

Review of the Country Towns Water Supply and Sewerage Program

The Need to Restore Funding

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This Position Paper, prepared for the Local Government and Shires Associations (LGSA) and the Water Directorate, sets out the case for the NSW Government to honor the commitment it made in 1996 that it would provide a 50% subsidy to country councils towards the cost of capital works needed to overcome backlog problems with their water and sewerage services.

1 History of the Country Towns Water Supply and Sewerage Program

The Country Towns Water Supply and Sewerage (CTWSS) Program continues a long history of co-operation between state and local governments in the delivery of safe and affordable water supply and sewerage services in country towns in NSW.

1.1 Legislation for Country Town Services

The provision of water supply and sewerage was established as a local government responsibility by the *Municipalities Act 1867*.

In 1880 the government enacted the *Country Towns Water Supply and Sewerage Act 1880* which gave the Minister for Public Works powers to construct works for country town services managed by country councils and to oversight councils' operation of these services.

This latter act was repealed in 1919 and simplified provisions covering the powers and duties of both councils and the Minister for Public Works were placed in Part 14 of the *Local Government Act 1919*. A similar process was followed in 1993 with the passage of the *Local Government Act 1993*. The role of the Minister for Public Works was passed to the Minister for Land and Water Conservation in 1995 and then to the Minister for Energy, Water and Sustainability in 2003.

1.2 Development of the CTWSS Program

Early History

Since 1880 some form of financial assistance has been provided to country towns for the provision of services. The present form of assistance was established by the *Local Government (Further Amendment) Act 1935*. The stated policy objective of the Government was to make possible the construction of water supply, sewerage and other development works where the full cost might be beyond the resources of the council. The 1935 Act established a formula based on a threshold rating for determining the proportion of a project's cost which a Council could reasonably finance wholly from its own resources before supplementary Government funding was provided.

The program was modified in the 1950s to make it less open ended by limiting the Government contribution to a maximum of 50% of the capital cost of the works. It has also been amended regularly by adjusting the threshold rate upwards in line with the movements in the consumer price index.

Program Changes 1994-96

In 1994, after extensive consultation with councils through the LGSA, the Minister for Public Works submitted a proposal for major changes to the CTWSS Program to the Capital Works Committee.

The main points in the proposal were:

- Government would increase funding to the Program to \$85m per year (1994 dollars) for 10 years so that all schemes at that time could be brought up to an acceptable standard that met all requirements of government regulatory agencies.

- In return, councils were to:
 - Fund works designed to cater for growth
 - Prepare and implement a strategic business plan which would demonstrate they were adopting best practice in such activities as:
 - Financial planning
 - Setting developer charges and tariffs
 - Demand management
 - Asset management

The \$85 million subsidy per year for 10 years was based on a preliminary estimate prepared by the Public Works Department of \$1,700 million overall cost to eliminate all backlog problems.

The overall cost estimate and proposed government allocations were calculated in 1994 in dollars of the day. No allowance was made for cost escalation over the projected 10 year life of the program. This was in accordance with Treasury guidelines at the time. Treasury made the necessary adjustments for cost escalation in its allocations for all programs.

Estimates were prepared on Public Works' understanding of the regulatory requirements and operational standards that would be in place over the next few years. For example, requirements for drinking water quality were based on national guidelines that were in an advanced draft stage of development at the time. The Minister proposed in addition that the Program budget should be increased when regulatory agencies introduced more stringent requirements than had been allowed in the Department's original estimates.

The Capital Works Committee endorsed the Minister's proposal. It approved funding for a three year rolling program at \$85 million per annum with the objective of clearing the backlog established as at 30 June 1994 within 10 years. The Public Works Department was requested to provide, on a regular basis for all outstanding backlog projects, the latest available estimates which took into account technological changes and alternative options. It recommended to Cabinet that changes in regulatory requirements should not be approved until the cost impact on government services had been examined by the Capital Works Committee.

The Minister did not introduce the new policy, presumably because of political sensitivity to removing the subsidy for works for growth in the run-up to the State Government elections in 1995.

The Carr Labor Government was elected to office in 1995 and administration of the Program was transferred to the newly created Department of Land and Water Conservation. In January 1996 the Minister for Land and Water Conservation announced that he would implement the new policy and a brochure setting out full details of the changes was prepared and issued to all Councils.

The Minister for Land and Water Conservation administered the program with relatively minor changes until 2003 when responsibility for the Program was transferred to the Department of Energy, Utilities and Sustainability (DEUS).

Program Changes 2004-05

The Minister for Energy, Utilities and Sustainability commissioned a review of the Program in 2003. Local government was not represented on the review committee or given opportunity to make any presentation to it. Following completion of the review the Minister announced major changes to the Program in June 2004.

For projects that were not already subject to a construction subsidy agreement:

- Grants would be reduced from 50% to 20% of backlog costs for Councils with a turnover of more than \$10 million pa in their combined water and sewerage account or \$5m pa where they only provide one service;
- Grants for unsewered towns would be reduced from 75% to 50% and the maximum subsidy capped at \$15,000 / tenement;
- The threshold typical residential bill was increased from \$253 to \$350;
- An independent committee of officers from nominated government departments would assign a priority ranking (1 to 10) to all projects based on security of supply, public health and environmental impact considerations. Available funding for new works would be provided each year to the highest ranked projects; and
- Councils would have to comply with the Best Practice Management of Water and Sewerage Guidelines, May 2004 issued by DEUS.

Neither the LGSA nor the Water Directorate have ever been given a copy of the review report, but judging from these key recommendations, the review would seem to have focused on how government financial commitment could be reduced.

