undertaken. During the recent organisational re-structures this allocation was not done, but has been reflected in the historical cost performance via a reporting cost allocation.

To justify the inclusion of the staff time not fully assigned to specific job numbers, the Office provided the Review Team with the job titles of each of the staff members making up the FTEs which were not allocated to a specific job code. A summary of the roles of the groups of staff is as follows:

Group of staff	Roles
Senior executives eg: Commissioner for Water Director, Water Management and Implementation	In common with all businesses, the predominant role of senior executives is to provide leadership and quality assurance of the Office’s outcomes. Such activities are difficult to assign to a specific activity/outcome and in the normal course of business these costs would be treated as indirect costs. To expect that the Commissioner and the Office’s Directors would allocate all their time to specific jobs across the myriad of activities that they undertake on a daily basis is not appropriate, normal business practice nor efficient. Using an appropriate cost disaggregation formula is the most efficient way for these costs to be attributed to specific jobs. To then make the assumption that these staff do not provide their skills into the outcomes of the price regulated water management activities is unreasonable.
Support and administrative eg: Business Support Officer	These staff support the direct activities of the staff within the teams for which they work. The number of activities and the nature of the support provided makes it impractical for these staff to allocate all of their time to direct outputs. To consider that staff supporting a team whose primary role is providing price regulated outcomes do not contribute to these outcomes is not justifiable and therefore the Review Team has inappropriately disallowed these staff resources.
Staff undertaking direct activities eg: Senior Natural Resource Officer	To consider that staff working in a team of the organisation whose primary role is providing price regulated outcomes do not contribute to these outcomes cannot be substantiated and therefore the Review Team has inappropriately adjusted resource needs.

The Office provided detailed information to the Review Team that attributed the time (and therefore costs) between IPART regulated activities and other activities based upon the average of all staff undertaking direct activities. The Review Team has provided no argument for not considering this evidence.

As part of this response, the Office has prepared further analysis of the roles of these staff and assessed the extent of time that is applicable to price regulated water management activities based upon the extent of time that the team (cost centre) in which they operate attributes their time to such activities. This analysis is shown in Appendix A. The 24 FTE attributed to water management activities in this detailed analysis are shown in summary in Table 3 below.

Table 3: Categories for 2007/08 FTEs not directly assigning their time to a specific water management activity

Category of job role	Number of FTE
Executives	2.0
Support roles	16.1
Direct roles	6.1
	24.2

The Office does not consider that the Review justified the removal of the costs associated with the FTEs that did not assign their time directly to jobs. Therefore their costs should form part of the baseline water resource management operating costs to be used as a basis for pricing. The Office's more detailed analysis (instead of the previous average allocation methodology) justifies the allocation of the costs of 24 FTEs to price regulated water management activities rather than the 18.3 FTEs originally requested by the Office.

2.3. The Office's forecast for additional staff in the next Determination period

The Office has substantiated the need for additional staff in its forecasts.

The Review Team has not provided any substantiated justification for the reduction of the additional staff and associated costs for the forecast water management costs.

The Office rejects the justifications contained in the Review for the reduction in the forecast additional staff:

§ *We further recommend that the additional staff resources sought by NOW be reduced by 20 per cent to account for:*

- *The scope for efficiency and productivity gains to be achieved in delivering the additional services;*
- *The expectation that some resources should be freed up from existing activities to service new and emerging areas of core business (for example, the transition from Water Sharing Plan development to operational aspects of these plans); and*
- *Concerns about the lack of clear business cases to support the proposals for additional resources and the absence of documented strategic decision making processes.*

(Review page 11)

§ *There does not appear to be a clear process that NOW has applied in determining the resources needed for the required activities. NOW relied significantly on the assessments of its Directors, however there was no robust process to test the base level of resources required with the activities and obligations that Directors are required to meet.*

(Review page 36)

§ *FTEs would best be applied or where they were most needed as it considered this level of precision to be impractical. Rather, while NOW has allocated additional FTEs to activity codes, it has not specified the activities within these codes that are in addition to the activities that are currently being undertaken that would require additional resources.*

(Review page 38)

§ *There does not appear to be any risk management processes regarding where NOW should focus its attention first in order to achieve its outcomes and satisfy its responsibilities. (Review page 38)*

The Office has requested varying increases of more than 0.1 FTE for 18 of the 36 Water Management (WM) Activities. There is a clear justification for each of these increases compared to the existing staffing level. For more information on the justification see the example given for water monitoring in this response (Appendix D), or refer to output measures in Appendix 1 of the Office's Pricing Submission.

The Review proposes an across the board reduction of 20% without demonstrating any risk assessment of the impact of this reduction on the Office's service obligations. The Office rejects this conclusion as clear justification has been provided by the Office for each of the proposed increments in staffing in the Pricing Submission.

The Office also outlined in its Pricing Submission the required future outcomes, the drivers of the outcomes, including an extensive set of statutory, administrative, contractual and performance standards for its monopoly service activities. By reducing the FTEs, the Review seems to be suggesting that the Office has the option of not complying with these obligations.

The Directors, in preparing the Pricing Submission forecasts, within a risk framework considered the priorities of each of the required future outcomes for both price regulated and other activities together with the staffing needs to achieve the outcomes from current activities. For example in the case of Water Sharing Plans, Directors made an assessment of staffing needs to complete the Water Sharing Plans currently in development consistent with

the National Water Initiative and also the future needs required to meet the NSW legislative requirement to review existing Water Sharing Plans 10 years after their introduction. The resources available to the Office were based upon the current staffing levels which were then adjusted reflecting the forecast requirements.

The Review Team did not ask for any information about the acquisition of the additional staff resources, and so has no valid justification for the Review statement that:

§ *Further, NOW has not outlined an approach as to how it would acquire these additional FTEs. NOW acknowledges there would most likely be a mixture of reallocation of staff from non-IPART activities and external sources, however there does not appear to be a plan in place to fill these supposed required additional resources. (Review page 38)*

The acquisition and allocation of the necessary staff resources to deliver the Office's service obligations is already in progress.

The Review acknowledges that the proposed changes in activities for the next determination period have been made to "*represent new services which have not been provided by NOW in the past, activities that were not previously classified, or the amalgamation or deletion of some past activities to better reflect the current focus*"(Review page 39).

Despite the evolving nature of water management requirements having been made explicit in the Pricing Submission, the Review has not made any allowance for this.

As a matter of good practice the Office is continuously assessing its staff allocations to take account of the outcomes demanded of it by its stakeholders. The Review Team was provided with an example of the staff resource assessment planning processes adopted by the Office. The Review acknowledges this, but has drawn the conclusion, without any supporting evidence, that such planning is isolated to the example given and therefore the level of staff planning is inadequate. This is not correct.

