

WATER IN PUBLIC HANDS

COUNCILS COLLABORATING TO DELIVER LOCAL WATER

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ABSTRACT

The provision of quality secure drinking water is not discretionary.

The delivery of water supply and sewerage services to communities across the world is undertaken in a range of ways. These include central government owned corporations, local government owned businesses and alliances, private sector operators and in some cases community owned and operated undertakings.

In this paper we present an overview of some of the delivery models, together with discussion on work undertaken by other organisations in examining the factors that influence the most appropriate delivery model for communities, both large and small. Discussion will be drawn from Australian and international sources.

The findings of the various reports will put into perspective the effectiveness and efficiency of the current models for the delivery of water and sewerage services in non-metropolitan New South Wales by Local Government owned water utilities.

Of note is the work done by Central NSW Councils as a Pilot Joint Organisation, seeking to optimise water and sewerage services through collaboration between Councils, other levels of government and key agencies.

INTRODUCTION

In New South Wales, water supply and sewerage services are provided to approximately 8 million consumers, of these 8 million, 1.8 million reside outside the metropolitan areas of Greater Sydney, Newcastle and Wollongong. These three areas have their water and sewerage services delivered by State Owned Corporations, with some private sector providers contracted to the Corporations.

The portion of New South Wales that is outside of these metropolitan areas is the focus of this paper. It is an area of almost 800,000 sq kms.

Water supply and sewerage services in this area are delivered by 105 regional local water utilities. As identified in the *NSW Department of Primary Industries Water 2014-15 NSW Water Supply and Sewerage Performance Monitoring Report* (Samra S. et al, 2016), the number of connected properties range from over 71,000 to less than 200 and the volume of total water supplied ranges from over 15,000 ML/annum to less than 200 ML/annum.

This range of physical characteristics, combined with the geographic spread of communities within many local water utilities and the wide range of climatic conditions all contribute to the nature of water supply and sewerage service delivery in regional New South Wales.

WHERE HAVE WE COME FROM?

For over 100 years, the delivery of water supply and sewerage services in regional New South Wales has been undertaken by Local Government councils in partnership with the NSW Government, under the Country Towns Water Supply and Sewerage Program. The Program was developed to provide leadership and guidance to local water utilities and to facilitate the building of the utilities' capacity and capability to develop and operate sound and affordable water supply and sewerage services in regional New South Wales. One aspect of the Program was the provision of financial assistance (50%) towards new water supply and sewerage infrastructure.

In 1996 the NSW Government introduced major reforms to the Program, after consultation with the then Local Government Association and Shires Association. One of the reforms was to only provide financial assistance towards the component of infrastructure works required to meet the demands and regulatory standards in place in 1996. This was termed the "backlog" component. In addition, the completion of a sound strategic business plan and financial plan became a pre-condition for gaining financial assistance. Any works required to meet higher demand, generally due to population growth, or higher standards, were required to be funded by the local water utility.

Further changes were introduced in 2004, including the definition of large water utilities and small water utilities. This definition was based on the annual turnover of the local water utility. In short, those utilities with a turnover of more than \$10 million per annum were defined as large and those with a turnover of less than \$10 million were defined as small. The main change under the Program funding was that large utilities were only eligible for a maximum of 20 percent subsidy for the backlog component of their projects. Small utilities remained eligible for up to 50 percent subsidy for the backlog components of their projects.

One of the founding philosophies behind the current and former Country Towns Water Supply and Sewerage programs was and is to provide financial support to local water utilities; in part to overcome the lack of economy of scale for non-metropolitan water and sewerage infrastructure. The subsidy aims to bring the typical residential bill for water supply and sewerage services in regional New South Wales to a level comparable to that charged to consumers in Sydney Water's area of operation.

Since 1996, the NSW Government has invested over \$1.2 billion in the Country Towns Water Supply and Sewerage Program. As their contribution during this period, local water utilities have invested over \$3 billion in delivering over 600 projects under the Program.

At the 2016 LGNSW Water Management Conference, held in Broken Hill, a paper presented by Mr Stuart Wilson, Deputy Executive Director, Water Services Association of Australia, *Efficiency Benchmarking and Customer Research* (Wilson S. 2016) clearly documented the influence of size of water utilities' customer base on infrastructure costs and treatment plant operating costs. The data presented in this work shows clearly that water supply and sewerage systems cost more per unit the smaller they are. This applies to dams in terms of the cost of maintenance (\$/ML stored); cost of water treatment (\$/ML treated); cost of waste water treatment (\$/ML treated) and the cost of the level of waste water treatment.

