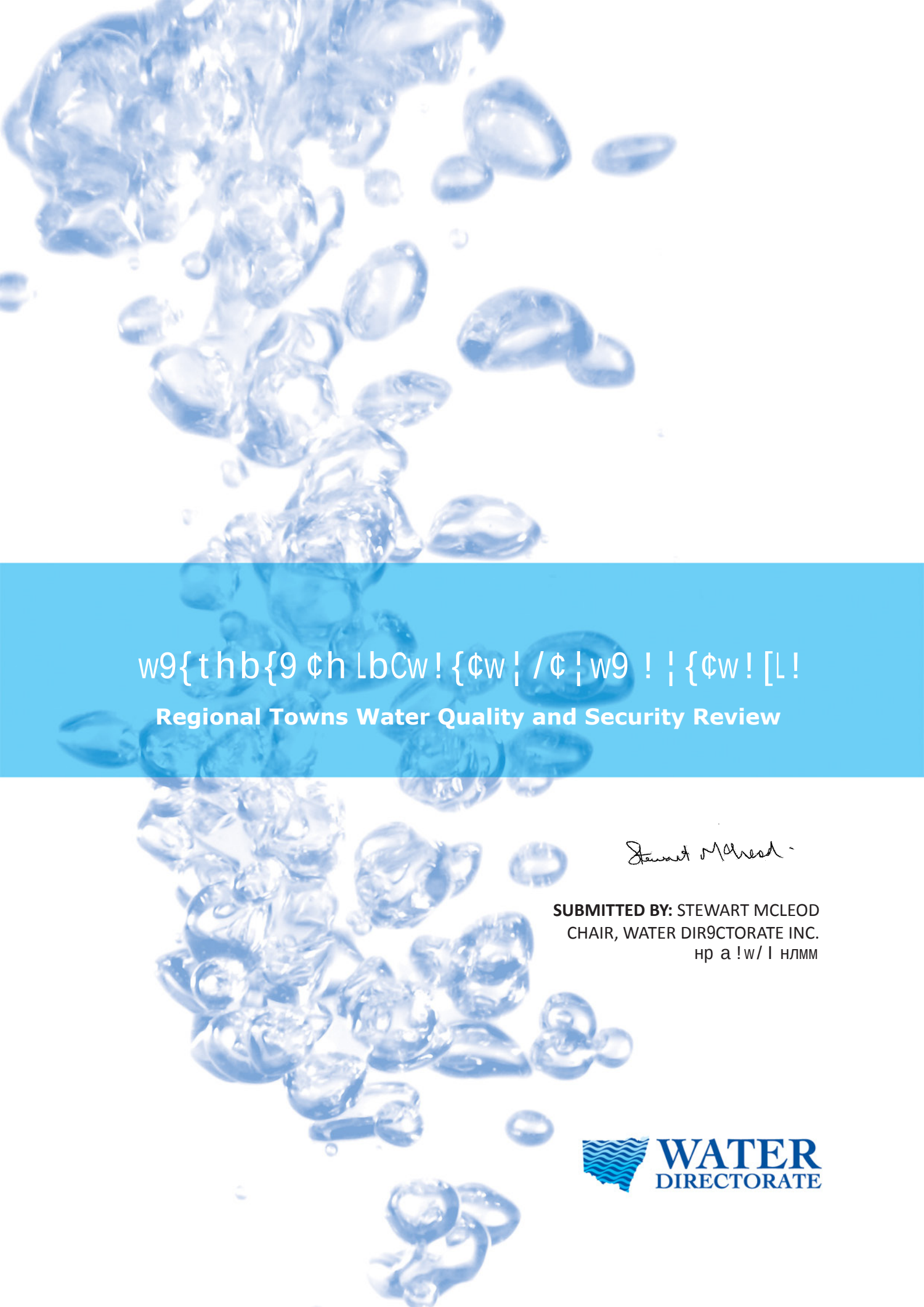

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Regional Towns Water Quality and Security Review

SUBMITTED BY: STEWART MCLEOD
CHAIR, WATER DIR9CTORATE INC.
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WATER DIRECTORATE

WATER DIRECTORATE

25 March 2011

Michael Deegan
National Infrastructure Co-ordinator
Infrastructure Australia
GPO Box 594
Canberra ACT 2601

Dear Mr Deegan

Water Directorate Response to the Review of Regional Towns Water Quality and Security

The Water Directorate would like to thank Infrastructure Australia for the opportunity to respond to the above report prepared by AECOM Australia Pty Ltd in October 2010. The Water Directorate is a membership association comprising 95 Councils and County Councils that provide water and sewerage services to approximately 1.9 million residents in regional NSW. Over 90% of eligible NSW Councils are members and we believe this high percentage is an indication of the Water Directorate's usefulness and effectiveness as a technical advisory organisation.

The Water Directorate's mission is to provide leadership and advice to the Local Water Utilities (LWUs) in NSW, particularly on technical issues. We believe that we have been fulfilling this mission successfully for the past twelve and a half years.

Established in late 1998, the Water Directorate was initiated by local government water and sewerage practitioners who recognised that the structure and legislative framework for water authorities in NSW was not ideal following the abolition of the Department of Public Works. By forming an industry specific association it was believed that the lack of coordination between government departments and local authorities as well as the declining level of technical advice could be addressed.

Since our establishment the Water Directorate has provided consistent statewide management tools at a low cost to our members in NSW. We have spent more than $4 million on developing relevant guidelines and technical documents and have supported the industry with valuable information that may not have been provided by State

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Government departments (a full list of our Technical Publications is on the website at www.waterdirectorate.asn.au).