The Review also concluded that the Office has not appropriately considered options to redeploy staff from tasks that are complete and referred to the movement of staff from Water Sharing Plan development. This reference indicates that the Review Team has not understood that whilst creation of the Water Sharing Plans will be completed during the next Determination period, there is a legislative requirement for review of all plans before the end of their ten year term as well as the significant new review process that is now required as a result of the Commonwealth's Basin Plan. The first round of plans will need to be reviewed and remade by July 2014. For those within the Murray-Darling Basin they will also have to be remade consistent with the Basin Plan and accredited by the Commonwealth. This review of the plans will include detailed scientific analysis of the outcomes of the existing plan and extensive consultation with stakeholders. The resources required for this work will in many cases, be at least the same or more (given the likely significant impacts of the Basin Plan on extraction limits) as those required to develop the initial plan.

The Review justification of a lack of evidence in staff (resource) planning is not valid as a reason for reducing the baseline FTEs. The Office undertook a comprehensive and critical analysis of the work program for the period to 2012/13 and assessed the resources required to deliver on this work program. This forecast was based on the expert knowledge of Directors, experienced in water management. The resource forecast then underwent a second round of review by the Steering Committee where activities were aligned and efficiencies identified. The outcome of this process was a self-imposed reduction of 34.5 FTEs to 47.5 additional FTEs by 2012/13.

The summary of the extra work that these resources would undertake is contained in the Office's Pricing Submission and seems to have not been taken account of by the Review Team. Of importance, key additional resources at an Activity level include:

- 12 extra FTEs in activity C01-01, which reflects an expanded and enhanced water monitoring network and improved maintenance and data collection standards;
- 5 extra FTEs in activity C02-01, which reflects the increased number of monitoring bores and the increasing volume of information to be collected and published from monitoring sites.;

- 5 extra FTEs in activity C06-06, which reflects the enhanced monitoring requirements following the roll-out water sharing plans and are required to inform and implement the Basin Plan;
- 5 extra FTEs in activities C07-01, C07-02 and C07-03, which reflects the acceleration in the roll-out of water sharing plans across the State, finalisation of the important operational planning instruments, the increased complexity of environmental water management and the extra complexities associated with implementing the Basin Plan through review and remake of the Office's commenced water sharing plans;
- 9 extra FTEs in activity C09-06, which reflects NSW commitment to enhance the Office's compliance capabilities and coverage and is consistent with recent legislative reforms to increase penalties for water theft. This will ensure water is accessed fairly and legally in accordance with licence conditions and enhance our capacity to detect and prosecute those who do not play by the rules;

A more detailed justification of staffing and efficiency gains implemented by the Office are provided in:

- Appendix D for Water Monitoring Activities
- Appendix E for Operational Planning.

2.4. Use of cost drivers to allocate costs across water sources

The Office has developed a cost driver model that:

- § is robust
- § transparently allocates costs according to identifiable and justifiable cost drivers
- § is reflective of the resource required to achieve the outcomes.

The Review does not identify any improved basis for allocating costs across water sources and therefore the Office's proposed cost allocation should be accepted.

The Office rejects the Review's criticisms that:

"In the absence of more cost reflective cost drivers, in some cases it appears as though NOW has applied an approach which allocated costs across valleys and water sources by entitlement volumes. This assumption may not necessarily provide a reflection of the actual cost driver for such activities and is simply used as a simple way of apportioning costs." (Review page 44)

"The inappropriate use of entitlement volumes as a cost driver could have a considerable impact in valleys where customer numbers are low, but entitlement volumes are high (Murrumbidgee and Gwydir are two examples where entitlement holdings per licence are significantly higher than the average and would therefore be disadvantaged through this approach)." (Review page 47)

"However, for some activities, it appears that NOW has resorted to a default approach that allocates costs across valleys and water sources by entitlement volumes — in the absence of being able to define a more suitable cost driver. (Review page 46)

The basis of allocating costs across water source in the previous two pricing determinations was reflective of:

- § the regionalised organisational structure of the time
- § the water resource management activities required
- § the nature of the vertically integrated natural resource management of the Department.

In reviewing and changing the cost drivers, the Office has presented a robust and transparent process that is supported by quantitative data. This will provide a mechanism to adjust costs in the future as the operating environment changes.

In making its statements regarding the use of entitlement as a cost driver, the Review Team does not consider that a component of the validation of the appropriateness of the cost allocation drivers was that they reflected the Office's experience of the allocation of effort within the organisation. The Office has used entitlements for WM activities where the cost is driven by the volume of licensed water and rejects the Review's comments that entitlement was used "in the absence of more cost reflective drivers".

3. Efficiencies

The Office has built efficiency savings into its forecasts.

The Review has recommended efficiency savings of 0.5%. However, the Review has attributed efficiency as a reason for reducing total costs by an average of 8.4% (9% in FTEs). This does not take into account the efficiency savings already incorporated into the Office's forecasts.

It is the Office's contention that it is unrealistic to expect a business to make efficiency savings of this level in 5 years and remain viable. The Office proposes that the cost adjustments attributed to efficiency should be limited to the factor.

The Office supports the Review's finding that there is *"an expectation that NOW should be able to make continuous improvements to its service delivery based on its current FTE resources (including, but not limited to, staff productivity improvements, streamlining of administrative tasks and reallocating resources from underperforming parts of the business)"* (Review page 10)

In its Pricing Submission the Office included a number of factors that reflecting efficiencies in operating costs including:

- § A reduction in the overhead rate of 4% in each of the years 2010/11 and 2011/12
- § A reduction of 20% in the baseline remuneration costs; whilst the majority of these costs related to staffing issues there was a factor included to reflect stakeholders' expectation of improved efficiency
- § Reduction of 20% in the additional FTEs
- § Productivity improvements already incorporated in the forecasts such as in the area of water monitoring (see Appendix D).

The Review has justified a number of further cost reductions on the grounds of improved efficiencies:

- § Reduction in additional future FTEs required by the Office (63 by 2014/15)
- § Reduction of FTEs for staff that allocated their time to overhead costs
- § Reduction in overhead costs for the additional FTE resources.

A summary of the adjustments that have been made by the Review Team that have at least been partially attributed to costs is as follows:

Table 1: Level of cost savings partially attributed to efficiency

2010/11		2011/12		2012/13		2013/14		2014/15		Overall	
\$	FTE	\$	FTE	\$	FTE	\$	FTE	\$	FTE	\$	FTE
7.7%	6.1%	8.5%	7.3%	9.2%	8.5%	9.7%	9.6%	9.5%	10.2%	9.0%	8.4%

The Office is committed to making efficiencies in the services it is providing and this has been reflected in its Pricing Submission. If the proposed average efficiency of nearly 9% is imposed, this can only be achieved through an absolute reduction in the level of future water management services that the Office provides.

