

Shoalhaven Water - A Business Group of Shoalhaven City Council

PRODUCTIVITY COMMISSION INQUIRY INTO AUSTRALIA'S URBAN WATER SECTOR

This submission is provided by Shoalhaven Council, and attempts to provide the Commission with a perspective from a relatively large regional NSW Council that has a strong history of innovation and achievement in its water business.

Council has structured its submission in such a way as to provide the Commission with some background of Council's Water Business, and has focused on the Commission's 6 key questions :

- 1. What Objectives Should Governments have for the Urban Water Sector ?**
- 2. What are the Impediments to Achieving these Objectives ?**
- 3. Is there a Strong Case for Reforming Australia's Urban Water Sector**
- 4. How Large are the Opportunities for Efficiency Gains ?**
- 5. What are the Main Reasons that these Potential Gains are not being Realised at Present ?**
- 6. Which Options for Reform Offer the Largest Benefits in Metropolitan and Regional Urban Areas ?**

Background

Shoalhaven Water is a business unit of Shoalhaven City Council, located on the South Coast of New South Wales, 160km south of Sydney. The Local Government area includes 49 towns and villages, scattered predominantly along the coast.

The following table provides a snapshot of the key characteristics of the Shoalhaven Water system.

Total assessments – water supply	49,849
Total assessments – sewerage	45,720
Number of Water Treatment Plants	4
Number of water pumping stations	25
Length of water mains (km)	1,500
Properties served per km of water main	30
Number of sewage treatment plants	12
Number of sewage pumping stations	221
Length of sewerage mains (km)	1,140
Properties served per km of sewer main	35
Current Replacement Costs – Water (2010)	\$473M
Current Replacement Costs - Sewer (2010)	\$637M

Achievements in Water Supply and Sewerage

Water Supply

Shoalhaven City Council has been proactive for many years in planning for the security of water supply for the Shoalhaven Local Government Area. Council had negotiated and lobbied the New South Wales State Government for 4 years to provide sustainable outcomes for the Shoalhaven River system. An agreement was finally reached in 2006 that secured water licence entitlements for the Shoalhaven City and provided for positive environmental outcomes.

Shoalhaven Water has also been proactive in its focus on water education and water demand management. In collaboration with a local theatre company, Shoalhaven has created a Water/Wastewater education program based around the “Tapstar”

character, which utilizes professional actors, mobile props and structured scripts to meet education syllabus outcomes. The “Tapstar” Waterwise education program has educated local school children about water conservation since 1996 and is highly recognized in the Shoalhaven and has now been expanded into shows in other States of Australia.

Sewerage

Significant commitments and long-term planning for extensive re-use programs has placed the Shoalhaven at the forefront of the sustainable re-use of both liquid and solid by-products of the sewage process.

Shoalhaven City Council is involved in water reclamation schemes at ten of its 12 operating wastewater treatment plants involving re-use on 29 properties.

The largest scheme is the Northern Shoalhaven Reclaimed Water Management Scheme (REMS). REMS is one of the largest and most complex water-recycling schemes undertaken by a regional Australian water authority. The first stage commissioned in January 2002 involves four wastewater treatment plants and re-use on 22 properties. The REMS Stage 1A entered its eighth year of operation in 2009/10 with 72% of scheme output beneficially re-used over the life of the scheme. 100% of processed, dewatered biosolids is reused on agricultural land in accordance with NSW Government environmental guidelines.

Other

In addition to the provision of water and sewerage services, Shoalhaven Water also manages an effluent and sludge cartage service to customers who have on-site sewage systems. This service is managed by Shoalhaven Water through a contract arrangement with a private company. This service is supplied to approximately 8,000 customers, and is funded through full cost recovery policy.

Shoalhaven City Council also formed a company, Southern Water Services, with the consent of the Minister in 1998. Southern Water Services was formed for the purpose of providing services to the water and sewerage industry. This company serves as a vehicle for Council’s involvement in the management of a tea tree plantation for effluent re-use, management of telecommunication towers and consultancy services to other organizations.