The Water Directorate is a proactive organisation with many successful achievements in the past 12 years. In recent times we have been involved in a large number of activities promoting and encouraging the long term efficiency of the of the local government water industry. A list of these activities includes:

- Publication of *Interim Blue-Green Algae Management Protocols* – November 2009
- Publication of revised *Backflow and Cross Connection Prevention Guidelines* – January 2010
- Joint sponsorship of the AWA and Water Directorate Conference Attendance Award – March 2010
- Hosting the Water and Electricity Safety Presentations at WIOA State Conference 2010 – April 2010
- Sponsorship of the NSW Operator of the Year Award at the WIOA State Conference – April 2010
- Sponsorship of the IPWEA Excellence Award Innovation in Water Supply and Wastewater – May 2010
- Hosting the Water Managers Forum at the LGSA Water Management Conference in Orange – September 2010
- Distribution to members of the fifth WIOA *Practical Guide* to all NSW LWUs – November 2010
- Continued joint management with the LGSA of the $22 million Water Loss Management Program (WLMP) in partnership with the Australian Government (through the Water Smart Australia program) – this is a five year project due for completion in July 2011
- Administering a discussion forum on our website for subscribers to send queries and comments to all our members - ongoing

At our planning meeting in November 2010 the Executive Committee agreed to again participate in all the conferences and sponsorships of awards as listed above and in addition set the following goals for 2010/11:

- Sponsor an Award for Environmental Best Practice for Water Utilities at the LGSA's Environment Awards
- Publish a *Design of Fire Flows Guidelines*
- Publish a *Land Acquisition Manual* in conjunction with the NSW Roads and Transport Directorate

These projects are all considered necessary tools for the local water industry to operate effectively. They are documents that are not being prepared by other government agencies and therefore we have taken it upon ourselves to coordinate and fund their production. A copy of our most recent Annual Report for 2009/10 is available on the website at www.waterdirectorate.asn.au

In January 2009 the NSW Government released a report detailing the results of its Inquiry into Secure and Sustainable Water supply and Sewerage Services for Non – Metropolitan NSW. The Water Directorate responded to this report in April 2009. The report and our response is available at www.water.nsw.gov.au

While it is recognised that the Infrastructure Australia Report is national, and as such is broader in nature than the NSW Government report, it is disappointing that elements of this report, together with a wide range of data readily available from public reports published by the NSW Office of Water (NOW) and NSW Department of Health, were not better used by AECOM to present a more accurate portrayal of regional water supply systems in NSW.

Many of the systemic problems perceived by AECOM to exist within NSW regional water supply systems are in fact the subject of NOW policy or procedure documents that have been in place for many years. For example the *Best Practice Management of Water Supply and Sewerage Guidelines* released in 2004 and updated in 2007 provides a high quality and consistent planning framework for regional utilities. It includes the preparation of Integrated Water Cycle Management (IWCM) plans that provide for planning at the catchment level.

Another example is the *Best Practice Pricing Guidelines* released in 2002 which fully conform to NSW IPART requirements and those of the National Water Initiative, providing a sound basis for water pricing.

The majority of regional water supplies in NSW already substantially comply with the requirements contained within both these documents and where compliance has not yet been fully achieved are progressing towards full compliance.

The NOW has for many years facilitated high quality water and wastewater training courses that are readily available to operators of regional water supply schemes. The availability of training is not considered a significant issue by regional water supply schemes however attracting and retaining skilled labour is an intermittent problem, comparable with most sections of Australian industry.

The Water Directorate believes that the proposed solution for regional water supply operators, in the form of larger regional utilities, is overly simplistic in that it ignores basic geographical constraints which dictate the work environment for most operators of regional water supply schemes regardless of the corporate structure within which they work.

Further, larger regional utilities, will mean the removal of water functions from the current scope of works undertaken by general purpose Council staff and would make attracting staff more difficult thereby presenting a much greater problem for regional Councils. The solution proposed in the AECOM report is not problem solving but merely problem shifting.

A skills shortage problem within the NSW water industry has been recognised for some time and will not be assisted by merely shifting the problem from one entity to another. Through the use of innovative approaches such as regional alliances between Councils and cooperation between regional water utilities, such as the formation and role of the Water Directorate, the skills shortage is being addressed in a positive manner. This level of cooperation extends also to County Councils and Council Owned Corporations that supply water to regional NSW.

The price of water in NSW regional systems is regulated by the State Government and reflects the cost of providing water to the community, with the *Best Practice Pricing Guidelines* used as the basis for setting prices. The vast majority of NSW Councils fully recover operating, maintenance, administration and capital costs. Most Councils choose not to pursue earning a profit from their water business, however a small number (three) do, with a dividend being returned to Council as the owner of the water assets. Retaining the dividend for use within the community in which it was raised better enables the Council to provide necessary community infrastructure.

For the majority of NSW Councils the commercial structure under which they operate most closely aligns to that of a Co-operative whereby dividends are returned to the shareholders (in this case, customers) in the form of lower prices. Co-operatives are a proven and successful form of commercial enterprise that has been used for generations, particularly by primary producers, to operate a business and return dividends equitably to members.

The Water Directorate strongly objects to any proposal that strips water assets from their current owners and places them in the ownership of Government owned regional corporations that then charge higher prices so that a dividend can be levied from these original owners. NSW regional communities are already faced with significant financial

challenges in meeting infrastructure requirements such as roads, drainage, community facilities as well as water. Stripping a dividend from these communities for their water services would further exacerbate this overall need.

Under various existing structural models, such as Council owned water utilities and corporations, county councils and alliances, any dividends levied remain within and benefit the local community. Such models have evolved to address specific issues without losing the advantages of the pre-existing structure. Not surprisingly, different regional circumstances have resulted in different corporate structures. The Water Directorate supports this considered approach and not the simplistic ”one size fits all” recommendation contained in the AECOM report.

A major deficiency in the AECOM report is that it fails to adequately address the costs/benefits associated with implementing its proposed recommendations, particularly the costs and disadvantages associated with creating regional water corporations. Within NSW most regional water systems are operated by general purpose Councils. This provides benefits to the community in the form of lower water prices resulting from economies of scope, better environmental outcomes resulting from integrated planning and development approval and better customer service provided by a “one stop shop” Council office.