4. Monopoly services

The Office provided detailed information on the activities of the Metro Water Section to the Review Team.

The Office considers that the activities undertaken by Metro Water division are required for “making water available” and must therefore be considered as monopoly services and hence part of the water resource management activities.

The Office rejects the Review Team’s conclusion that 50% of the activities of the Metro Water division should be excluded as they are not monopoly services. The Review defines “*the making of available water*” activities (which are activities that are considered to be recoverable through water management charges) “*as those which are required to ensure water resources are managed on a sustainable basis. This includes activities relating to the assessment, allocation, planning, monitoring and reporting of water resources*” (Review pages 51, 69).

The Review Team then determined that activities such as researching key initiatives within the Metropolitan Water Plan, providing advice and reviewing key findings of the plan and preparation and review of the plan, and monitoring and reporting of progress of the plan are not considered water management activities.

This is contradictory because research and review activities are essential to ensure that water resources are managed sustainably. The Office provided detailed information to the Review Team on the activities of the Metro Water Division justifying the inclusion of these activities and their relevance to the definition of “the making of available water.”

Furthermore, key agencies in the area include the Sydney Catchment Authority and the Sydney Water Corporation and costs attributable to the management of water resources for these authorities should be part of the cost recovery framework.

5. Errors in overhead calculations

The Office disagrees with the proposed cost reductions resulting from the elimination of FTEs including the total overhead component of cost

The Review in making adjustments to the costs of staff not allocating their time has not reflected its own findings that overheads are to a significant extent fixed.

While the Office does not support the reduction in resources, should this not be reinstated, then the cost adjustment made should at least reflect the Review's finding in relation to the fixed and variable component of overheads.

When considering the overhead factor in relation to the Office's inclusion of additional FTEs, the Review Team accepted the Office's argument that overheads are not necessarily fixed and made an adjustment to its earlier draft report such as to assume that 25% of the overheads are fixed. If the Review is to be consistent, the proposed reduction of 23.1 FTEs should be costed at remuneration costs plus 25% of the overhead component i.e. the proposed costs reduction of \$3.3m should be reduced by \$0.251m.

6. Performance Reporting

The Office has published expenditure reports, output measures and performance indicators for its WM Activities.

The Office rejects the Review comment that:

"during the course of the 2006 Determination period NOW has not published performance indicators and measures" (Review page 126).

The Review confirms that, in addition to ongoing operational reporting such as that contained in the Critical Water Communiqués and allocation announcements, the Office has published:

- Comprehensive output and performance information in the Office's Pricing Submission for the 2010 Determination¹;
- Water Management Activity expenditure reports;
- 8 output measures in the Department's annual report².

The late publication of the annual expenditure reports to IPART is a result of the staff resource limitations within the Office. This is an example of the current stress on delivery activities competing for staff resources within the Office which has an extensive set of statutory, administrative, contractual and standards obligations³ across which the agency has to prioritise allocation of staff resources.

The Office's performance information, used in conjunction with the expenditure reports and forecasts, provides a comprehensive set of performance measures for the Office activities.

The Office rejects the Review criticism that:

"The performance indicators and output measures proposed by NOW do not enable objective assessment of how efficiently it is delivering services or how cost effective its activities are" (Review page 7).

The performance information provided in section 9.5 of the Review shows there is currently no consistency in water resource management performance reporting between jurisdictions.

The Office provided extensive information about its activities in the 20 pages that comprise Appendix 1 of the Pricing Submission. This was provided to inform stakeholders about the activities undertaken by the Office as it was required to do by the 2006 IPART Determination. The provision of the performance information by the Office was a first step in the process of developing an appropriate set of performance information that can satisfy stakeholder information needs using the SMART criteria.

The Office supports the SMART criteria for selecting performance measures.

Many of the performance measures proposed by the Review do not satisfy the SMART criteria and some indicate a lack of understanding of the Office's business.

IPART has asked for additional briefings and more detailed information on a number of activities since the Pricing Submission was made by the Office. However, no requests for clarification of WM Activities, outputs, output measures or performance indicators were received from the Review Team.

Existing Department of Environment Climate Change and Water (of which the Office is part) guidance for selection of performance measures using the SMART criteria can be found on the website at <http://www.environment.nsw.gov.au/4cmas/temppperfmeasures.htm>.

The Office accepts that it is difficult to identify high level performance indicators for some of its WM activities. Section 9.4 of the Review selected some specific WM Activities for comment, yet is unable to propose appropriate alternative indicators that satisfy the SMART criteria for these activities.

For example, *C05 Water modelling and impact assessment* involves a complex modelling capability⁴ that has been built up over many years. The range of requirements serviced by this modelling

¹ Introductory paragraphs to Section 9.4 on page 130 of the Review of NSW Office of Water's water management expenditure.

² Table 9.2 of Section 9.4 on page 133 of the Review of NSW Office of Water's water management expenditure.

³ See Appendix 2 of the NSW Office of Water Submission for 2010 Bulk Water Price Review.

⁴ See <http://www.water.nsw.gov.au/Water-Management/Modelling/default.aspx> for more information on The Office modelling.

capability is summarised in the Pricing Submission. The Review correctly identifies that modelling is a key input to the development of Water Sharing Plans (WSPs), but it does not involve the development of separately quantifiable new models. The capability of existing models continually require development or enhancement to satisfy running of scenarios to provide the information for the management of different environmental conditions and events in specific Water Sharing Plans. Input for development of Water Sharing Plans is just one service requirement for water modelling.

The *C07 Water management planning* activities are similarly difficult activities to find appropriate performance measures that satisfy the SMART criteria. The stakeholder consultation, learning processes, number of different inputs and complexities of different water sources concerned in producing WSPs means that the time taken to develop individual plans is typically longer than one year. The knowledge and expertise in understanding what is required for an effective Water Sharing Plan is continually developing and will continue to evolve under an adaptive management framework.

The Office can and does report the number of WSPs completed (gazetted) each year, and the average cost per WSP could simply be obtained by dividing the annual C07-01 cost by the number of plans gazetted in that period. However, the extended timeline required to produce the plans means that variation in this performance measure from year to year is likely to be misleading (and therefore does not satisfy the SMART criteria). For example the Greater Metropolitan Region Water Sharing Plan has taken 5 years to complete. Also, the gazetting of a plan is often at the beginning of a financial year, with most of the work done (and therefore cost) being recorded in the year or years prior. The Sydney Metro Plan will likely be gazetted in 2010/11 but the costs charged to that plan in 2010/11 would not reflect the previous years of work.