The initial prioritisation of projects on the department's waiting list has been completed. The Minister wrote to all councils with priority 1 and 2 projects and some with priority 3 projects advising that their projects would be funded. Other Councils were advised by the Department that they could submit their unfunded projects for funding in subsequent years' prioritisation review.

The Minister has recently indicated in press releases and meeting with LGSA that funds available to the program are limited to \$908m and that, with \$639m already spent as at 30 June 2004 and major commitments to works in progress and recently approved new works, there will be little if any remaining funds for additional projects.

It is this latest development coupled with the reduction in the size criteria of grants under the new policy that has prompted LGSA and the Water Directorate to prepare this paper.

2 Implementation of the 1994-96 and 2004-05 Changes

The 1994-96 changes to the original CTWSS Program involved commitments:

- By Local Government, to fully fund works for growth and to introduce nominated best practice reforms; and
- By the State Government, to provide \$85 million (1994 dollars) per annum for 10 years to assist councils to overcome backlog problems.

How well have these commitments been honoured?

2.1 Local Government Funding Works for Growth and Introduction of Reforms

Councils have generally met their commitments under the Program. This is evidenced by the following:

- All councils are fully funding works for growth. The average typical developer charge for water supply has been increased from \$1600 in 1994 to \$2500 in 2004, and from \$1300 to \$2500 for sewerage over the same time range;

- By 30 Jun 2004, 86% of councils had completed strategic business plans or had such plans in final draft form; and
- 83% of Councils had a two-part or inclining block water tariff structures in place with a strong pay-for-use component. Average annual residential water consumption had fallen from 330 kL/property in 1991 to 215 kL/property in 2003/04.

The above supporting statistics are taken from the annual NSW Water Supply and Sewerage Performance Monitoring Reports produced by DEUS.

2.2 State Government's Allocation of Funds

State Government's Position

The Minister released a press statement on 24 May 2005 stating:

"The Government's spending on improvements to water and sewerage systems will rise to \$908m with total funds of \$67.2m available in 2005-06, including \$32.2m in new funds. These will be used to subsidise almost 40 new projects and provide ongoing assistance to more than a hundred projects currently under construction".

Neither the LGSA nor the Water Directorate have been provided with formal advice of the basis of the increase in the overall budget from \$850 million (1994 dollars) to \$908 million. To the best available knowledge, it is understood that it includes:

- \$20 million subsidy from the Sydney Catchment Authority for upgrading the sewerage systems of country towns located in the outer Warragamba Dam catchment;
- \$12 million for drought projects; and
- \$21 million for partial cost escalation over the last 4 years.

Treasury Budget papers indicate that the allocation of government funds to the Program for 2005/06 is \$32.2m. The total funds referred to by the Minister (ie: \$67.2m) presumably therefore includes council contributions.

Indications are that most, if not all, of the \$908 million has now been committed to the recently approved new works and to completing works in progress.

Information available to councils would confirm this position. Treasury budget papers indicate total allocations to the Program including 2005/06 of \$718 million. It is estimated that commitment to works in progress and to the recently announced new works could well account for most of the remaining \$190 million.

Recommended LGSA and Water Directorate Position

An analysis of the funding provided by State Government to the Program since July 1994 is shown in Table 1 below.

In considering the adequacy of Government's allocations it is essential that proper allowance made for inflationary increases in construction costs since July 1994.

There is no index that has accurately tracked increases in costs of water and sewerage projects in country NSW over this period. The building cost index (BCI) for Sydney prepared by Rawlinsons is considered to be the most appropriate index of those available and was therefore used in the analysis.

Annual State expenditures on the CTWSS Program were taken from Treasury Budget Papers. The outstanding Treasury commitment for the CTWSS Program at the end of each financial year was calculated by taking the commitment at the start of the financial year, adding an increase equal to the % change in the BCI for that year multiplied by the mid year commitment and then deducting the allocation for that financial year (ie: Commitment year end = commitment year start *(1- Allocation/2)* %BCI- Allocation).

A BCI increase of 3% per annum was assumed for the first half of 2005/06. No increase in BCI was allowed for after June 2005.

Table 1: Analysis of CTWSS Program Expenditure

Year	Program Allocation	BCI Increase	Residual Commitment With Cost Escalation	Residual Commitment With no cost Escalation	Program Allocation in 1994 \$
	\$m	% p.a.	\$m	\$m	\$m (1994)
			850	850	
94/95	85	2.85	788	765	83.8
95/96	75	4.07	744	690	71.8
96/97	62	6.23	726	628	56.3
97/98	50	6.72	723	578	42.1
98/99	49	6.42	719	529	38.7
99/00	52	5.12	702	477	38.3
00/01	57	1.77	657	420	40.5
01/02	88	1.18	576	332	62.6
02/03	64	3.76	533	268	44.4
03/04	64	4.81	493	204	42.1
04/05	40	3.77	471	164	25.1
05/06	32	0.00	439	132	19.9
Total	718				565.5
10 Year Total	646				520.5
to 03-04					

The Government has not honoured its commitment to fund the Program. Annual expenditure has never reached the commitment of \$85 million in 1994 dollars for any of the 10 years. To 2003/04, after 10 years of the Program, it has provided a total of \$646.0 million. This would be equal to \$520.5 million in 1994 dollars, for an average annual expenditure of only \$52.0 million. In 2004/05, program expenditure was only \$25.1 million in 1994 dollar values, and the budgeted expenditure for 2005/06 is a mere \$20.4 million in 1994 dollar values.

It can be seen from Table 1 above that Councils should have every reason to believe that, as at 30 June 2006, some \$439 m (2005 dollars) should remain of the original \$850m (1994 dollars) commitment to the Program.