Economies of scope arise from water functions such as governance, management, planning, technical services, asset management, information systems, customer service, administration, finance, maintenance and repair facilities, plant and equipment etc being provided within Council’s overall general works functions. This resource sharing arrangement results in lower costs for both the general works and the water functions.

A major benefit in achieving positive environmental outcomes within local government areas, particularly as it relates to integrated water cycle management and infrastructure provision, is the integrated approach provided by local government facilitated by its powers under both the *Local Government Act* (NSW) 1993 and *Environmental Planning and Assessment Act* (NSW) 1979. Creation of water corporations would result in another bureaucracy for the community, developers, local government and other authorities to deal with. Such corporations, with a narrow operational focus, and often overly driven by commercial considerations, are poorly placed to deliver good environmental and social outcomes.

Customers currently conduct both their general council business and their water business at their readily accessible Council office (one stop shop). A regional water corporation

would inevitably operate from one large regional office that may mean customers have to travel hundreds of kilometres to their nearest regional water office.

The cost of disaggregating each Council's water business into a regional corporation would be significant. For most regional Councils the water business represents between a quarter and a third of the Council's total operational budget. This means that Council staffing, offices, workshops, plant, fleet etc are sized based on this total operational budget. Most Councils have staff that are multi skilled providing economies of scope efficiencies for the community. For example, professional staff are often responsible for both water and general purpose Council functions, rates staff collect both water business and rates income, etc. Disaggregating such functions will result in costs associated with underutilised resources in one or other of the resulting entities.

A major economic and social problem facing regional NSW communities is the shift of skilled workers from small to larger regional centres. The creation of larger regional water corporations, presumably with offices in the major regional centre, would exacerbate this problem.

The AECOM report recommends the establishment of regional water corporations as the structural solution for regional water supply security and quality problems in NSW. The report fails to recognise that during the recent drought one of the highest risk areas in NSW, for running out of water, was Sydney. This is evidenced by its need for the hasty, expensive and unpopular construction of a desalination plant near Botany Bay. Also, one of the most significant boil water alerts within recent Australian history, in terms of persons impacted, was Sydney Water's *Cryptosporidium* / *Giardia* occurrence in 1998. In addition, Hunter Water has changed its mind several times over the past few years as to whether Tillegra Dam is required for its long term water security and this project was recently abandoned after much preparatory work and money was spent.

The purpose of these examples is not to criticise Sydney Water or Hunter Water but to point out the poor logic that AECOM has used in reaching their recommendations. Scale, by itself, is not a guarantee that desirable outcomes will always be achieved. It should also be noted that during the recent millennium drought, all regional NSW regional towns were able to implement appropriate management strategies that enabled the provision of an on-going water supply to their respective communities.

Through the NOW, NSW has in place a sound basis for planning, operational management and pricing of regional water supply schemes. The Water Directorate supports initiatives that build on this basis to address specific problems identified in the AECOM report. For example the AECOM report specifically mentions inconsistent water

restrictions within catchments as an example of a systemic problem. The Lower Macquarie Water Utility Alliance has adopted common water restriction levels for its eight member Councils, along with Bathurst and Orange, the two largest regional centres further upstream on the Macquarie River. Such an approach could be extended to all catchments by minor amendments to existing IWCM planning requirements.

The Water Directorate supports planning at the catchment level and the achievement of best practice among regional NSW utilities through the application of sensible and common policy and procedures. Where it can be demonstrated that these objectives can best be met by alliances, County Councils, joint ventures, Council Owned Corporate entities or another structure these options should be pursued to the extent that they provide a positive return for the community. Given the geographic, demographic, climatic and socio – economic diversity in regional NSW, together with the associated differences in water availability and demand profiles, it is overly simplistic to expect that a “one size fits all solution” will provide positive cost/benefit returns to all regional communities in meeting their water needs.

Based on the above, and the detailed comments in the attached Annexure A, the following comments are offered in relation to the report recommendations:

1. Mandatory compliance with Australian Drinking Water Guidelines (ADWG) has already been legislated by the NSW Health Department in 2010 and is supported. This compliance is well progressed within regional NSW.

2. The NSW Health Department has a health based regulatory role associated with drinking water quality. Refinement of this role to conform to a national standard is supported.

3. The NOW is responsible for independent monitoring and reporting of water quality performance of regional NSW water utilities. IPART also has a regulatory role. Refinement of their roles to conform to a national standard is supported.

4. NSW regional water utilities operate under a Best Practice Management Framework. A national standard that builds on this framework is supported.

5. NSW regional water utilities have in place a Best Practice Pricing Policy. A national standard that builds on this policy is supported.

6. NSW, through the NOW, has in place well developed operator training courses. A national standard that builds on this model is supported.

7. Structurally disaggregating water utilities in NSW is not supported. There are significant financial, social and environmental costs in disaggregating water supply functions from local government in NSW and forming regional corporations. The AECOM report does not address these costs and other key issues nor present any well substantiated arguments for its proposed recommendations to form regional corporations. The report has been based on selective and often questionable data and provides recommendations that are inconsistent or inadequately supported by the report content.

Should you require any further information I may be contacted on (02) 6801 4800 during business hours, or by mobile 0418 636 489 at other times.

Yours sincerely

Stewart McLeod
Chair

ANNEXURE A

Detailed Comments by the Water Directorate on Review of Regional Water and Quality and Security Report dated 25 October 2010 and prepare by AECOM Australia Pty Ltd for Infrastructure Australia

Executive Summary

The report states that performance reporting for small utilities (less than 50,000 connections) is patchy and inconsistent.

All Australian utilities with more than 10,000 connections report annually to the National Water Commission and are audited every 3 years. NSW water utilities, irrespective of connection numbers, have reported to the NOW annually since 1986. NSW has the most complete longitudinal record of reporting by water utilities of any state in Australia. In 2008/09 the NOW *Performance Monitoring Report for NSW Water Supply and Sewerage* ran to 77 pages of intra and inter State statistics. The *Benchmarking Report for NSW Water Supply and Sewerage* ran to a further 263 pages containing, in part, 66 graphs and 24 densely packed tables of data.