The Office accepts the Review criticism that the output measure provided for C07-02 Operational Planning does not effectively describe the scope of work done, as the quantification given only relates to one of the many instruments produced within this Activity. This is clear from the description of the range of operating instruments listed in the output description column for C07-02 in Appendix 1 of the Pricing Submission. The work delivered by this activity is also described in more detail in Appendix E , with some more insight also provided on future work. The Office therefore proposes to use the performance measure of annual and cumulative '*Operational Planning Instruments Delivered*' to provide stakeholders with a better understanding of the volume of work undertaken in this activity.

The Office has provided extensive qualitative and quantitative justification for its resource requirements.

Many of the statements in the Review about the performance information provided by the Office are contradictory. The Review comments that:

“performance indicators proposed by NOW are based on completion of an activity, such as monitoring or metering a site, completing a water sharing plan” (Review page 132)

This contradicts other comments in the report that claim that information to quantify WM Activities has not been provided such as:

“there is no mention of the cost, quantity or quality to which activities or output measures will be completed” (Review page 131).

Likewise the comment that

“in the case of quantifiable performance indicators/targets, this often involved simply increasing the target beyond the current rate” (Review page 132)

contradicts Review comments that information was not provided to justify the additional FTE required in the Office Pricing Submission to IPART (see earlier comments in the Office Response relating to water monitoring activities).

The cost of each WM Activity for each year in the forecast models was provided to the Review Team and IPART as supporting information for the Office's Pricing Submission. Unit costs can be calculated where there is a single quantified output for the activity. Where feasible, this single output quantification is provided in Appendix 1 of the Pricing Submission, along with a ratio as a performance measure of the activity. Where the performance could not readily be quantified, quality measures were proposed as a relevant indication of the target performance.

The Review is critical (Review page 132 and 133) of the large number of performance measures provided in Appendix 1 of the Pricing Submission⁵, and adds '*The framework developed by NOW allows for multiple outputs to be listed against each water management sub-activity. However, in most instances only one output has been chosen to be measured.*' (Review page 131) The Review has not recognised that for some activities there may be several associated sub-activities for a WM Activity. Thus water billing and payment processing is associated with customer account queries. For C11-01, the Review text implies a requirement for 6 performance measures where 2 quantified measures of different characteristics were provided by the Office for this activity.

The Office acknowledges that no performance measures are provided for customer satisfaction or complaints handling. There is currently no obligation to provide this information and no on-going system within the Office to provide complaints monitoring across all offices and aspects of the Office business. The Office is subject to the potential complaints processes under the Energy & Water Ombudsman NSW.

In accordance with prioritisation of staff resource allocation, customer satisfaction and complaints handling performance information cannot be provided unless sufficient additional resources are provided to the Office to undertake these additional tasks.

The Office proposes that periodic reporting will be undertaken for priority performance indicators.

The Office agrees that there is a cost associated with performance reporting, and agrees with the Review that it will not be possible for the Office to have a large number of reporting measures given the current level of staff resources. This is why the Office is seeking feedback from stakeholders on their preferred and priority measures for reporting performance of WM Activities.

The Review recommends 63 performance measures comprising 43 output measures, 14 effectiveness measures (8 cost effectiveness), 5 time duration measures and 1 outcome measure. This recommended level of reporting is not feasible with the current level of resourcing in the Office.

Many of the Review recommended performance measures do not satisfy the SMART criteria nor are they correctly assigned to the appropriate WM Activity. For many of the critical performance measures recommended in the Review, the performance information was already provided by the Office in Appendix 1 of the Pricing Submission, or, in the case of cost effectiveness measures, could be calculated by taking the forecast cost of the activity and dividing it by the relevant performance information provided in Appendix 1.

The Office sets out 21 proposed reporting measures in Appendix C that satisfy the critical operational performance reporting recommended in the Review. Cost effectiveness measures can be calculated using the performance information provided and the Office's annual expenditure reports to IPART. The 21 reporting measures proposed by the Office and how these align with the critical performance measures recommended in the Review are shown in Appendix C.

Conclusion:

The Office of Water considers that the Review's proposed reductions in the Office's staffing levels and costs are not justified. If the proposed reductions in costs are reflected in the price of water management services, unlike price regulated utility corporations, the Office has no mechanism to fund cost variations above that included in the price. The Office does not have a large asset base upon which a rate of return on and of assets can be included in the price. As a result the Office will have to proportionally reduce its services in a period in which the Review Team has acknowledged water management is increasing complex and in the face of increasing impacts on licence holders of nationally imposed water reforms.

⁵ See comments under 'Achievable' on page 132 and under table 9.2 on page 133 of Section 9.4 of the Review of NSW Office of Water's water management expenditure.

Staff that in 07/08 did not assign all of their time to specific activities

Staff number	Position	Staff role within their team	FTE of time not allocated to jobs	% of time in the employees cost centre attributed to price regulated water resource management activities	FTE equivalent attributed to price regulated activities
Staff with no time assigned to specific jobs					
100446	Deputy Director General Water Management	Executive	1	Commissioner - assumed to be average of all staff - 55%	0.55
100629	Senior Finance Analyst	Support	1	100%	1.00
101097	Business Analyst (Water)	Support	1	27%	0.27
102721	Executive Assistant	Support	1	PA to Commissioner same proportion as Commissioner adopted	0.55
102840	Corporate Support Officer	Support	1	64%	0.64
102851	Business Support Officer	Support	1	94%	0.94
102914	Administrative Coordinator	Support	1	27%	0.27
104365	Business Operations Manager	Support	1	27%	0.27
106192	Business Development Officer	Support	1	100%	1.00
107099	Administrative Officer	Support	1	27%	0.27
108345	Administrative Support Officer	Support	1	27%	0.27
111173	Corporate Support Officer	Support	1	82%	0.82
325088	Administrative Officer	Support	1	27%	0.27
102723	Administrative Officer	Support	0.9	55%	0.49
325352	Business Development Officer	Support	0.6	100%	0.60
108469	Corporate Support Officer	Support	0.57	88%	0.50
100079	Licensing Officer providing administrative support	Support	1	99%	0.99
101585	Senior Licensing Officer providing administrative support	Support	1	99%	0.99
104314	Project Officer providing general business support	Support	1	74%	0.74
107699	Nat Res Proj Off (Resource Analysis) providing general business support	Support	1	73%	0.73
108412	Senior Natural Resource Off Water Policy providing general business support	Support	1	94%	0.94
112285	Nat Res Proj Off Instrumentation	Direct	1	64%	0.64
112294	Licensing Officer	Direct	1	99%	0.99
112296	Nat Res Off (Hydrometric)	Direct	1	64%	0.64
112307	Senior Water Database Officer	Direct	1	64%	0.64
112345	Nat Res Proj Off (Major Prjs & Planning)	Direct	1	0%	-
112352	Aquatic Ecologist (Statistician)	Direct	1	73%	0.73
112358	Hydrologist	Direct	1	87%	0.87
112342	Project Support Officer	Direct	0.4	56%	0.22
Staff with only part of their time assigned to jobs					
100171	Director Water Management Implementation	Executive	1.20	Single person cost centre - Director of water management implementation where costs are attributed 55%	0.66
100102	Business Manager	Support	0.98	100%	0.98
100465	Finance Officer (MDBC)	Support	0.94	27%	0.26
108384	Administration Officer	Support	0.93	88%	0.82
100073	Business Support Officer	Support	0.89	27%	0.24
101761	Administrative Officer	Support	0.86	27%	0.23