This is before any consideration is given to justification for enhancing the overall budget because of more stringent regularity requirements introduced by the State Government or the cumulative effect of approved changes in scope to many individual projects.

This figure of \$471 million residual as at June 2004 is in strong contrast with the figure of \$190m that can be derived from recent statements by the Minister.

3 Impact of Reduction in Government Funding

Councils have identified in excess of 200 backlog projects that they have submitted for subsidy and that have not been included in the Minister's recent offers to new projects. The list is attached at Appendix 1.

These projects were previously on the Department's priority list. On this basis, councils have been proceeding with preconstruction activities and community consultation on the clear understanding that they would receive government financial assistance.

These typically comprise towns without water or sewerage service or existing schemes with backlog problems. There are over 133 sewerage projects. Of these projects, 60 involve construction of sewerage systems in villages that presently rely on household septic tanks.

There have been many reviews of the ability of septic tanks to deal safely with household liquid wastes in closely settled areas. All have concluded that this cannot be achieved with normal lot sizes and that massed septic tanks are associated with increased public health risks and significant adverse environmental impacts.

Eighty nine projects involve considerable expenditure for upgrading of existing sewage collection and treatment systems. Nine of these projects are focused on upgrading sewage treatment plants only and 5 more on improvements to effluent management only including construction of effluent reuse systems.

There are over 90 water supply projects of which 62 are general upgrades to existing systems so that they can meet accepted standards of quality, pressure and drought reliability.

Eleven projects are concerned with water treatment facilities. Clearly, safe drinking water is essential in the interests of public health both for the local community and tourists.

4 Recent Changes in Operating Environment for Local Water Utilities

The operating environment for councils providing water supply and sewerage services has become increasingly difficult since 1994 and councils are incurring significantly increased costs in complying with government's regulatory requirements and natural/ climatic changes. Some examples are given below.

4.1 River Flow and Water Quality Objectives

As a result of the NSW Government's reforms of September 1995 a range of interim water quality and river flow objectives has been developed for each major catchment in the State.

The Healthy Rivers Commission was established in 1996 to conduct independent public inquiries into the health of NSW rivers. It is making recommendations to Government on longer term environmental objectives and necessary actions for these catchments.

A further public inquiry in 1997 resulted in the Codd Report, *The Management of Sewerage and Sewerage By-Products in the NSW Coastal Zone*. This report made recommendations to government for integrated planning of water, sewerage and drainage services and about re-use of sewerage by-products; i.e. sewage effluent and sludge.

Water Sharing Plans are being developed under the *Water Management Act 2000* to help safeguard river flow and, to a lesser extent, water quality objectives.

Under this Act water for the environment is given first priority in water sharing plans and town water supplies withdrawals are being restricted to a proportion of higher stream flows.

The impact of this policy will vary from town to town, but on towns drawing water from small unregulated streams it could mean a doubling of required storage size.

Water quality objectives are being targeted by:

- Establishing and empowering Catchment Management Authorities under the Catchment Management Authorities Act 2003 to deal with diffuse pollution;
- Regulating pollution from point sources through the issue of licences;
- Under the Protection of the Environment Operations Act 1997. load-based licensing is being applied to council sewage effluent discharges and is adding significant costs to council operations;
- Pollution Reduction Programs negotiated with the Department of Environment and Conservation were based on expectations of government funding. Therefore many councils developed rating structures that will now be inadequate. This will severely impact the Government's ability to achieve catchment management objectives.
- The Department of Environment and Conservation has also introduced a program to license whole sewerage systems to enable it to better control sewer overflows; and
- This tighter regulation is reducing point source pollution, but again at considerable cost to country councils.

While the rural community accepts these initiatives are aimed at improving the health of the State's waterways there has been little or no contribution from State funds towards meeting the costs of securing a better environment for all the State's population.

4.2 Drinking Water Quality

New Australian Drinking Water Guidelines were issued in 1996 and further revised in 2004. These guidelines are risk-based and recommend a multiple barrier approach. One of the stated guiding principles reads: "In the absence of complete protection of source water, filtration is likely to be required to improve the removal of viruses and protozoa". Complete source protection cannot be achieved in country surface water catchments, so filtration has become necessary in many instances where it was not necessary before 2004.

Influenced by these guidelines and by the *Cryptosporidium* problems that Sydney Water experienced in 1998, councils are moving to filter all surface water supplies and increasingly adopting more expensive membrane filtration technology which can effectively remove *Cryptosporidium* and *Giardia*. Before 1998, these expensive technologies were never even contemplated.

4.3 Drought and Global Warming

Since 1997/98 of NSW has been suffering severe drought conditions. In some areas, streamflows over the last 2 to 3 years have been the lowest on record.

This situation has exposed the vulnerability of many country town water supply systems to extended droughts. The critical situation reached at Goulburn with its main storage drawn down to 10% of capacity by June 2005 provides a graphic example of this vulnerability.

The Climate Impact Group, CSIRO Atmospheric Research has investigated possible future changes in the NSW climate and the impact of such changes on water resources.

In Part 1 of a major study “Climate Change in NSW”, CSIRO 2004, the CSIRO’s overall conclusions were that under SRES scenarios by 2030:

- Average annual temperatures would increase by 0.2°C to 2.1°C as indicated below:
 - +0.2°C to 1.6°C in the coastal and southern regions;
 - +0.2°C to 1.8°C in the central west; and
 - +0.3°C to 2.1°C in the northern region.