Key Questions

1. What Objectives Should Governments have for the Urban Water Sector ?

Shoalhaven Council, as one level of Government, believes that the Urban Water Sector should provide water and wastewater services to residential, commercial and industrial users in an efficient and effective manner. The definition of efficient and effective is of course open to interpretation and Council welcomes the Commission's proposal to develop a detailed definition of an efficient Urban Water Sector. Council considers that the effective provision of service includes taking due consideration of local factors and area specific challenges. This is particularly true in regional areas where the large distances involved in the provision of water and sewerage services brings an inherent lack of economies of scale.

This point is illustrated by the data in the table below, where the Shoalhaven area is compared to Sydney Water, Hunter Water, and ACTEW. The sparsity of serviced properties within the Shoalhaven leads to lower number of connections per km of main, and considerably more treatment plants per head of population. (Note that the source of this data is the 2008/09 National Performance Report).

2008/09 DATA	ACTEW	Sydney Water Corporation	Hunter Water Corporation	Shoalhaven City Council
Total connected properties - water supply ('000s)	144	1755	222	45.67
Total connected properties - sewerage ('000s)	144	1707	211	39.41
Number of Water Treatment Plants	2	9	6	4
Length of water mains (km)	3059	20936	4822	1471
Properties served per km of water main	47	84	46	31
Number of sewage treatment plants	2	29	18	12
Length of sewerage mains (km)	3059	23817	4625.59	1117
Properties served per km of sewer main	47	72	46	35
Average number properties served/sewage treatment plant	72,000	60,517	12,333	3,806

Council notes that the Commission has flagged the question of whether there is greater or lesser scope for reform in the regional Urban Water Sector compared to Metropolitan Urban Areas. Shoalhaven, as a relatively large local water utility in regional NSW, considers that a 'one size does not fit all', and Shoalhaven's issues are different from (for example) some Western Councils in NSW and also different from a large water utility such as Sydney Water.

Council, as the tier of government that is closest to its customers, is very conscious of the need to balance the competing demands of communities. Regional communities face many different issues compared to metropolitan areas. Lower employment opportunities, less access to public transport, less access to wider utility services such as natural gas, and higher fuel prices are just a few of the challenges that affect local communities.

Shoalhaven City Council has undertaken a proactive approach over a number of years within its own structure to give the priority that water and wastewater facilities require and deserve. This structure clearly defines Shoalhaven Water as a business within Council. This governance model allows professional and effective planning, reporting and pricing functions to ensure the provision of cost effective, safe and reliable water and sewerage services.

2. What are the Impediments to Achieving these Objectives ?

There are a number of limitations under current statutory arrangements that inhibit or limit a local Council water utility's ability to operate in a more efficient manner. For example, the payment and timing of water and sewerage rates and charges is tied in with S562 of the NSW Local Government Act 1993 and does not suit a separately-billing utility business with periodical meter readings.

There are many synergies between Council's water business and the other functions of local government, and this could be greatly strengthened by legislative reform.

For example, the whole concept of Integrated Water Cycle Management (IWCM) is analogous with the scope of Local Government activities. IWCM requires a trans-disciplinary approach to the management of water resources. The structure of local Councils already allows for the facilitation of this approach. Attempts by some local Councils to adopt an IWCM approach have been thwarted by the inability of the State Government to provide a single approach to this complex issue. In the case of one Council, for example, despite the demonstration of clear contradictions between BASIX and IWCM modelling outcomes, the Council was unable to get agreement between the various state government departments as to how to proceed with its modelled outcomes.

Despite a major emphasis on guidelines (Best Practice, Developer Servicing Plans), there is still a lack of regulatory integrity that confirms some of Council's water and sewerage business activities. A review of the State Government Developer Servicing Guidelines by IPART in 2007 raised questions about the future of such guidelines. Despite submissions and input into public sessions, Councils have never been advised of any outcome of this process. This has been and continues to be sources of frustration and waste for Councils and the development industry.

3. Is there a Strong Case for Reforming Australia's Urban Water Sector ? What is it ?

The Commission is aware that the NSW Government announced a review of local water utilities in NSW in August 2007. The State Government is yet to provide its response to the Independent Inquiry Report. Throughout the process of that inquiry, it was clear that the National Water Commission and some other authorities seemed to view local regional water utilities in NSW as lagging behind in the sector. In regards to the Shoalhaven local government area, Shoalhaven Council believes that Shoalhaven does not lag behind other State Authorities, and in fact the Shoalhaven structural model has a number of significant advantages.