Staff that in 07/08 did not assign all of their time to specific activities

Staff number	Position	Staff role within their team	FTE of time not allocated to jobs	% of time in the employees cost centre attributed to price regulated water resource management activities	FTE equivalent attributed to price regulated activities
101545	Manager Monitoring Eval & Reporting	Executive	0.65	88%	0.57
102315	Team Leader Groundwater Planning	Direct	0.64	94%	0.60
101785	Administrative Assistant	Support	0.60	27%	0.16
104293	Water Manager	Direct	0.55	0%	-
104387	Licensing Officer providing administrative support	Support	0.41	99%	0.40
105565	Administrative Off (Regional Planning)	Support	0.23	94%	0.22
106740	Snr Nat Res Off Soils Publications & Com	Direct	0.20	88%	0.18
105998	Licensing Officer providing administrative support	Support	0.19	99%	0.19
100095	Snr Nat Res Proj Leader	Direct	0.18	73%	0.13
103064	Surveyor Assistant	Direct	0.17	88%	0.15
101267	Senior Project Manager	Direct	0.10	88%	0.09
101648	Snr Nat Res Off (Darling River)	Direct	0.10	82%	0.08
100846	Director Water Systems	Executive	0.09	99%	0.09
106167	Manager Water Resource Mgt Modelling	Executive	0.09	87%	0.08
101401	Nat Res Proj Off (Salinity)	Direct	0.07	88%	0.06
106091	Senior Project Officer	Direct	0.06	88%	0.05
109748	Senior Water Database Officer	Direct	0.04	64%	0.03

24.15

Number of Executive FTEs

2.0

Number of Support FTEs

16.1

Number of Direct FTEs

6.1

24.2

The Review Teams' cost reductions

	20010/11		2011/12		2012/13		2013/14		2014/15		Total	
	FTE	\$'000	FTE	\$'000	FTE	\$'000	FTE	\$'000	FTE	\$'000	FTE	\$'000
The Office's original opex prior to adjustments related to efficiencies	365	60,180	386	64,707	401	67,381	403	68,470	373	63,389	1928	327,056
Overhead efficiency of 4% in each of years 2010/11 and 2011/12		-474		-1,010		-1,078		-1,133		-1,173		-4,869
Reduction of additional FTE resources	-34	-2,800	-38	3,130	-34.5	2,842	-20	1,648	-15	-1,236	-111.5	9,185
Reduction of 20% in baseline remuneration costs	-64	-6,654	-64	-6,654	-64	-6,654	-64	-6,654	-64	-6,654	-320	-33,269
The Office's opex as per Pricing Submission	267	50,180	284	53,913	303	56,807	319	59,036	324	59,797	1,497	279,733
The Review's recommended adjustments (not efficiency related)												
Baseline – Metro Water	-3.5	-470	-3.5	-465	-3.5	-465	-3.5	-465	-3.5	-465	-17.5	-2,330
Baseline overhead costs		-245		-250		-267		-280		-285		-1,327
Baseline – Business admin	-1.3	-175	-1.3	-173	-1.3	-173	-1.3	-173	-1.3	-173	-6.5	-867
Net cost prior to efficiency adjustments	262.2	49,290	279.2	53,025	298.2	55,902	314.2	58,118	319.2	58,874	1,473	275,029
PWC's recommended adjustments attributed to efficiency												
Baseline - Unallocated	-18.3	-2,458	-18.3	-2,433	-18.3	-2,433	-18.3	-2,433	-18.3	-2,433	-91.5	-12,190
Reduction in additional FTEs	-2.2	-295	-5.7	-756	-9.5	-1,263	-12.6	-1,675	13.6	1,808	-43.6	-5,797
Reduction in overhead costs for additional FTEs		-92		-228		-380		-503		-543		-1,746
Efficiency Factor		-232		-495		-774		-1,062		-1,339		-3,902
Level of cost reduction attributed by the Review Team to efficiencies	20.5	-3,077	-24	-3,912	27.8	-4,850	-30.9	-5,673	-31.9	6,123	-135.1	23,635
% efficiency applied	7.7%	6.1%	8.5%	7.3%	9.2%	8.5%	9.7%	9.6%	9.8%	10.2%	9.0%	8.4%

The Office's proposed performance indicators

Activity Group	Review proposed measure	Comment	NOW proposed measure
C01	R1. Proportion of gauging stations monitored 6 times per year	Pricing Submission proposed measure is equivalent	N1. Average number of gaugings per site
	R2. Average cost of operating and maintaining hydrometric stations each year	Calculated using cost of C01-01 and number of active hydrometric stations	N2. Number of active hydrometric stations operated with NOW funds
C02	R3. Proportion of groundwater sources that are monitored	Review proposed measure does not satisfy SMART criteria - all groundwater management areas have one or more monitoring bores. However, not all groundwater areas or licensed bores are subject to metering which is a C03 activity	See C03 measures
	R4. Average cost of operating and maintaining groundwater monitoring installations each year	Calculated using cost of C02-01 and the number of active groundwater monitoring sites	N3. Number of active groundwater monitoring sites
C03	R5. Proportion of groundwater licence holders that are metered	Review proposed measure does not satisfy - a licence-holder can, and often does, hold multiple groundwater licences, which may be a mixture of metered and not metered	N4. % of Groundwater Entitlement metered in each of Basin and Coastal Areas
	R6. Proportion of surface water licence-holders that are metered	Review proposed measure does not satisfy SMART criteria. Licence-holders can and often do hold both Regulated and Unregulated licences. Regulated water extraction is metered by State Water and therefore not a service provided the Office.	N5. % of Unregulated Entitlement metered
C06	R7. Proportion of Water Sharing Plan performance indicator reports prepared annually	Review proposed measure does not satisfy SMART criteria. There is currently no requirement to produce an annual performance indicator report for a Water Sharing Plan. An audit report is done 4 yearly because many of the environmental trigger conditions are not experienced each year.	N6. Number of Water Management Implementation Plans
C07	R8. Annual number of Water Sharing Plans completed		N7. Annual number of Water Sharing Plans gazetted
	R9. Cumulative number of Water Sharing Plans completed		N8. Cumulative number of Water Sharing Plans gazetted
	R10. Average cost in developing Water Sharing Plans	A specific KPI is not appropriate. However can be calculated using cost of C07-01 and number of WSPs completed and updated.	
	R11. Annual number of existing Water Sharing Plans reviewed and updated		N9. Annual number of existing Water Sharing Plans reviewed and updated