AECOM may argue that the comment on patchy and inconsistent data relates to water utilities in other states, however, this type of generalisation has been used extensively throughout the report, with recommendations not necessarily based on data relevant to the state to which they relate.

The use of generalisations undermines the credibility of this report, its conclusions and recommendations. For example, details of every NSW Council's treatment processes and water treatment performance is available in Appendix D1 (pages 233 to 237) of the *2008/09 Benchmarking Report* are available on the NOW website at www.water.nsw.gov.au. It does not appear that AECOM staff used this trove of data and simply collected what they could from a myriad of other less reliable sources.

Similarly, the perceived benefits of the recent amalgamation of water utilities in the smaller states of Victoria and Tasmania appears to drive the recommendation of amalgamation of water utilities in the larger states of NSW and Qld. If such amalgamations were clearly advantageous for all regional water supplies then it could be expected that SA and WA, with a single water utility, should be delivering demonstrably

superior results when compared to regional utilities in NSW and QLD. This is not the case, and the report is not surprisingly silent in this regard.

Key Findings

a. It is inferred that “full cost recovery” means earning”sufficient revenue to allow a dividend payment to State Government shareholders”. This inference indicates a lack of understanding of LWUs in NSW where water assets are owned by the Councils and not by the State Government. Although a small number of Councils choose to have their LWU operation pay a dividend to the Council, non payment of a dividend is a policy choice by the large majority of LWUs. Most Councils choose to only recover sufficient revenue to cover the operations, maintenance and capital costs identified within their Strategic Business Plans, and do not make a “profit” simply to be able to declare a dividend. This matter is further discussed in response to Section 2.1.

b. The report states that “many utilities servicing regional towns are not recouping the costs of supplying water, let alone providing for capital improvements”, or that “many are charging prices significantly lower than in major urban areas”. This general statement is applied to all regional utilities and appears to drive relevant report recommendations. The NOW has required LWUs to prepare Strategic Business Plans (SBPs) to a specified format since 1993. These SBPs require that NSW LWUs do recover all costs, including that required for current and future capital costs. Performance monitoring by the NOW indicates that, in 2008/09, 96% of LWUs were achieving full cost recovery. Financial plans require at least a 20 year forward projection, a 30 year projection is preferred, of capital and operating costs and generally achieved by LWUs in their published SBPs. In many instances lower prices in LWUs reflect greater efficiency of operation due to economies of scope achieved within the local government environment.

c. LWUs in regional NSW communities are progressively implementing programs to achieve compliance with the 2004 ADWG. This is being done on a priority basis within respective communities and, like all programs associated with implementing a change in standards, will take time to fully achieve.

d. Australian industry as a whole, not just the water industry, has faced a skills shortage for many years. The report inadequately addresses the causes of such shortages and reaches its conclusion without exploring the various available options. Further comments are detailed in response to Section 2.4.

e. Improved training and wider compliance with ADWG may deliver significant benefits, however, the statement of potential benefits without any quantification of what these benefits are or the costs that may be incurred to achieve them does not enhance the credibility of this report.

f. Achieving water security in regional areas is not considered to be greater in complexity than that in major urban areas. The fact that towns share the same water source is of little consequence. On regulated streams in NSW, towns use in the order of 2% of the total water extracted and are guaranteed priority access under the *Water Act*. There is no substantive "conflict" involved. The towns are minor water users and the Water Sharing Plans (WSPs) in place make it very clear that irrigators and other non-urban users will have their allocation reduced to ensure security of supply to towns. One of the most high risk water supplies in NSW, during the recent drought, was Sydney Water as evidenced by the hasty and costly construction of its desalination plant. It should also be noted that during the recent millennium drought, regional NSW regional towns were able to implement appropriate management strategies that enabled the provision of an on-going water supply to all of their respective communities.

g. It is a NSW Best Practice Management requirement that LWUs prepare IWCM plans that address water planning at a catchment level. In developing the IWCM plan it is a requirement to rigorously investigate the boundaries of the water system, provide detailed whole-of-catchment information, all catchment related targets and requirements, all legislative obligations, and climate change impacts in a global and a NSW context, as well as workshop the proposed plan with all key catchment-based stakeholders. The AECOM report at page 27 Para 2 correctly recognises the value of catchment based planning in NSW, but then in the last Para of Page 27 presents an alternate view. This inconsistency does not enhance the credibility of this report.

h. NSW Local government is well represented on the committees which drew up the WSPs and on the various valley-based Customer Service Committees of State Water, the bulk water provider for most of inland NSW. Alliances of LWUs have now evolved covering much of the Lachlan and Macquarie Valleys which serve as inter-town planning bodies for water resource management (e.g. the recently lauded CENTROC Water Security Study). LWUs in NSW are already closely networked with each other and the government agencies dealing with catchment-wide issues and other community stakeholders.

i. Comments in relation to restrictions are detailed in response to Section 2.7.1.1. The Water Directorate supports the need to standardise restriction regimes as far as practicable. This has been pursued in the Macquarie valley where, by consensus, Bathurst, Orange, Dubbo, Wellington, Narromine, Warren, Bogan, Cobar, Brewarrina and Bourke have adopted common water restriction definitions for their schemes. Also, in 2003 the Water Directorate published our *Drought Management Guidelines* that included a recommendation to all our member councils to adopt the suggested seven levels of restrictions.

j. It is interesting that the report condemns the role of the NSW Regulator in being able to overrule water restriction decisions by small LWUs thereby rendering ineffective their water security plans while at the same time recommending greater regulation.

k. NSW has had comprehensive reporting by all LWUs in place since 1986. The NOW has developed planning procedures for LWUs that have been in use for the past 20 years. Similarly *NSW Best Practice Management Guidelines* were first issued in 2004 and updated in 2007. The Water Directorate agrees with the need to standardise, as far as practicable, national water business reporting, planning and management and would support a recommendation that builds on these proven NOW guidelines.

l. The existing governance arrangements for LWUs in NSW provides for economies of scope that provide efficiency outcomes at least comparable to economy of scale efficiencies claimed that may accrue to larger utilities. Additionally, the existing structures provide integration advantages which provide improved environmental and social outcomes for the community. This integration is increasing in importance as it becomes evident that many of the problems facing society (including water supply, security and quality) will only be addressed by an integrated approach. This is evidenced by the national importance given to IWCM. It is therefore incomprehensible that this report recommends segregating the water functions from the local government structure which is ideally suited to delivering integrated solutions to water issues.

m. Further, the report makes this recommendation without any quantification of the stated perceived benefits or any assessment of the associated costs and other disadvantages. This lack of balance challenges the credibility of this report.