Modelling indicates a general tendency for decreasing annual average rainfall over NSW, but with strong seasonal and regional variations. SRES scenarios gave changes as:

- -3% to +7% in winter for all NSW, in the north-west in summer and in the north in autumn;
- -20% to +7% in spring for all NSW;
- -7% to +13% along the coast and north-east in summer and in the far west in autumn.
- Annual potential evaporation increases across NSW of 1.5% to 13% west of the highlands and 1% to 8% along the coast.

In Part 2 of this study, the CSIRO investigated the impact of global warming on climate extremes including drought and extreme rainfall. By 2030 the frequency of drought could change by between -35% and +70%. The results for extreme daily rainfall showed much variation between regions, but for many regions there was a high likelihood of an increase in extreme rainfall events despite a reduction in annual average rainfall.

There are major difficulties in using this research to obtain a reliable estimate of the impact of climate change on streamflows and urban water demand.

However the severity of the present drought coupled with the broad consensus amongst climate scientists that global warming will cause a further reduction in drought streamflows should cause councils to make further investment in water supply headworks over the next decade.

A number of Councils that initially applied for funding under the program for water augmentation schemes have now discovered that they may not receive any subsidy. This is contrary to the warnings of climate scientists outlined above.

5 Comparable Funding Practices Elsewhere for Country Town Services

The Treasurer’s decision to cut funding to the Program and the Minister’s decision to reduce the size of grants to individual projects contrasts strongly with what is happening with the major NSW water agencies, in several other States in Australia and overseas.

There is universal recognition of the multiple benefits of adequate, safe and environmentally responsible water supply and sewerage services for country towns and villages. There is also a general acceptance that some form of financial assistance is required to make these systems affordable to rural communities. Some examples are given below.

5.1 Major NSW Water Agencies

The Independent Pricing and Regulatory Tribunal’s Determination No 4 in 1997 in connection with pricing of backlog sewerage services for Sydney and Hunter Water Corporations and Gosford City

and Wyong Shire Councils is particularly relevant to the need to provide financial assistance to NSW country towns.

The Tribunal examined 4 backlog sewerage projects proposed by Sydney water and established pricing principles that it will apply to all backlog projects for the major water authorities.

The key principles are:

- “The underlying principle is that the costs associated with the provision of sewerage in backlog areas should be recovered from users or beneficiaries of these services.
- In cases where environmental or public health hazards pose a risk to the local and the wider community, the tribunal considers that the wider community should share these costs with local residents.
- Where Capital costs are to be shared, up to 25% of costs should be paid by local residents at the time of connection to the service and the remaining capital costs should be paid by all customers of the water authority, through an increased common sewerage charge. Further, contributions by residents are to be capped at a maximum of \$3,000 to ensure affordability.”

The Tribunal’s figures for the Bundeena sewerage project were as shown in Table 2 below:

Table 2: Bundeena Sewerage Project Funding Analysis

Capital cost		\$15.100m	
No. of lots	1,400		
Resident contribution	25%	\$3.775m	(1,400lots @ \$2,696/lot)
Subsidy from Sydney rate base	75%	\$11.325m	

The Government’s decision in 1995 to require Sydney Water to cross-subsidise backlog projects reversed the previous Government’s decision to provide funding as a Community Service Obligation.

In a 2001 Sydney Water information sheet it was stated that the 25% (capped at a maximum of \$3,000) previously paid by local residents would now be funded by the NSW Government as a Social Program. Unlike the current situation in regional NSW, all unsewered villages in the Sydney basin were being fully funded by Sydney Water and State Government in a cost sharing arrangement.

5.2 Queensland

The Queensland Government has a longstanding policy of supporting country town water and sewerage services. The Government substantially increased the rates of subsidy from 1 July 1996 to those shown below.

Water Supply

Subsidy of 40% towards cost of water supply headworks. This includes source of supply (dams, weirs, bores), treatment works and delivery mains to the first service reservoir.

Sewerage

Subsidy of 40% towards cost of treatment works, nutrient removal works, effluent disposal works and works for the disposal or re-use of sludge.

Wastewater Re-use

Subsidy of 50% towards works which provide for the long term beneficial re-use of sewage effluent.

These subsidies are applicable to both new projects and augmentation works; i.e. works for growth are also subsidized.

The Minister for the Environment, Local Government and Planning announced on 7 June 2005 that “\$650 million will be made available over the next 5 years for water and sewerage improvements to enable councils to respond effectively to increasing demands for improvements to water and sewerage infrastructure”. She also said “more than 50% of the new money would be directed to regional Queensland where further investment in water and sewerage infrastructure in particular was vitally important”.

The reasons for continuing financial support are expanded in the 2005-06 budget papers:

“The department manages grant and subsidy programs that assist local governing bodies to provide a broad range of infrastructure and services in response to community needs, thereby contributing to the economic performance of the State and supporting the development and improvement of service delivery to local communities. Improving equity in access to services is an important objective of these programs, which recognize differences in the economic circumstances of communities throughout the State.”

5.3 Western Australia

The Water Corporation is responsible for the provision of water supply and sewerage services to Perth and the majority of country towns. The Corporation is required to provide water at a uniform price to metropolitan and country users. This requirement has led to payment by the State government of a large annual subsidy (Community Service Obligation) to the Water Corporation supporting country services.

The Corporation stated in a submission to the WA Economic Regulation Authority’s Inquiry on Urban Water and Wastewater pricing:

“The uniform policy commenced in 1993/94 as part of the pay for service / pay for use tariff reform. Part of the Government’s vision was to have a statewide consumption charge for average consumption, to end discrimination between metropolitan and country households. This concept has been maintained by successive Governments. The provision of water at below cost to country towns is supported by Government through a CSO payment to the Corporation for the loss associated with operating country schemes, which in 2003/04 totalled \$120 million.”