The Office's proposed performance indicators

Activity Group	Review proposed measure	Comment	NOW proposed measure
	R12. Cumulative number of existing Water Sharing Plans reviewed and updated		N10. Cumulative Annual number of existing Water Sharing Plans reviewed & updated
			N11 Operational Planning Instruments Delivered Annually
			N12 Cumulative Operational Planning Instruments Delivered
			N13. % of valleys that comply with MDB Cap
C09	R13. Number of Water access licence applications processed annually	Doesn't satisfy SMART criteria – Licence applications are a C10 Water Consents activity and do not relate to C09.	N14. Water Access Licences recorded on public registers
	R14. Average cost per licence application processed	Doesn't satisfy SMART criteria – see above. Licensing administration activities relate to providing a licensing system that supports creation of tradeable licences, registration of those licences on the public register and support for licence trading activities.	N15. % Licenses on public registers
	R15. Number of licence compliance audits undertaken annually		N16. Number of licence compliance audits undertaken annually
	R16. Percentage of licences audited that are not compliant with licence requirements		N17. % licences audited that are in compliance with licence requirements
	R17. Action taken against licence breaches as % of licence breaches		N18. Alleged Breach Reports actioned
C10	R18. Number of water consents applications processed annually		N19. Total number of water consents applications processed annually
	R19. Average number of days to review water consent and make a decision		N20a. % Category A consents processed within 30 working days
	R20. Average cost per water consent processed	Calculated using cost of C10 activity and the total number of water consents applications	N20b % Category B consents processed in 60 working days
C11	R21. Number of licences billed annually		N21. Number of licences billed annually
C12	R22. Percentage of capital works completed within time and budget		

Water Monitoring Activities - Efficiency Improvement and Additional Resources Justification

The Office has incorporated productivity gains into its future water monitoring activities

The performance information provided by the Office provides substantial justification for the additional staffing required for water monitoring activities. Rivers are dynamic systems. Visits to sites are still required for gauging calibration and to maintain automated data collection equipment. There has been a long term productivity improvement and significant increase in volume of data collected as a result of the automation program.

The Office therefore rejects the unsubstantiated and subjective assessment of the Review Team:

“It is understood that NOW is progressively moving to automated data collection, through the installation of telemetry and data loggers on its stations. If this is the case, some efficiency gains would be expected to arise due to the reduced need for manual visits to stations.

It is not clear from NOW’s submission whether these efficiencies have been built into its future resource needs and whether consideration has been given to the possibility that some of the current 20 FTEs could be redeployed as a result of the increasing automation” (Review page 77)

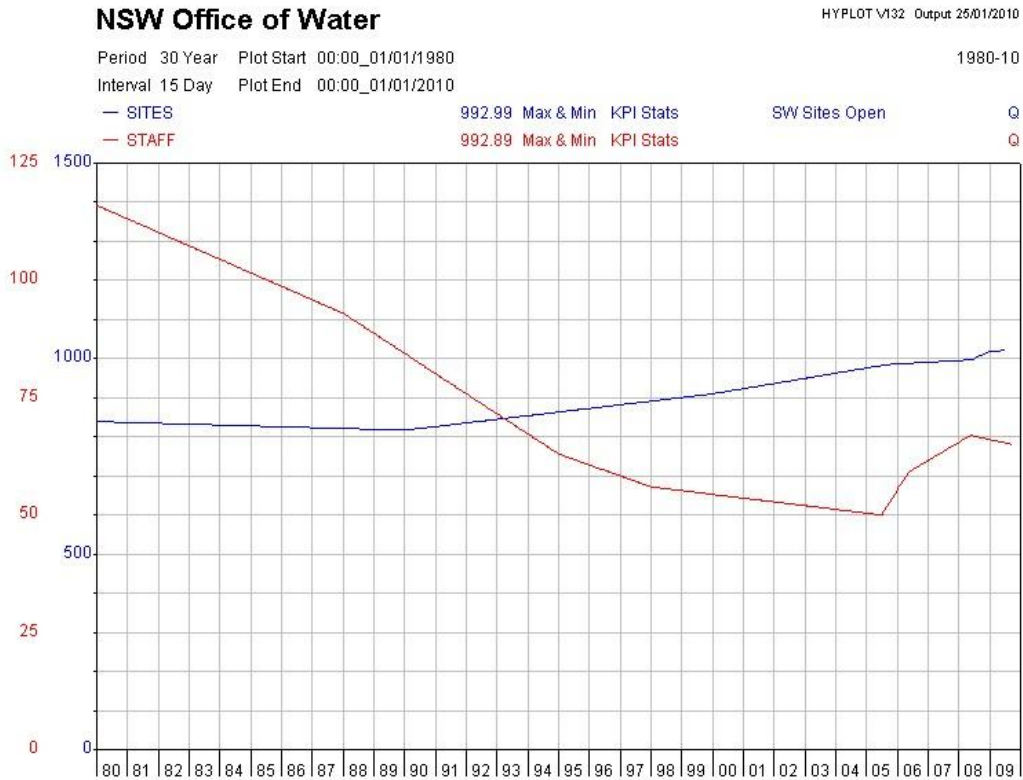
The following information is provided to clearly show the efficiencies that have been achieved in the Office’s hydrometric operations.