Specific comments relevant to other issues relating to governance arrangements are provided in responses to the various sections of this report below.

Section 1.2 Snapshot of Water in Regional Towns

The comment that “many regional areas receive no water filtration or comparatively less treatment” implies that this is a deficiency in itself. Without quantifying the need for higher level treatment to achieve a fit-for-purpose water quality this statement is misleading. It is noted that the stated example of poor performance (assumed to be the worst in Australia) is regional Victoria, yet the governance structure for regional Victoria is recommended within the report to fix perceived problems in other regions of Australia.

The return of treated wastewater to inland rivers in NSW is highly regulated requiring development approval through the Environmental *Planning and Assessment Act*, licensing by the NSW EPA and approval by the NOW. Water prices in regional NSW towns are developed in accordance with NSW *Best Practice Pricing Guidelines* that fully comply with the requirements of both the NSW Pricing Regulator (IPART) and the National Water Initiative.

When commenting on performance reporting by large utilities, AECOM makes the observation that “poorer levels of service to small towns are often masked by the average service level for the utility as a whole”. This is an accurate observation and a strong argument against the creation of large utilities to service remote regional towns. Local Councils have local accountability, whereas remote utility managers are driven by average system results.

Section 1.4 Our Approach to Undertaking this Review

The AECOM report states that “towns were chosen (18 from 107 regional towns in NSW) for their known or likely water quality and / or security issues” and that “the data may be statistically skewed”. In the context of the report this data is highly skewed. However, it has been presented as being representative of the water industry as a whole in regional NSW. This selective approach raises significant questions in relation to the credibility of this report.

The credibility of this report is further compromised by the data, on which the report is supposedly based, being incomplete, out-of-date and often questionable. For example, why would a 2010 report, dealing with the current state of the water industry, reference 2001/2002 water rates for Bourke when 2010/11 rates would have been available when this report was being prepared?

Comprehensive data for NSW LWUs is readily available from the NOW and the NSW Department of Health. While representatives from both of these agencies were

interviewed by AECOM in the preparation of this report it would appear that relevant factual data has been ignored or not requested.

Section 2.1 Pricing is only Part of the Problem

Within regional NSW the LWU owns the water assets. The commercial structure under which these regional schemes operate most closely aligns to that of a Co-operative whereby dividends are returned to the shareholders (or customers) in the form of lower prices. Co-operatives are a proven and successful form of commercial enterprise used for generations, particularly by primary producers, to operate a business and return dividends equitably to members.

The Water Directorate objects strongly to any proposal that strips the Councils of their water assets and places them in the ownership of Government Owned Regional Corporations which then charges higher prices to levy a dividend from the original owners. Councils and local communities could be expected to oppose any arrangements that require them to pay dividends, to Government, on water infrastructure that they have provided.

NSW regional communities are already faced with significant financial challenges in meeting infrastructure requirements such as roads, drainage, and other community facilities as well as water. Stripping a dividend from these communities for their water services would further exacerbate this overall financial need. Under various existing structural models such as LWUs, county councils and alliances any dividend levied remains within and benefits the local community. Such models have evolved already to address specific issues without losing the advantages of the pre-existing structure. Not surprisingly, different regional circumstances have resulted in different governance structures. The Water Directorate supports this considered approach and not the simplistic “one size fits all” recommendation contained in the AECOM report.

2.1.1 Supporting Evidence

In a number of instances, the poor performance of the Victorian water industry is illustrated. For example, the report states that “poor water quality and water security planning are still evident in some parts of the State (Victoria)”. This is after 16 years of operating under a State Water Corporation model. Section 2.3.1.1 refers to the poor level of tertiary water treatment in regional Victoria (53 localities with surface water sources receiving only disinfection) as a significant example of poor performance within the industry. Box 2 “Operating profits in Victoria” on page 8 states”operating revenue for Victoria Water Utilities nearly doubled from 2008/09 to 2009/10 “which had been “driven predominately by increases in pricing”. Finally it is detailed in Section 2.8 that Victorian

regional water utilities have higher average operating costs than regional NSW water utilities. The report's recommendation that NSW adopt the Victoria regional model is not credible given the above examples.

2.2 Inadequate Pricing Practices

The report makes the comment "many small towns are without water treatment because the increase in residential bills to cover the cost would be substantial." While cost is one of the factors that influence the level of service provided by a LWU it is not the only factor. In regional NSW (and for infrastructure systems generally) the level of service provided is a trade off between quality, risk and the communities willingness / ability to pay. Without an adequate exploration of these factors, within the report, the above comment lacks credibility.

The report makes the following comment as a basis for the need to increase water prices in regional communities "Many (regional towns) are charging prices significantly lower than in major urban areas, where economies of scale would be likely to mean lower cost." This comment is not substantiated. As indicated earlier the vast majority of regional water utilities in NSW are achieving full cost recovery. Lower prices, than in larger metropolitan areas, are considered to be the result of services being delivered in an efficient manner assisted by economies of scope achieved within the Local government environment.

Postage stamp pricing is one of the available pricing options. It has advantages and disadvantages, none of which are explored in this report, when compared to other pricing options. The perceived importance of postage stamp pricing within the context of this report is not readily understood based on information presented.