Local water utilities in New South Wales are operating in the range of less than 30,000ML for dam storage (except Gosford-Wyong) and less than 14,000 ML/annum for water and sewage treatment.

All of these indicators relate directly back to the need for financial assistance to overcome the lack of economy of scale in regional water and sewerage networks.

In 2008 the NSW Government commissioned a report titled *Report of the Independent Inquiry into Secure and Sustainable Urban Water Supply and Sewerage Services for Non-Metropolitan NSW*.

(Armstrong and Gellatly, 2008). This report examined the performance of local water utilities and the challenges that were facing them.

This report examined the performance of individual water utilities in 2006/07 and identified areas where, through resource sharing and functional aggregations, the performance of smaller less well resourced water utilities could improve.

In discussing the benefits of aggregates or groups, the Report commented:

"In general, each group in both options:

- 1. Has approximately 10,000 or more connected properties;*
- 2. Is able to generate annual revenue of approximately \$10 million or more;*
- 3. Is sensitive to catchment boundaries;*
- 4. Builds on existing alliances;*
- 5. Has a regional centre located in each potential new entity; and*
- 6. Is based on council submissions made to the Inquiry."*

And

"Four organisational structure models for the aggregated entities have been put forward by councils in their submissions. These are:

- Binding alliance;*
- County council;*
- Council-owned regional water cooperative; and*
- Status quo.*

All of these models were assessed against criteria defined by the Terms of Reference relating to council viability, efficiency, water supply security, employment, community impacts and impacts on the financial sustainability of councils. All models are assessed as being able to meet the criteria to some degree. However, not all models are suitable for all areas and this is consistent with submissions received in the course of the Inquiry that state a "one size fits all" solution is impractical because of the great diversity in geographic and socio-economic conditions across NSW".

Moving forward to 2013, the NSW Government commissioned the Independent Local Government Review Panel to "formulate options for a stronger and more effective system of local government". In its report *Revitalising Local Government* (Samson G. et al 2013) the Panel states "The two key words are options and system. The Panel has made a decisive move away from "one size fits all", and has sought to give communities and regions more options for the way local government is arranged and how it operates" (Page 7).

While the Panel's report examined all areas of Local Government activity, it made specific mention of water utilities. Section 7.5, page 52 states:

"The Panel has some reservations about including water supply and sewerage networks as part of the total infrastructure backlog. Council-owned water utilities are intended to be business enterprises and ought to recover their costs from water rates and user charges in the same way as electricity distributors. The Panel appreciates, however, that considerable increases in rates and charges would be required to satisfy community expectations for extension of water supply and sewerage schemes, and to meet desirable standards for water quality and environmental protection. Also there is a substantial list of previously identified backlog projects that may be eligible for some State government assistance. In those circumstances councils are naturally reluctant to undertake works on a fully commercial basis.

The Panel has been advised that just under \$1 billion is needed to bring all water supply and sewerage systems to acceptable minimum standards. This could involve \$300 million of new State government funding. A priority works program is to be formulated, based on cost-benefit analysis of required upgrades. Again regional collaboration has an important role to play in enabling council-owned water utilities to meet the challenges they face".

The Panel's report also states:

"In addition to the five existing County Councils that operate water utilities, there are several emerging regional alliances promoting closer cooperation between member councils. The Panel sees an opportunity for new Joint Organisations (JOs) to build on these foundations by incorporating functions such as strategic business and network planning, regional water cycle management, high-level technical support to smaller councils, and – where agreed – joint infrastructure and service delivery. Making existing County Councils and regional water alliances subsidiaries of the new JOs would help achieve those objectives. It would also ensure that rural water supply and sewerage assets and operations remain firmly in local government hands." (Page 80).

From the changes to the Country Towns Water Supply and Sewerage Program, the Armstrong-Gellatly report and the Independent Local Government Review Panel's report it is clear that not only is there a need for New South Wales Government support to address the water supply and sewerage infrastructure backlog, but there is a need for regional cooperation amongst local water utilities.

An important message from both the reports cited above is that "one size fits all" is not a practical solution to the challenges the industry faces.

WHERE ARE WE NOW?

In reviewing the historical data of local water utility performance, gathered since 1994 (Samra et al 2016) together with Australia-wide data and commentary published in the *National Performance Report 2014-15: Urban Water Utilities* (BOM et al, 2016) it is clear that across Australia, water utilities are performing at very high levels.