EFFICIENCY OF HYDROMETRIC OPERATIONS

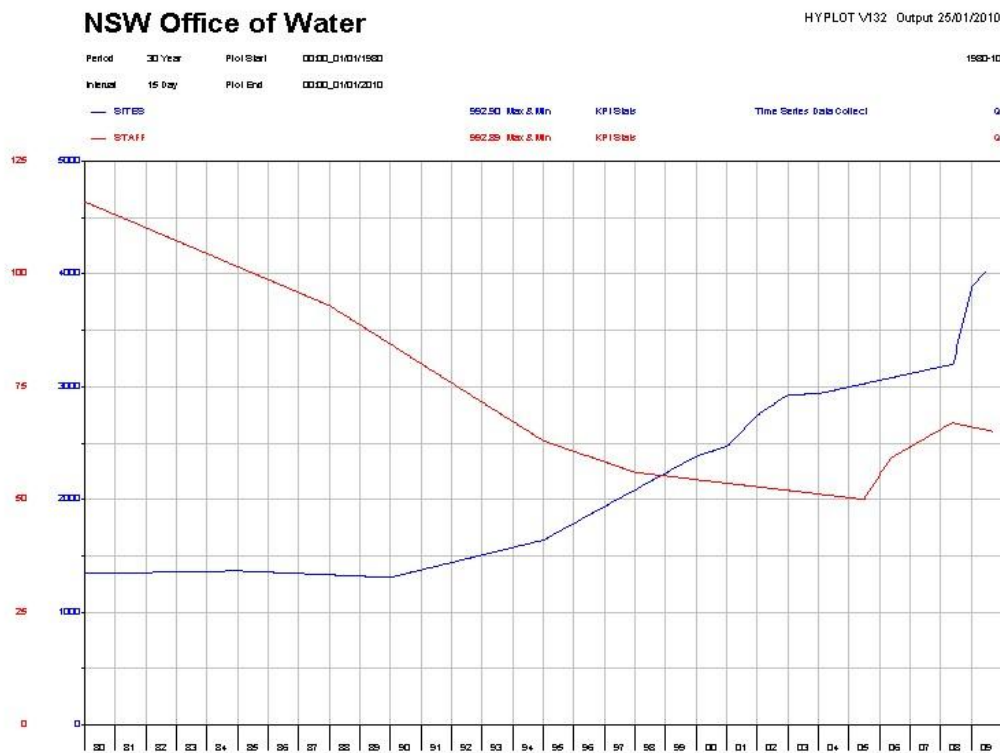
The Office has achieved and is continuing to implement productivity improvement in its hydrometrics operations.

The graphs that follow show the long term productivity improvement achieved by the Office for its water monitoring activities and the significant increase in volume of data collected as a result of the automation program.

The first graph shows the number of hydrometric staff compared with the number of river monitoring sites they maintained from the period 1980 to 2009. The graph shows that the number of staff (red line) has declined from 115 to 63 over the 30 year period, while the number of stations maintained (blue line) has increased from 850 to over 1,000.



The second graph is a better depiction of efficiency as it compares the number of staff (the red line) involved in the collection of hydrometric data (both surface and groundwater) compared with the amount of data collected and archived (the blue line) eg river level, EC, temperature, rainfall, groundwater level etc.



The reason for the increase in the amount of time series data being collected and archived, apart from the increased number of monitoring sites, is the increase in the amount of groundwater level, quality

and rainfall data measured. Prior to 1990 most sites only measured water level and flow. Since 1990 many sites have Electrical Conductivity, temperature, and rainfall included in the monitoring requirements. In the last three years the need to have groundwater data available in real time has increased significantly, requiring a major upgrade of the program.

The number of sites that have telemetered data available on the internet has increased to 700 (as at 30/06/2009). Of these sites, 300 have been upgraded to provide hourly data updates. This is a significant increase in workload for water monitoring staff and demonstrates the uptake of new efficient technology.

JUSTIFICATION FOR ADDITIONAL RESOURCES

The Office provided justification for water monitoring activities that require additional staff in the 2010 Determination period.

Water monitoring is a major activity of the Office and comprises a number of activity cost codes.

C01-01 – Surface water quantity monitoring

For surface water quantity monitoring, one output measure (number of hydrometric stations) and two performance measures were included in Appendix 1 of the Office's Pricing Submission to IPART. These measures show the increasing number of stations that have to be supported, and target the two most important performance areas for this activity:

- 1 The number of gaugings per year (calibration checks for the hydrometric station).
- 2 The percentage of sites where telemetry data is published to the web.

These two indicators relate to how well the Office (1) calculates flow (2) and publishes data. These were proposed in the context that they are indicators that demonstrated the key outputs for the activities. It must be added that the taking of a gauging at a site is only one of a number of tasks performed at a hydrometric station. To increase the number gaugings from 3 to 6 does not double the cost of operating the site but it significantly increases the FTE resourcing requirement.

There are many other indicators that the Office has previously collected as a measure of water monitoring performance. They include: (3) the amount of missing flow data, (4) the percentage of good flow data, (5) the data processing flow backlog, (6) the number of site visits per year, and (7) how many sites are not visited every 50 days.

The process the Office was using to collect this information was terminated during the current Determination period owing to lack of resources to report this performance data. This is another example of a task being dropped in the Office's continual stress testing of activities as a result of lack of recurrent resources.

The number of hydrometric stations is currently being increased. The additional hydrometric stations to be installed and maintained by the Office have been determined by close consideration and design of the minimum additional monitoring necessary for equitable water sharing and to protect environmental assets under the Water Sharing Plans.

The Commonwealth Department of Environment Water Heritage and the Arts (DEWHA) funding deed for the Hydrometric Network Expansion project makes explicit reference to the minimum standard (equivalent to the National Standard) for hydrometric station visits. It is expected that the Bureau of Meteorology (BoM) will issue a new national Water Information standard re-iterating this visit frequency as mandatory for the water information it receives, particularly given the Capital funding the Commonwealth Government has provided nationally to improve monitoring networks.

The Review recommends that the annual and cumulative number of new hydrometric stations installed should be two output performance measures for C01. None of the capital cost for the new sites⁶ is funded by the Office (i.e. from water user revenue) and in the near future will remain at zero, so this is not a relevant performance measure. A more appropriate measure is the number of sites closed or falling into disrepair because the Office does not have the funding or staff resources to maintain those sites.

⁶ There is some capital expenditure for the upgrade/replacement/refurbishment of the hydrometric network, but this does not relate to new sites.

Of the 16.8 FTE requested 12.1 are a direct consequence of a 25% increase in the number of hydrometric stations and a re-instatement of gauging frequency for the IPART price controlled Office funded network component. This justification is clearly shown in the performance information provided in the Office's Pricing Submission.

C01-02 Surface Water Quantity Management and Reporting

The implementation of Water Sharing Plans requires the Office to collect significantly more data by telemetry for existing sites. This telemetry data needs to be published to the Internet in real time. The data from the Hydrometric Network Expansion project (additional hydrometric stations specifically for addressing WSP monitoring and implementation) will add to the workload of staff by increasing the volume of data management and reporting components. Water Sharing Plans will generate additional reporting requirements and higher standards of timeliness and data capture for publication and corporate systems.

The adoption of new technology to meet different and higher accuracy measurement requirements (e.g. visible flow assessment, or flood measurement not previously achievable with conventional technology) has in turn increased the level and complexity of data management required. The need for a more structured approach to managing assets has led to an increased workload through ongoing monitoring of instrumentation lifecycle and reliability.

C01-03 Surface Water Quality Monitoring

The additional FTE are required for this activity because the Office needs to measure the quality of water in all priority rivers to ensure that it is suitable for its end use. The Office currently has no field staff on the northern half of NSW to undertake the sampling. The Office needs this data to generate water quality objectives for the rivers.

Where data is collected from water quality sites this data needs to be available on internet within 4 weeks of collection.