2.2.1 Supporting Evidence

If the conclusions drawn from what customers are prepared to pay for bottled water are correct, within the context of this report, then the earlier comment that "many small towns are without water treatment because the increase in residential bills to recover the cost would be substantial" is a nonsense.

The statement that "water utilities that are operated as part of the local government structure experience rate pegging" is incorrect for NSW regional Councils. This is a basic factual error which highlights the lack of on-the-ground industry understanding inherent within the report more generally.

The report states that "under current pricing practices, funds are transferred from utilities to the Government often at the expense of new infrastructure, repair and

replacement", however then goes on to recommend the transition of regional NSW utilities to a structure that provides for the payment of exactly such dividends to the Government.

In relation to servicing dispersed small communities the report makes the comment "if water utilities serve a large population, economies of scale can significantly reduce this per person construction cost". Water is not a readily transferable commodity and with the on-going increase in electricity prices can be expected to become more costly to transfer (pump) in the future. As such, water treatment and other capital infrastructure for regional towns can be expected to remain localised which negates the ability to realise economies of scale construction benefits.

2.3.1.1 Water Treatment

As detailed earlier the level of service (treatment) necessary is dependent on a range of factors. Comparing regional treatment levels with that of metropolitan areas that are typically high risk and have a relatively high ability to pay is overly simplistic. For this section of the report to be meaningful a more thorough assessment of local water quality drivers would need to be undertaken.

2.3.1.2 Water Quality Results

The purpose of the AECOM report was to review the performance of regional water utilities in relation to water quality and security. However, it is noted that in "proving" the existence of poor quality performance of regional water utilities, an example from a privately operated ski resort (Smiggin Holes) has been used. Is water quality such a minor issue that the authors have a problem finding proof relevant to a LWU as opposed to a private sector entity?

In a similar vein, lead was seen as one of two major problems in regional NSW. In reality it was an issue for one town only, Broken Hill. It is a problem now resolved by the construction of improved treatment, and as a matter of detail, Broken Hill is NOT served by a LWU at all. The State owned electricity corporation, Country Energy (now Essential Energy), is the operator of that town's facilities.

Likewise Box 8 on page 17 of the report talks of 1540 cases of *cryptosporidiosis* in NSW between 1997 and 2000, the inference being these were water supply related. It is common knowledge, however, that the vast majority of *cryptosporidiosis* cases in western societies are sourced from swimming pools not drinking water, so this comment in Box 8 serves simply to alarm the reader rather than to inform.

In 2008/09 99.3% of all NSW bacteriological samples provided by LWUs complied with *E.coli* standards. Approximately 150 samples only from 20,700 across the whole State failed during the year from the 250 water supplies tested. Given the false positives that can arise from contamination during the sampling procedure and from failure to reach the Sydney laboratory within 24 hours from some of the more remote parts of the State as required by protocols, this is a very high compliance rate compared to any other jurisdiction across Australia. Certainly this compliance rate of 99.3% is comparable to results for the Victorian regional corporations.

2.4 Absence of a Skilled Workforce

Australian industry as a whole, not just the water industry, has faced a skills shortage for many years. In addressing this problem within particular industries it is important to identify the root causes and address these causes. This has not been done. The AECOM report makes sweeping statements and arrives at recommendations that are inconsistent with the report contents. The report states that its anecdotal evidence upon which this observation is based is “common across Australia, not just limited to regional towns, with some also observed in Major cities”.

The report at Section 3.5 then recommends creating regional corporations in order to “have a better chance of attracting appropriately qualified professional staff.” The AECOM report has not presented evidence to indicate that, on a fit-for-purpose basis, professional staff in LWUs perform at any lesser standard than their peers in the major water corporations. Scale, by itself, is not a guarantee that desirable outcomes will be achieved. Examples of this are provided in the response to Section 2.7.

NSW LWUs have benefitted from positive actions targeted at addressing specific skill problems. Economies of scope, afforded by having water operations combined with Councils general purpose operations, provide benefits of attracting staff of a calibre and breadth of experience appropriate to meet management requirements. Any identified additional specialist skills required within Councils water operations has been addressed by innovative approaches such as alliances between groups of Councils, use of consultants either by individual Councils or on a regional basis or by regional cooperation through agencies such as the Water Directorate and the Water Loss Management Program in partnership with the Australia Government (Water Smart Australia program).

2.5 Inadequate Operator Training

The stated benefits of improved operator training are interesting observations. It would be useful if any evidence to support these observations was presented within the report.

Training courses run by the NOW provide high standard water treatment plant operator training available to all regional water utilities in NSW. This training is presented by experienced and respected professional operators, and involves written tests, mathematics tests, and on-site assessment of students back at their own plants. The training is at Certificate III standard in accordance with NSW TAFE requirements. The NOW then follows that up with regular inspections of all LWUs by a team of six full-time Inspectors who circulate around the state providing follow-up, feedback and mentoring of Council operators. As another means of routine follow-up, every LWU in NSW is required to annually report the qualifications and training provided for all of its operators to the NOW in its annual performance report.

A major factor in staff retention / career paths for water treatment plant operators is the geographical limitations faced by widely dispersed regional communities. Work opportunities afforded by the scope of operations undertaken by regional councils is considered to provide greater potential to retain the necessary operator skills within these communities when compared with a regional water supply model where, for career progression, an operator would need to move to a larger town or a regional headquarters. Under the current structure operators can, and do, move to larger towns to pursue a water career, however, they also have the opportunity to remain with their existing Council and broaden the scope of their skills.

2.6 Poor Catchment Based Planning

The report appropriately notes the benefits of catchment based planning as currently carried out in NSW. However, the report fails to comment on the benefits that arise from this catchment based planning being implemented at a local level where water service delivery is integrated with other Council general purpose functions.

IWCM planning at the catchment level is part of *NSW Best Management Practice Guidelines*. At the local level implementation of these plans involves coordinating achievement of water objectives with land use planning, economic development priorities, environmental objectives and other Council operations that are major water users such as parks and reserves, aquatic leisure centres, airports, show grounds and caravan parks. An important component of IWCM is water sensitive urban design to minimise the impacts of urban development on the water balance and the environment and to help address water scarcity by diversifying supply options and conserve water.