The Economic Regulation Authority stated in its draft report March 2005:

“On the issue of Customer Service Obligations (CSOs), the Authority is indifferent to whether the uniform tariff policy is funded by a direct government payment or a reduction in dividend requirement.”

5.4 United States of America

There is generous financial support in the United States for local authorities supplying water and sewerage services. The administrative arrangements are complex with many Federal agencies providing funds and each State also running its own programs. A report prepared by the United States General Accounting Office in November 2001 provides an overview of this situation.

In the 10 years from 1991 to 2000 inclusive 9 federal agencies provided a total of \$US44 billion to the states for drinking water and wastewater capital improvements.

The states provided a total of \$US25 billion for matching federal funds and financing state specific programs.

With total financial assistance averaging \$US6.9 billion per annum, the average annual per-capita subsidy computes to around \$A32.40 based on a US population of 295.7 million, the per-capita level of support is clearly more generous than that provided by the NSW Government in the order of \$8.95, based on a total annual subsidy of \$60 million for an estimated NSW population of 6.7 million.

The reasons for provision of financial support vary with the nature of the program.

For example the Federal Safe Drinking Water Act had the prime objective of protection of the nation's drinking water supply. Funding is provided through grants and a multi-billion dollar Drinking Water State Revolving Fund (DWSRF) for infrastructure.

An EPA report on this fund states *“EPA's recent Needs Survey shows that the costs to make drinking water infrastructure improvements to protect health fall most heavily on customers of small public drinking water systems. These system's problems result from a lack of economies of scale, remoteness, poor source water quality and decades of neglect. For this reason the DWSRF emphasizes assistance to small systems.”*

5.5 Canada

Perhaps because of its vast areas of remote, lowly populated and largely undeveloped land featuring many small, remote settlements, Canada has developed systems of cross-subsidisation in the provision of many basic utilities, including water supply and sewerage.

Provision of these services is the responsibility of the major cities and rural centres under the direction of its 13 Provinces and Territories – much as Australia's are provided. In this respect, a comparison is perhaps useful.

Subsidies are provided by the Provincial Governments of Canada, and are generally made on the basis of affordability, which in turn is a reflection of the urban/rural demographic divide. The net result is that the richer cities cross-subsidise the poorer remote settlements with respect to water supply and sewerage service. There appears to be no clear and universal formula for this redistribution, and it is suspected that there is a strong political influence in the process.

Overlaying this Provincial funding is a regional development funding program implemented by the Federal Government. Areas of specific need and/or economic deprivation are identified for these regional programs, and funding of infrastructure projects of all kinds is generally agreed on a three-thirds basis between the Canadian federal government, the provincial government and the local government.

An example of this is the Canada/ New Brunswick Infrastructure Program, whereby a total of C\$163 million over 6 years was declared, starting in 2002. All forms of infrastructure were eligible for funding, but water and wastewater projects have to date dominated the program as the priority class. Backlog, renewal and expansion projects are eligible, and a minimum of 40% of the funding has to be directed to projects in rural communities.

If the federal and provincial funding components are classed as subsidies, an average year's subsidy totals C\$21.7 million once the lower funded initial two years have passed. Based on the province's population of 752,000, this equates to a per capita subsidy of around A\$27.40. This is some three times the \$8.95 per capita subsidy mentioned above for NSW.

6 Reasons for Providing Financial Assistance to Country Towns

Review of the practices of other agencies set out in Section 5 indicates that two fundamental arguments are used to support provision of financial assistance for country services. They are:

- Beneficiaries should pay; and
- Social equity requires that safe water and sewerage services should be available to all at an affordable cost.

Both arguments are relevant to country NSW.

These principles are examined in more detail below.

6.1 Beneficiaries Should Pay

Beneficiaries are not restricted to consumers connected to the system.

This argument is best developed by IPART in its 1994 determination for backlog sewerage pricing in NSW's major centres. IPART rejected the polluter pays principle for new sewerage schemes as it considered that:

- There are no universally agreed methods to measure the costs of environmental damage;
- Environmental damage may also be due to other causes; and
- While malfunctioning on-site systems cause land and water pollution, not all systems in a town will be malfunctioning.

IPART adopted the beneficiary pays approach. IPART considered that the residents of backlog sewerage projects would benefit through:

- A healthier and more pleasant local environment;
- Enhanced land value to property owners; and
- The development of local commercial and industrial enterprises.

However, IPART considered that benefits also accrue to the wider community in the form of:

- Protection of public health;
- Protection of the environment, including riverine and marine ecosystems; and
- Economic activities associated with waterways, including tourism.

For the backlog sewerage projects within Sydney Water Corporation's service area, IPART considered that the residents should pay 25% of the capital costs and all Sydney Water's customers, representing the broader community of beneficiaries, should pay the remaining 75%.

In other states and the overseas countries investigated, the beneficiary pays principle appears to have been adopted without being named as such. For example, the EPA in the United States of America introduced its Safe Drinking Water Act with a national goal of ensuring all town water supplies meet stringent public health requirements. It is achieving this goal through provision of

tied funds to the states. The states are required to provide matching funds to local authorities and attach conditions to any grants to ensure the EPA's requirements are met. Identified beneficiaries making different levels of contribution are the nation, the state and the local community.

6.2 Social Equity

The most commonly used argument in favour of providing financial assistance to country towns is based on considerations of social equity.

Most governments take the view that safe water supply and sewerage are basic services that are essential for modern urban living and should be available at a price that is both equitable and affordable across all sections of the community.