Since performance reporting began in the 1990s all performance measures have improved significantly.

Individual water utilities in New South Wales are delivering water supply and sewerage services which meet public health, water quality and effluent quality standards, system performances are excellent. Overall, the industry is robust, with high levels of skills and commitment amongst staff across all areas of service delivery.

However, as noted by BOM (page 22) utility size is a factor in performance:

"While many factors influence performance, there is a relationship between the size of the utility's customer base (in terms of the number of connections) and its performance on a number of indicators. The relationship may be casual, coincidental, or due to a related matter (for example, larger utilities are subject to price regulation while many smaller utilities are not). Utility size also has a role in establishing economies of scale; however, such economies are also affected by the size of the area serviced by a utility and the density of the population within it."

In the case of New South Wales local water utilities, there are limited opportunities for centralised treatment plants connected with extensive pipelines. In the majority of cases, local systems are the most appropriate and cost effective solution for regional communities.

However, there are opportunities for resource and skills sharing amongst geographically closely linked water utilities.

In recent years, the Central NSW Councils (Centroc) group has worked successfully to explore and develop these opportunities.

Taking its lead from the highly successful Lower Macquarie Water Utilities Alliance (LMWUA), the application of the Alliance model as a highly efficient and cost effective means of supporting the delivery of local water utility services to communities in regional New South Wales has gone from strength to strength.

The LMWUA was originally formed in 2008, with 6 local water utilities in the Macquarie Valley forming a Mandatory Alliance. This has now grown to 11 local water utilities, stretching from Wellington and Dubbo to Bourke and Brewarrina. The Alliance's Vision and Objectives are listed on its website (www.lmwua.nsw.gov.au) as:

Vision: The member councils of the Lower Macquarie Water Utilities Alliance commit to provide a unified approach to the sustainable delivery of water supply and sewerage services, and to achieve and maintain gazetted Best Practice by the earliest feasible date.

Objectives: The initial objectives of the Lower Macquarie Water Utilities Alliance are:

- a) *Resource and staff skills sharing;*
- b) *Water resource sharing opportunities;*
- c) *Peer review of performance and mentoring where appropriate;*
- d) *Development of shared best practice strategies;*
- e) *Funding of best practice strategies and goals.*

The defining principle that guides the Alliance model is that it is critical for the resilience of regional communities that ownership and control over utilities such as water remain firmly in the public's hands through their local governments.

Local Government management and ownership of water utilities in Central New South Wales is being undertaken on a sound basis through the Centroc Water Utilities' Alliance (CWUA) with demonstrable savings and efficiencies being achieved.

The Centroc Water Utilities' Alliance, formed in 2009, is a voluntary collaborative Alliance between 14 Local Government Areas (LGAs), in the Central New South Wales region, including the local water utility operations of Bathurst, Blayney, Cabonne, Cowra, Forbes, Hilltops, Lachlan, Lithgow, Oberon, Orange, Parkes, Upper Lachlan, Weddin and Central Tablelands Water. The Centroc region represents over 243,000 people and covers more than 72,500 sq kms.

Centroc has two core objectives:

1. Regional sustainability – Encourage and nurture suitable investment and infrastructure development throughout the region and support members in their action to seek from Governments financial assistance, legislative and/or policy changes and additional resources required by the Region.
2. Regional Cooperation and Resource Sharing – Contribute to measurable

improvement in the operational efficiency and effectiveness of Member Councils through facilitation of the sharing of knowledge, expertise and resources and, where appropriate, the aggregation of demand and buying power.

The Centroc Board is made up of the 28 Mayors and General Managers of its members Councils who determine priority for the region.

Centroc was selected by the NSW Government as one of only five regional pilot Joint Organisations to assist the NSW Government strengthen and reform Local Government. Joint Organisations are a key component of the State Government's "Fit for the Future" Local Government reform package.

Inter-governmental collaboration was a foundation stone of the JO Pilot and is critical to Centroc's ability to align the priorities of Central New South Wales LGAs and communities to the State.

A key component of Centroc's successful pitch to be a JO Pilot was the value of the CWUA.

Since the formation of both the LMWUA and CWUA the results of the Alliance model are evident in the overall improved best practice compliance of the constituent local water utilities, and enhanced training of water and sewage treatment plant operators.

The performance of local water utilities in regional New South Wales compares favourably with utilities in other Australian jurisdictions, with key factors such as water pricing, water quality, sewage effluent quality and typical residential bills performing equal to or better than comparable regional areas.