IWCM combines all aspects of the urban water cycle (water supply, sewerage, stormwater, conservation, recycling, pollution prevention, flood control etc) to ensure that water is used optimally for urban development as well as within the natural water

cycle. IWCM not only requires integration of the various elements of the water cycle but also integration with strategic urban planning and land use development controls. Water Sensitive Urban Design (WSUD) applies the principles of IWCM in the built environment and focuses on on-site residential and commercial developments. Examples of WSUD include rainwater tanks, recycling, grey water reuse and stormwater harvesting schemes.

Local government across regional NSW, because of the integration it affords to strategic water supply planning, water supply and sewerage provision, stormwater and drainage management, strategic urban planning, and land use development control, is ideally placed to implement the WSUD concept. It is important to recognise also that the formal process of IWCM planning, as set out by the NOW, overtly requires a whole-of-catchment approach to be taken, and a draft plan will simply NOT be approved by NOW unless this is demonstrated.

The benefits from IWCM would be much more difficult to achieve in an institutional setting where strategic planning for and delivery of water operations and infrastructure were removed from local government. Separate water utilities would struggle to facilitate integrated planning due to a lack of direct involvement in the strategic community planning process and access to the powers of both the *Local Government Act (NSW) 1993* and the *Environmental Planning and Assessment Act (NSW) 1979*. Also, decision makers in water entities who are completely removed from local government might not have the incentive to look beyond their business objectives and aim to achieve whole-of-community outcomes.

2.7 Inadequate and Inconsistent Planning Frameworks

This section of the AECOM report commences with “Water business related planning is not performed well in regional areas compared with the planning undertaken for metropolitan and larger regional centres”. In the context of this report (water quality and security), however, the validity of this statement is highly questionable. During the recent drought one of the highest risk areas in NSW for running out of water was Sydney Water as evidenced by its need for the hasty, expensive and unpopular construction of a desalination plant. Similarly Hunter Water has changed its mind several times over the past few years as to whether Tillegra Dam is required for its long term water security. In addition, one of the most significant boil water alerts, in terms of persons impacted, within Australia in recent history was Sydney Water’s *Cryptosporidium* / *Giardia* occurrence in 1998. The purpose of these examples is not to criticise Sydney Water or Hunter Water but to point out the poor logic that AECOM has used in reaching their conclusion.

The greater number of staff in larger organisations certainly produce a larger volume of planning documents (often viewed as being evidence of good planning) and weight of statistics (often viewed as being evidence of good performance) however this should not be confused with the adequacy or appropriateness of planning or quality of planning outcomes. Water planning in regional NSW, operating within the NOW framework, is considered to provide fit-for-purpose outcomes at a price the community can afford.

Planning within LWUs provides for the management of the various factors such as drought, demand, water quality, climate change and capital infrastructure listed in the AECOM report. Moreover it is clear from the experience of the recent millennium drought (the "worst in a 100 years"), where not one NSW water supply scheme was observed to "fail", that planning in regional NSW must have actually been highly effective during the last 20 years or so, or else the results could not have been so overwhelmingly positive.

The Water Directorate certainly supports a national approach for consistency in planning frameworks and reporting that builds upon the NOW model, provided such a model does not inflict an unnecessary burden on regional Councils. Planning and reporting frameworks need to be fit for purpose and not merely standardised to conform with a methodology appropriate to the larger utilities.

2.7.1 Supporting Evidence

This section commences with the statement "Accountability to both regulators and customers is especially lacking in regional towns. "Unfortunately it displays a total lack of understanding of local government. Customers in regional towns elect their board of directors (Councillors) – and can fire them at the next election - and have direct access to them for grievance resolution. Within the larger utilities the board of directors are appointed by the State Government with little or no consultation with customers. These directors invariably have silent telephone numbers and private emails so they are not disturbed by disgruntled customers. This does not demonstrate a higher level of accountability to customers.

The report appears to equate "accountability to regulators" to reporting requirements. As such it is pleasing that the advanced state of reporting by NSW LWUs is recognised. In addition to this reporting, LWUs in regional NSW are subject to the following regulation by external agencies:

- Department of Health – regulates and monitors water quality in reticulated water supplies, including fluoridation of water supplies;

- Department of Environment, Climate Change and Water – regulates water supply extractions and volumetric entitlements, including water sharing plans and monitoring of waterways;
- Catchment management authorities – responsible for implementation and funding of catchment activity plan;
- Dam Safety Committee – responsible for surveillance and monitoring of prescribed dams for both water supplies and regulated waterways;
- NOW - responsible for approvals pursuant to section 60 of the *Local government Act (NSW) 1993*, main regulator of the sector through the DWE Best Practice Management for Water Supply and Sewerage Guidelines, performance reporting through the NOW *Supply and Sewerage NSW Performance Monitoring Report*, management of the Country Towns Water Supply and Sewerage Program;
- Independent Pricing and Regulatory Tribunal – review of NOW Developer Charges Guidelines for Water Supply, Sewerage and Stormwater; and
- Department of Local government – responsible for compliance with *Local Government Act (NSW) 1993* and ensuring the implementation of proper governance in the industry

2.7.1.1 Water Security Planning and Water Restrictions

The report blames a general lack of planning as the basis for water restrictions in many regional towns. The report is silent on the fact that Australia has been through one of its most widespread and longest droughts ("the worst in 100 years") that affected regional and metropolitan utilities alike including significant impacts on Sydney Water. During the period 1986 to 2001, on the other hand, a period preceded by the 1983/84 drought, water restrictions across regional NSW were avoided 90% of the time in absolute agreement with this State's 5/10/10 Planning Rule for security of water supply. It is not fair to single out regional NSW as having struggled to meet that 90% benchmark during the much more severe millennium drought when utilities all over Australia, large and small, failed to cope. Selective use of data by the consultant in this matter simply draws into question the credibility of this report.