C01-05 Surface Water Quality and biological database Management

The Office is replacing its outdated Water Quality database because the current system is not capable of meeting existing and anticipated future needs. This database will meet the future needs including a greater level of publishing to the Internet but require more staff resources to provide the enhanced information to stakeholders. The databases will be located in a more secure environment, and operate on a modern database platform (SQL Server).

With active consideration of water quality and salinity targets being specified under the Murray Darling Basin Plan, for water planning consideration as well as operational management in some cases, the level of data capture, management and publication must evolve to a contemporary service standard, consistent with that for water quantity reporting.

C02-01 Groundwater quantity monitoring

The additional staff required for groundwater quantity monitoring is justified by the increased number of monitoring sites contained in the Pricing Submission. Concurrent with the increased number of monitoring bores, there is an increasing requirement for information from the monitoring bores.

The implementation of Water Sharing Plans has meant the Office needs to monitor more frequently, accurately and in a more timely manner an increasing number of groundwater systems. This monitoring requires increased use of data loggers and telemetry, generating a significantly larger amount of equipment for maintenance and data which is to be managed and reported to the Internet. The necessary implementation of more rigorous standards for groundwater data collection has increased the cost of this activity and the staff required to undertake it, given more complex tasks and higher levels of skill required. The demand for higher groundwater monitoring standards and a clear demonstration that the Office is working to those standards is increasing significantly. It is also evident in that the OH&S and environmental constraints for staff working in isolated and remote areas are increasing costs.

Operational Planning

The Review has questioned over-resourcing and under-delivery for Operational Planning.

The Office provided information to substantiate the staffing for operational planning and the broad range of outputs produced under this activity. The Office acknowledges that operational planning is a critical water management activity. This is an area where there has been some rationalisation of the Activity codes to provide for improved monitoring of this expenditure. Comments by the Review are reproduced below, followed by an explanation of the Office's activities in this area.

Furthermore, based on the findings from a detailed audit of several activities, PwC is concerned that there are inefficiencies in NOW's existing deployment and allocation of staff resources across activities. For example, in the case of Operational Planning, the reported outputs for this activity (one completed policy guideline identified on page 101 of NOW's submission, though progress in the drafting of others is acknowledged) does not appear to be commensurate with the 20 to 25 FTEs that have been working in this area over the past four years. (Review Page 10)

Since 2005, annual expenditure on this activity has been \$4 to \$5 million. Over the three years from 2006/07 to 2008/09, approximately 20 to 25 FTEs have been applied to Operational Planning, with a gradual increase over this period. In 2009/10, the number of budgeted FTEs are increased to 38. (Review page 83)

Our main concern is whether the existing resources dedicated to this task are being effectively utilised. NOW's target for its operational planning is to complete 9 out of 10 required guidelines by 2012-13, a significant increase on the one completed guideline that is in place from the current period. While we acknowledge that it takes time to complete guidelines, as stakeholder consultation is often required, we are of the view that four years appears to be an inordinately long time to complete policy guidance, particularly give the staff complement of 20 to 25 FTEs. During the course of this review, there has been difficulty in understanding the size of the task for this activity and we are not convinced that there are no efficiencies to be gained in this area. (Review page 84)

There are two component parts to the conclusions stated in the Review that need to be addressed. In summary, the Review Team's figures on the historical resources are over-stated and the historical outputs are understated. The correct information is detailed below.

Firstly, the review states that the Office had 20 – 25 FTEs working on "operational planning" during the course of the current Determination. The Review Team arrived at this figure based on the correct starting point of approximately 48 FTEs working on what is now activity C07-01: Water Planning. The Review Team has correctly recognised that this historical activity contains staff working on water sharing plans, operational planning instruments and legislative reform. The Review Team have split these 48 FTEs in half to arrive at their estimate of 20 – 25 FTEs working on "operational planning".

The correct percentage historical split of the 48 FTEs is approximately 80/10/10 into these three component activities. This means that within activity C07-01, there were approximately 38 FTEs charging their time to the development of water sharing plans, 5 FTEs charging their time to the development of operational planning instruments and 5 FTEs charging their time to the legislative reform tasks.

The actual historical resource working on operational planning tasks was therefore 5 FTEs. With this limited resource pool, the following major operational planning milestones have been completed and implemented during the last determination period (within the current activity C07-01):

- Groundwater trading rules in inland aquifers;
- Embargoes on groundwater licence applications across all of the Murray-Darling Basin aquifers and all of the alluvial coastal aquifers;
- Controlled allocation strategy for savings associated with the Cap and Pipe the Bores Program;
- Rules and quantification of unassigned groundwater;

- Supporting information for the 2008, 2009 and 2010 amendments to the *Water Management Act 2000* and associated regulations;
- Assessment of water sharing and trading arrangements for their consistency with State and Commonwealth agreements and the *Water Management Act 2000*;
- Water sharing and trading arrangements for:
 - surface water: the Border Rivers and Peel in the MDB and the Bellinger, Coffs Harbour, Lower North Coast, Paterson, Hunter Unreg/Alluvial, Central Coast (Gosford/Wyong) on the coast; and
 - groundwater: 6 inland aquifers and Great Artesian Basin;
- Licensing rules for access to sugar cane drains;
- Licensing strategy and supporting regulation for tidal pool users;
- Rules to define and manage replacement groundwater bore works;
- Rules for setting daily access conditions for licence holders extracting water from highly connected surface/groundwater systems and in-river pools;
- Rules for exemptions to daily access conditions for critically important licence categories, such as those who are licensed to extract water for domestic and stock purposes.

Significant progress has also been made during the Determination period on the following:

- Public exhibition of the draft rules for licensing floodplain harvesting;
- Final preparations for public exhibition of draft mandatory guidelines for the reasonable take and use of water for stock and domestic purposes under basic landholder rights;
- Draft guidelines for licensing aquifer interference activities and preparation of material to seek approval to proceed to consultation phase;
- Draft rules for the management of stacked aquifers;
- Draft return flow rules and providing advice to licensees interested in obtaining credits for return flows and managed aquifer recharge;
- Draft rules for licensing stormwater harvesting projects and providing advice to major proponents of these projects;
- Draft rules for setting long-term annual average extraction limits and managing compliance to these limits for unregulated and groundwater systems in the Murray-Darling Basin;

In the forecast, the Office has split the existing (historical) activity C07-01 into 3 activities: C07-01, C07-02 and C07-05 to separate the important component parts. The newly created activity C07-02 specifically focuses on operational planning activities and the Office has assigned some additional resources to this task to reflect its importance and priority for NSW. If the Determination is in accordance with the Office's Pricing Submission, the Office expects to have a contingent of additional staff working on operational planning activities under the new C07-02.

In the next Determination period, the Office expects to build on the substantial work done so far, finalise the items in the list above and embark on other activities that the Office has been unable to resource to-date. This is reflected in the detail of the Office's Pricing Submission.