The adoption of the Alliance model by LMWUA and Centroc, in the hands of Local Government is performing exceptionally well. In line with the mooted Joint Organisation Legislation, it is delivering effective and efficient services to the local communities through:

- Regional strategic planning and prioritisation;
- Inter-governmental collaboration;
- Regional leadership and advocacy; and
- Operational support to member Councils.

The enhanced level of support that an Alliance can bring to its members, particularly in the areas of water treatment and sewage treatment is of critical importance. The ability of infrastructure to deliver increasingly stringent targets calls for high levels of understanding and competency from all treatment plant operators. The ability for better resourced Alliance members to mentor less well resourced

Alliance partners is benefitting all communities in the Alliance area of operation.

Since its inception in 2009, the Centroc Water Utilities Alliance has achieved the following through its collaborative efforts:

- Collectively saved its members in excess of \$600,000;
- Attracted over \$3 million in grant funding for programming;
- 100% compliance in Best Practice management plans;
- Completed regional Integrated Water Cycle, Drought, Demand and Strategic Business Plans;
- Developed a Regional Priority Water Infrastructure Plan to inform investment;
- Delivered compliance based training in drinking water quality to over 70 operators;
- Formation of a Centroc Operators Group for training, mentoring and skills development;
- \$40,000 in Skillset funding for Workforce Development resulting in 12 operators being certified under the AWA Pilot of the National Certification Framework;
- Work on Water Loss Management through production of a Toolkit distributed to Councils throughout NSW through partnership with the NSW Water Directorate;
- Work underway to develop a Best Practice in Drinking Water Management Program.

Water utilities in New South Wales have a responsibility to cover all costs and provide a positive return on investment to their local Council owner. The level of return is a matter between the water utility and the Council. This varies from community to community but is typically well below what would be required by the private sector.

WHAT IS HAPPENING ELSEWHERE?

Changes in the delivery, ownership and management of infrastructure and services occurs all around the world. The delivery of water supply and sewerage infrastructure is no exception.

Recent work undertaken in 2014 by the Public Services International Research Unit (PSIRU), University of Greenwich, UK and OECD in 2016 provide valuable insights and discussion on how water supply and sewerage services are being delivered under a range of models internationally.

The paper from PSIRU, *National Performance Report 2014-15: Urban Water Utilities* (Lobina E. et al 2014) looks at the growing remunicipalisation of water supply and sewerage services as an emerging global trend. The paper states that *"In the*

last 15 years, there have been at least 180 cases of remunicipalisation in 35 countries".

Remunicipalisation is the "taking back" of public control of water supply and sewerage service management from private sector operators, either at the end of a contract or by way of a contract termination.

The paper makes for interesting and thought provoking reading. A few extracts that relate to this discussion are:

"Public water operators and national or regional associations are increasingly helping each other through the remunicipalisation process. In Spain, the regional public company Aguas de Huesna (Andalusia) facilitated remunicipalisation for 22 municipalities. The remunicipalised water operators from Paris and Grenoble played a role in helping other local authorities in France and elsewhere to remunicipalise and improve their water services. French authorities and public water operators have benefitted from the exchange of experience and knowledge on remunicipalisation that has been facilitated by associations of local government and public enterprises". Page 6.

"After failed Public-Private Partnership (PPP) experiments, the Mozambican government entered into a not-for-profit partnership with a Dutch public water company focusing on local capacity building. Cooperation between public water companies as part of public-public partnerships is a viable alternative to costly PPPs and are the most effective way to assist public water authorities in improving services." Page 6.

"Policy makers and public officials who are considering transferring the management of water services to the private sector should consider the risks and learn from the mistakes of other authorities". Page 6.

"Solidarity, cooperation and partnerships between public authorities can unlock the way to more democratic, inclusive and sustainable water services". Page 6.

A number of cases of remunicipalisation are discussed in the paper. Following are extracts from some of these cases:

"In 1984, two 25-year lease contracts for water supply in Paris were awarded....". "In 2000, the contracts were criticised by the regional audit body for lack of financial transparency and in 2002 an audit commissioned by the city of Paris found that the prices charged by the lease operators were between 25% and 30% more than economically justified costs."... "in 2003, the city of Paris decided to take back control of its water supply. Remunicipalisation took place in January 2010 after

the expiry of the two private contracts.....” “In the first year of operations, the new municipal operator Eau de Paris realized efficiency savings of €35 million, which allowed for an 8% drop in tariffs” Page 7.