There are large economies of scale in the provision of water and sewerage infrastructure. Consequently, the capital investment per consumer is very much higher in country towns and villages than in large cities.

Affordability for country townspeople can only be achieved by use of one or more of the following:

- Capital grants to offset the higher capital costs in smaller communities;
- Social payments to needy groups (Community Service Obligations, Social Programs); and
- Setting uniform charges across a large population base.

In the cases examined, Western Australia provides a good example where all three methods have been used to bring affordable services to country towns.

6.3 Application to Country NSW

Beneficiaries

In NSW, there are clear whole-of-state benefits in country towns having adequate, safe and environmentally sensitive water and sewerage in country towns. These benefits include:

Water supply

- Protection of public health, including visitors to towns (tourists, people travelling on business);
- Public safety – adequate fire service for residential fires and assistance with bush firefighting; and
- Public safety – dams meeting modern safety standards to avoid dam failure catastrophe.

Sewerage

- Protection of the environment - waterways protected from pollution; and
- Protection of public health – residents, visitors and downstream communities.

Water supply and sewerage

- Facilitation of regional development and decentralisation; and
- Facilitation of tourism.

Equity

The problem of small scale infrastructure ensures that the capital investment per consumer in country town systems will always be higher per consumer than in Sydney and Newcastle. Country councils are facing larger capital costs, and often have to meet more stringent requirements of state regulatory authorities. Average incomes are lower in country towns and unemployment is generally higher.

In the case of country town services, a practical way for the State representing the wider community to pay for the benefits identified above is through payments towards the capital cost of necessary system upgrades.

Where such payments are insufficient to make annual charges affordable to most residents, additional assistance can be justified under the equity argument. Tying affordability to some relationship with average charges in Sydney Water's area would seem reasonable.

7 Summary and Conclusion

This analysis has clearly established that, after allowing for the 2005/06 CTWSSP allocation, \$439 million (in 2005 dollars) should remain from the original commitment of \$850 million (in 1994 dollars) to enable councils to overcome backlog problems.

It is understood that only \$190 million remains. Under the current Minister, a nominal allowance has been made for cost escalation on a minor proportion of the program in the Government's assessment.

If the Government's present fund assessment is not increased, more than 200 backlog projects on the Department's priority list will not receive subsidy.

The Government is placing a more stringent regulatory regime over council water and sewerage services, and this is already involving Councils in significant additional expenditure.

Country NSW is in severe drought and the CSIRO is predicting that there is a strong likelihood that more severe droughts could occur over the next 25 years. Many councils will have to augment their water supply headworks to deal with this situation.

In these circumstances, it is considered that it is an inappropriate time for Government to reduce its funding to the program and attempt to escape from a firm commitment to fund the total backlog program.

The practice of providing financial assistance to local authorities providing water and sewerage services is followed in other Australian states and overseas.

Construction costs per consumer are much higher for small country towns than for large cities leading to much higher costs of service provision.

Financial assistance is justified elsewhere on the basis that these services should be available in all settled areas at affordable charges, and that upgrading these services provides benefits to the general community as well as to local residents and that the general community should therefore contribute towards the costs.

IPART's 1997 Determination in connection with backlog sewerage schemes for Sydney is relevant to considerations of subsidy for country town systems. IPART assessed that local residents should pay 25% of the capital cost of providing sewerage systems to four unsewered areas and that the wider community should meet the cost of the remaining 75%. The NSW Government has subsequently decided to fund the 25% on behalf of local residents through a Social Program.

This brief review of practice elsewhere adds weight to the LGSA's and the Water Directorate's position that NSW Government must reconsider its recent decision to limit funding to the CTWSS Program.

It is recommended that the LGSA and Water Directorate seek the following:

- A commitment from Government that it will reassess residual funds available to the Program after making realistic allowances for cost escalation from 1994;
- An increase in annual allocations to more closely match the original agreement between Government and country councils of \$85m per annum (in 1994 dollars);
- A return to a more consultative approach to administration of the Program including a joint review of the effect of the reduction in grants to individual projects introduced in 2004. This review would give particular attention to the level of subsidy provided for new small town sewerage schemes; and
- An increase in funding to assist councils comply with changes to legislation and application of more stringent regulatory requirements (eg load based licensing, 2004 Drinking Water Guidelines, Water Management Act 2000).

APPENDIX 1

COUNTRY TOWNS WATER SUPPLY AND SEWERAGE PROGRAM
Partial List of Projects that have not had a Subsidy offer by April 2005

S =Sewerage augmentation : SER = Sewerage Effluent re-use: SN = New sewerage scheme
W = Water augmentation: WD = Water- dam project: WT = WaterTreatment Project