Water restrictions are one of a range of drought management measures available to water managers. To be effective restrictions need to target high water use areas that can be reduced without resulting in unacceptable consequences within the community given the current water supply situation. The wide range of different water uses within the communities of the various utilities mean that water restrictions need to be targeted

and one size may not fit all. The standardisation of restriction regimes, for its stated advantages in reporting and monitoring, is supported provided such standardisation does not impact achievement of restriction objectives. This has been achieved in the Macquarie Valley where, by consensus because of regional similarities in water security and use, ten regional water utilities have adopted identical water supply restriction definitions.

The report is overly simplistic in its comments in relation to water supply planning. The wide range of variables associated with water supply planning make it extremely unlikely that a single planning approach across all utilities will ever work satisfactorily. As indicated above by the Sydney Water and Hunter Water examples planning will always need to be flexible and appropriate to both the current situation and possible changes in the future.

2.8 Governance Arrangements

A significant reason for the report recommending the Victorian model is that "historical data shows larger water utilities service their regional communities at relatively lower cost, with the annual water bill in Victoria being approximately 20% cheaper than the annual bill in regional NSW". This statement, like many in this report, is misleading.

Data presented on page 59 of the *2008/2009 NSW Water Supply and Sewerage Performance Monitoring Report* shows the average operating cost for water in regional Victoria was $389 per connected property compared to $330 per connected property in regional NSW. Similarly, the Operating Cost per connected property for Water Supply and Sewerage Combined was $670 for NSW and $710 for regional Victoria while the median Economic Real Rate of Return for Water Supply and Sewerage in 2008/09 was 0.6% in regional NSW versus 0.4% in regional Victoria. Based on this additional information it is clear that NSW LWUs are performing more efficiently.

Typical Residential Bill (TRB) for water supply and sewerage is another measure by which NSW performs well in comparison to Victoria. In the last 14 years the TRB has risen by only 2% in real terms in regional NSW. In Victoria the same bills have gone up 15% in just the last five years, and according to media reports are expected to rise another 20 to 30 % in the next three years.

The report indicates at Section 2.1.1 that "poor water quality and water security planning are still evident in some parts of the State (Victoria)" even after more than 16 years of operating under a State Water Corporation model. Section 2.3.1.1 refers to the poor level of tertiary water treatment in regional Victoria (53 localities receiving only disinfection) as a significant example of poor performance within the industry. The same

is true, but more dramatically so, for the status of sewerage treatment throughout regional Victoria. Under NWI Indicator E3, the percentage of Sewage Treated to a Tertiary or Advanced Level, NSW reported a result of 88% in 2008/09, but Victoria could only report 15%. The Water Directorate considers this a very poor result upon which to base adverse findings against the current governance model operating here in NSW. Under Box 2 on page 8 “Operating profits in Victoria” the report states “operating revenue for Victoria Water Utilities nearly doubled from 2008/09 to 2009/10 “which had been “driven predominately by increases in pricing”. Therefore many of the stated advantages of the Victorian model are not supported factually or by the content of the AECOM report itself.

The report is overly simplistic in its “one size fits all” recommendation for governance arrangements. If such an argument was valid then the performance of the organisations working under the recommended structure would be demonstrably superior to that of organisations working under alternate structures. This is not the case based on even the selective data presented in the AECOM report.

While changes in structure may have some advantages there are costs and disadvantages associated with such change. The AECOM report does not provide any assessment of the costs or disadvantages associated with implementing its recommendations. Without a full analysis of both the advantages and disadvantages, based on site specific data, any recommendation for change must be viewed with caution.

The Water Directorate does not view change for its own sake as being a valid basis for sound decision making.

3.6 Practical Solutions to Localised Issues

In this section the report makes unreasonable generalised criticisms of all non-metropolitan water utilities when it talks of “fundamental problems …repeated across all States and through numerous regional communities”. These are specified with examples as follows: “there are communities without metering, many networks suffer from large water losses, distribution systems are not adequately managed to prevent recontamination events and consumer efficiency measures have not been put in place”.

Such comments fly in the face of reality in regional NSW. For example:

a. The only town in NSW still not metered is Brewarrina, with 470 connected properties. Given that LWUs in NSW serve 791,000 connected properties, it is

contended that 99.94% implementation of metering represents significant disagreement with the Report's assertion.

b. Large water losses are not a feature of NSW LWUs. Only 5 of 29 LWUs reporting in the 2008/09 National Performance Report for Urban Water Utilities exceeded the rate of real losses per service connection per day reported by Sydney and Hunter Water, despite the much longer length of water main per connection endemic to regional water utilities. NSW has also been host, since 2007, to the world's largest and most extensive Water Loss Management Program, a $22 million joint venture between the Australian Government, the NSW Local Government and Shires Association and the Water Directorate. During the life of this program, 75l LWUs have availed themselves of the technical and financial assistance available under that program. Whilst the report's claims regarding "large water losses" may have foundation in other States, it is firmly rejected as being descriptive of the NSW situation.

c. Without data or examples upon which to base the assertion that recontamination is common across NSW, it remains nothing but an untested assertion. The 2008/09 NSW Benchmarking Report, for example, details the known reason for all boil water alerts issued in NSW during a two year period and lists five very specific sources of contamination which were discovered and remedied by the individual LWUs involved. Water Quality Management Plans in accordance with ADWG requirements are now mandatory as of 2010 and are being developed across the State. These will improve what is already a highly performing sector of the national industry, where microbiological compliance achieved for regional NSW in 2008/09 was 99.3%.

d. In NSW the performance of LWUs in the area of water conservation has been exemplary to date. The average annual water supplied per connected property has fallen 47% over the past 18 years (see the 2008/09 NSW Water Supply and Sewerage Performance Monitoring Report), with 87% of all utilities now reporting implementation of a sound water conservation plan. To assert that consumer efficiency measures are not in place in "numerous" communities across NSW is simply not true.

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