“The contract with....guaranteed that the return on investment for the private shareholders would be 8%, and this level of profitability would be guaranteed by the state of Berlin for 28 years.” Page 8.

“In the four years.....operated Atlanta’s water system (1999-2003), it halved the workforce and tariffs continued to increase each year” Page 8.

Once again, interesting and thought provoking reading.

In its 2016 report *Water Governance In Cities* (OECD 2016) OECD examines a wide range of issues in relation to the delivery of water supply in a number of OECD member countries.

Of particular interest is chapter 3, *Mapping who does what in urban water governance*. While the report examines cities in a number of OECD member countries, the size of all cities are all larger than any community in regional New South Wales. However, there are a number of models discussed, including alliances between local or municipal councils.

Irrespective of community size, the allocation of roles and responsibilities across various levels of government is widely discussed, with the role of central or sub-national governments being policy and regulatory setting. The role of monitoring, implementation of policy requirements and service delivery is widely allocated to Local Government or multi-Local Government organisations.

In addition to the governance mapping discussion, OECD raises significant and important issues relating to inter-dependencies across all levels of government and the impacts of over-lapping roles and gaps in governance roles.

In recent years in New South Wales, changes to legislative roles and responsibilities across a number of State Government agencies has undermined local government’s confidence in any long-term policy direction.

While the need for regulation and direction from central government in relation to policy settings and legislative requirements is recognised and understood, local government needs such policy and regulation to be consistent and stable over extended timeframes.

OTHER CONSIDERATIONS

Not examined in this paper but also worthy of remark are:

- The economies of scope offered by Local Government management of water utilities;
- The fit with Integrated Planning and Reporting (IP and R) and community and Council management of their water where IP and R, while firmly embraced by Local Government in New South Wales, is still in its infancy; and
- The relationship between community control over assets and community resilience including voluntarism.

There is also the potential to look in greater depth at the approach taken in other jurisdictions where, for example, interest has been expressed in Central New South Wales about water management in non-metropolitan Switzerland and its relationship to local governance.

CONCLUSIONS

Looking at the models of delivery of water supply and sewerage services, both within Australia and overseas, we could ask ourselves “In New South Wales, have we missed the boat, dodged the bullet, or got it right?”

At the present time, there is no large scale privatisation of water supply and sewerage service delivery in regional New South Wales. As a result there have been no cases of remunicipalisation.

Does that answer the first two parts of the question?

Has the industry in regional New South Wales missed the privatisation boat? In answer, was it ever considered as an appropriate model?

Having not boarded the privatisation boat, have we avoided the need to dodge the bullet and work through the processes of remunicipalisation?

It appears that we have.

So does that mean that we have got it right in regional New South Wales?

Over the past 20 years, local water utilities across regional New South Wales have developed and matured to a point where, now, they represent world-class service delivery organisations, serving their communities, from within the communities.

They have adapted to changes along the way, endured prolonged droughts without placing their communities’ water supplies at risk, managed floods, storms and bushfires.

There are always changes in regulations and requirements, some minor, some not so. There is also a need to give Integrated Planning and Reporting the time needed to optimise its fit with water utilities.

The defining principle that guides the Alliance model is that it is critical for the resilience of regional communities that ownership and control over utilities such as water remain firmly in public hands through their Local Governments.

The Alliance model has been gaining worldwide acknowledgement particularly throughout Europe which, in the last decade, has seen an emerging trend towards new governance structures such as municipalities seeking to wrestle back control of their water supplies from the private sector.

Collaborative Alliances in Australia have also gained recognition by the Productivity Commission, Infrastructure NSW, Infrastructure Australia, IPART and the Office of Local Government, as a potential model for the delivery of local water utility services in regional and rural areas.

The preparedness to respond to climate variability, changes to drinking water requirements, drinking water management plans, Health Based Targets, increasing effluent quality requirements and more will be more easily achieved for water utilities that are part of locally owned and operated Alliances.

As has been noted in reports cited here, there is no "one size fits all", however there is a strong case for the flexibility and agility provided in a Local Government owned and operated local water utility sector, built around strong collegiate Alliances.

Within current New South Wales local water utilities there are standalone utilities, County Councils with a handful of member Councils and alliances with up to 15 member Councils. This arrangement displays not only a recognition that "one size fits all" is not appropriate, but a capacity across New South Wales to adopt a structure that serves local conditions optimally.

There is an opportunity with the suggested Joint Organisation Model to further embed intergovernmental collaboration both within Alliances and then with other levels of Government.

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