COUNCIL	TYPE	PROJECT	DEUS RANKING
Ballina	S	Ballina STP ultimate upgrade	
Berrigan	S	Finley Sewerage & Effluent Recycling System	10
Byron	S	Byron Bay Sewerage System Upgrade	4
Carrathool	S	Hillston Sewerage	8
Clarence Valley	S	Ilarwill Sewerage Const	4
Clarence Valley	S	Maclean/Townsend Sewerage Const	4
Clarence Valley	S	Yamba Sewerage Aug Const	4
Coolamon	S	Ardlethan Sewerage - Construction	5
Deniliquin	S	Deniliquin Sewerage Stage 2	4
Dungog	S	Gresford Sewerage Const	7
Dungog	S	Paterson Sewerage Const	7
Eastern Capital City	S	Bungendore Sewerage Infiltration Study	8
Eurobodalla	S	Spine Road	
Eurobodalla	S	Malua Bay	
Eurobodalla	S	Telemetry	
Gloucester	S	Barrington Sewerage Const	8
Inverell	S	Yetman Sewerage	7
Kempsey	S	Stuarts Point/Grassy Head Sewerage	5
Kempsey	S	Bellbrook Sewerage	8
Kyogle	S	Kyogle Sewerage	4
Kyogle	S	Bonalbo Treatment Plant	5
Kyogle	S	UMMWWS Construction Works	6
Kyogle	S	UMMWWS Treatment Construction Works	NA
Kyogle	S	UMMWWS Storage Construction Works	NA
Mid Western	S	Mudgee Sewerage Construction	4
MidCoast County	S	Stround Sewerage Aug Const	4
MidCoast County	S	Tuncurry Swerage Aug	7
Moree Plains	S	Moree Sewerage - SE Sector	10
Murrumbidgee	S	Coleambally Sewerage	7
Narrabri	S	Bellata Sewerage	5
Narrabri	S	Wee Waa Sewerage	7
Narrandera	S	Barellan Sewerage (S158)	5
Narrandera	S	Narrandera Sewerage (S136)	5
Oberon	S	Oberon Sewerage Treatment Works	7
Parkes	S	Parkes Sewerage Augmentation	5
Parkes	S	Tullamore Sewerage Scheme	5
Parkes	S	Trundle Sewerage Scheme	5

Richmond Valley	S	Evans Head Sewerage Augmentation	3
Richmond Valley	S	Casino Sewerage Augmentation	
Richmond Valley	S	Coraki Sewerage Augmentation	
Richmond Valley	S	Broadwater Sewerage	5
Shoalhaven	S	Currarong Sewerage	5
Tenterfield	S	Tenterfield Sewerage Construction	3
Tumbarumba	S	Tumbarumba Sewerage Treatment Plant	3
Tumut	S	Brungle Sewerage	5
Tumut	S	Batlow Sewerage	5
Tweed	S	Kingscliffe Sewerage	8
Upper Hunter	S	Cassilis Sewerage Const	8
Upper Lachlan	S	Taralga Sewerage Construction	2
Uralla	S	Bundarra Sewerage	7
Walcha	S	Walcha Sewerage Construction	3
Warren	S	Warren STP Augmentation	5
Warrumbungle	S	Coolah Sewerage	7
Warrumbungle	S	Coonabarabran Sewerage Aug	7
Warrumbungle	S	Dunedoo Sewerage	8
Warrumbungle	S	Mendooran Sverage	8
Weddin	S	Grenfell Sewerage Const	8
Wellington	S	Geurie Sewerage Construction	5
Wentworth	S	Wentworth Sewerage Scheme	5
Yass Valley	S	Binalong Village Sewerage	7
Bellingen	SER	Dorrigo Sewerage Reuse	4
Bourke	SER	Sge Effluent Management	8
Eurobodalla	SER	Effluent Reuse	
Gilgandra	SER	Gilgandra Sewerage Effluent Management Project	7
Lachlan	SER	Lachlan Sewerage Effluent Mgt Const	10
Mid Western	SER	Rylstone Sewerage Effluent Mgt Const	8
Shoalhaven	SER	Sussex Inlet EMS	8
Cabonne	SN	Four Town Sewerage Scheme	
Clarence Valley	SN	Lawrence Sewerage	7
Clarence Valley	SN	Wooli Sewerage Const	3
Clarence Valley	SN	Ulmarra Sewerage Const	5
Cooma-Monaro	SN	Bredbo Wastewater	
Dubbo	SN	Brockelhurst Village Sewerage Scheme	8
Dubbo	SN	Wongarbon Village Sewerage Scheme	8
Dungog	SN	Dungog Villages Sewerage Const	7
Eurobodalla	SN	Sewerage to High Priority Villages	
Eurobodalla	SN	Sewerage to Low Priority Villages	
Eurobodalla	SN	Rosedale/Gorilla Bay Sewerage	4
Eurobodalla	SN	South Durras Sewerage Const	4
Eurobodalla	SN	Nelligen Sewerage Const	5
Eurobodalla	SN	Bodalla Sewerage Const	7
Eurobodalla	SN	Central Tilba Sge Const	7
Eurobodalla	SN	Congo Sewerage Const	7
Eurobodalla	SN	Mystery Bay Sewerage Const	7
Eurobodalla	SN	Potato Point Sewerage Const	7
Gosford	SN	Cheero Point Sewerage Construction	3
Gosford	SN	Little Wobby Sewerage Construction	3
Gosford	SN	Mooney Mooney Sewerage Const	3
Gosford	SN	Bar Point Sewerage Construction	3
Gosford	SN	Bensville Sewerage Construction	3
Gosford	SN	Patonga Creek Sewerage Const	3
Griffith	SN	Griffith Villages Sewerage Precon	5

Griffith	SN	Lake Wyangan Sewerage - Const	5
Griffith	SN	Nericon Sewerage Construction	7
Griffith	SN	Tharbogang Sewerage Construction	7
Hastings	SN	North Shore Sewerage Const	3
Hastings	SN	Beechwood Sewerage Const	7
Hastings	SN	Comboyne Sewerage Const	7
Hastings	SN	Telegraph Point Sewerage	7
Hastings	SN	Long Flat Sewerage (Hastings) Const	8
Leeton	SN	Wamoon Sewerage	7
Lismore	SN	North Woodburn Wastewater System	
Liverpool Plains	SN	Wallabadah Sewerage	7
Liverpool Plains	SN	Willow Tree Sewerage	7
Mid Western	SN	Charbon Sewerage Construction	7
MidCoast County	SN	Stroud Road Sewerage	7
MidCoast County	SN	Nerong Sewerage Const	7
MidCoast County	SN	Crowdy Head Sewerage Const	4
MidCoast County	SN	Allworth Sewerage Const	7
MidCoast County	SN	Bundabah Sewerage Const	7
MidCoast County	SN	Coomba Park Sewerage Const	7
MidCoast County	SN	North Arm Cove Sewerage Const	7
MidCoast County	SN	Pindimar Sewerage Const	7
Tamworth	SN	Attunga Sewerage Construction	7
Tamworth	SN	Duri Sewerage Construction	7
Tamworth	SN	Nundle Swerage Construction	7
Tweed	SN	Burringbar-Mooball Sewerage	5
Tweed	SN	Kielvale	
Wagga Wagga	SN	Collingullie Sewage	5
Wagga Wagga	SN	San Isidore Sewage	7
Wingecarribee	SN	Exeter Sewerage	not ranked
Wingecarribee	SN	Burrawang Sewerage	not ranked
Wingecarribee	SN	Yerrinbool Sewerage	5
Yass Valley	SN	Murrumbatenman Village Sewerage	3
Yass Valley	SN	Bowning Village Sewerage	8
Yass Valley	SN	Sutton Village Sewerage	8
Bega Valley	W	Bega valley ws construction	3
Bellingen	W	Lower Bellingen Water Supply Stage 2	10
Berrigan	W	Tocumwal Water Augmentation	5
Berrigan	W	Finley Water Augmentation	6
Bourke	W	WS Aug Construction	6
Carrathool	W	Carrathool WS	8
Cooma-Monaro	W	Cooma Water Supply Reservoir Upgrade	9
Corowa	W	Balldale WS Construction	4
Corowa	W	Daysdale WS Construction	6
Corowa	W	Savernake WS Construction	6
Cowra	W	Drought Management Preparation of Plan	
Cowra	W	Drought Mgt Emergency Water Supply	
Cowra	W	Drought Mgt Emergency WS Invest	
Cowra	W	Drought Mgt Emergency WS Const	
Dubbo	W	Ballimore Village Water Supply	6
Dubbo	W	Eumungerie Village Water Supply Scheme	6
Dungog	W	Dungog Villages WS Const	5
Glen Innes Severn	W	Glen Innes Water Project	10
Gloucester	W	Barrington Water Supply	4
Greater Argyle	W	Tarago Water Supply	6
Gwydir	W	Yallaroi Water Supply Augmentation	
Jerilderie	W	Jerilderie WS Augmentation	9
Kempsey	W	Crescent Head Water	
Kyogle	W	Kyogle IWCM	4
Kyogle	W	Bonalbo Alternate Source	9
Lachlan	W	Tottenham WS	8
Leeton	W	Whitton WS	10
Lismore	W	Nimbin Water Supply Augmentation	5
Lithgow	W	Lithgow WS	6
MidCoast County	W	Tea Gardens / Hawks Nest WS	5

Moree Plains	W	Biniguy WS	6
Moree Plains	W	Ahsley W/S	8
Moree Plains	W	Moree WS Study	8
Murray	W	Wamboona WS Const	6
Murray	W	Bunnaloo WS	8
Murrumbidgee	W	Darlington Pt and Coleambally WS	7
Nambucca	W	Nambucca Water Supply	
Narrabri	W	Narrabri WS Augmentation	9
Narrandera	W	Narrandera WS (W776)	8
Orange	W	Spring Hill / Lucknow WS Construction	10
Parkes	W	Parkes Water Supply	6
Richmond Valley	W	Casino Water Supply	
Riverina Water	W	Humula	
Singleton	W	Broke WS	6
Singleton	W	Bulga WS Const	6
Singleton	W	Camberwell WS Const	6
Tamworth	W	Barraba WS Security	8
Tamworth	W	Tamworth Water Supply River Intake	4
Upper Hunter	W	Scone-Aberdeen WS Stage 2 Const	3
Upper Lachlan	W	Taralga Water Supply Augmentation	6
Walgett	W	Rowena WS	7
Walgett	W	Walgett WS Aug	9
Wellington	W	Stuart Town WS Construction	6
Wentworth	W	Pooncarie WS Aug Construction	8
Wingecarribee	W	Balmoral Water Supply	not ranked
Wingecarribee	W	Penrose/Wingello Water Supply	not ranked
Yass Valley	W	Yass Water Supply Strategy	9
Yass Valley	W	Murrumbattenman Water Supply Augmentation	3
Armidale/Dumaresq	WD	Malpas Dam Wall Investigation	
Armidale/Dumaresq	WD	Malpas Dam Outlet Tunnel Safety Investigations and Improvement Works	
Armidale/Dumaresq	WD	Dumaresq Dam	
Armidale/Dumaresq	WD	Puddledock Dam	
MidCoast County	WD	Manning Dist WS Stg Dam Const	8
Rous County	WD	Rocky Creek Dam Remedial Works	0
Upper Hunter	WD	Murrurundi WS Dam Raising Const	4
Bourke	WT	WS Sludge Management	10
Clarence Valley	WT	Grafton WS Lime/CO2 Dosing Cosnt	6
Cowra	WT	Darbys Falls Water Supply Filtration	
Cowra	WT	Cowra Ws sludge management	
Cowra	WT	Construction WFP	
Eurobodalla	WT	Eurobodalla WS Stg 4B WTPs Const	8
Liverpool Plains	WT	Quirindi Shire WS Disinfection Const	4
Tenterfield	WT	Tenterfield WS	6
Tumbarumba	WT	Tumbarumba Water Treatment Plant	4
Yass Valley	WT	Yass Water Supply Water Softening Construction	10