Shoalhaven Water is defined as a separate business unit of Shoalhaven City Council and reports to Council through its own committee, the Shoalhaven Water Operations and Strategic Review Committee (SWOS).

With this structure, Shoalhaven Water operates in accordance with the National Competition Policy requirements: - ie it is separately identified within the operations of Council and has its accounting and other operations structured in such a way as to provide a distinct reporting framework for its operations to Council.

Shoalhaven Council considers that its adopted model for the delivery of water and sewerage services to its ratepayers provides an efficient, transparent and effective arrangement. Shoalhaven Water is a separately defined, yet integral, business unit of Council. It is led by a Group Director, one of five Directors of Council.

Shoalhaven Water is responsible for all facets of Council's water and sewerage activities including Operations, Planning & Development, Billing and Customer Interface. All water, sewerage and trade waste charges are contained onto a single account managed and produced quarterly through the Shoalhaven Water Group. Shoalhaven Water's structure is unique in NSW in this regard, in that it is the only Council in NSW that has completely removed water utility charges from "rates notices" and therefore clearly defines its water business and takes responsibility for billing and customer issues.

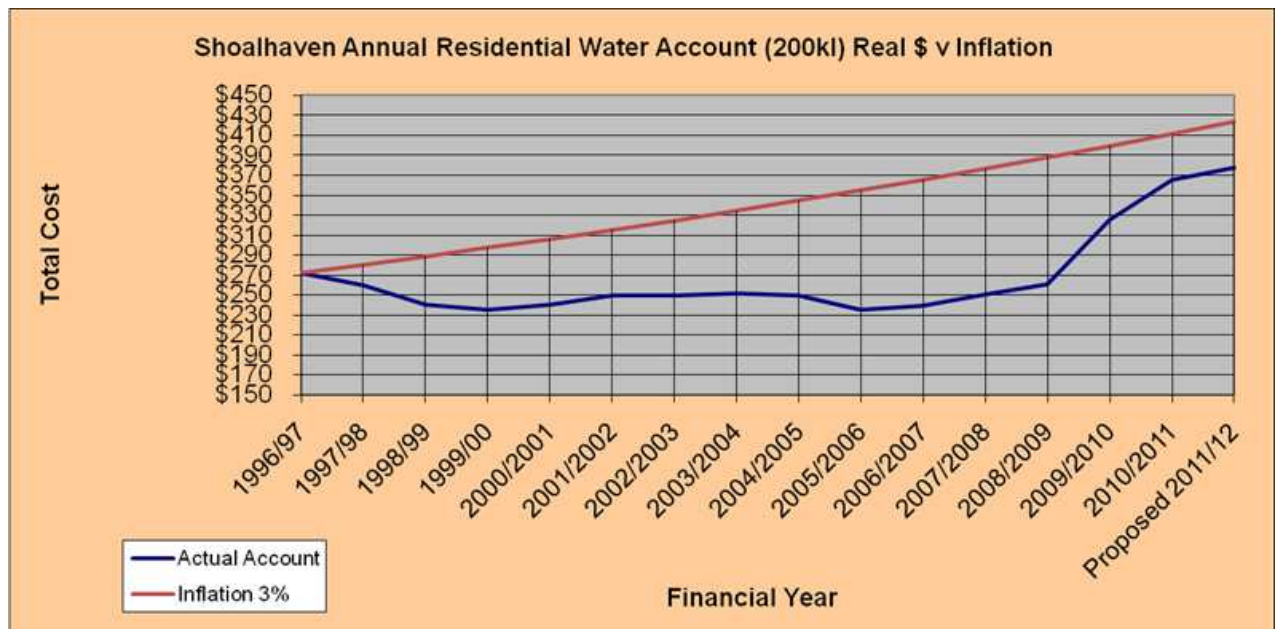
As outlined in response to Question 2, Council considers that there is a strong case for legislative reforms that are required to remove “red tape” and to allow local water utilities to operate in a more efficient manner. This is obviously specific to NSW.

4. How Large are the Opportunities for Efficiency Gains ?

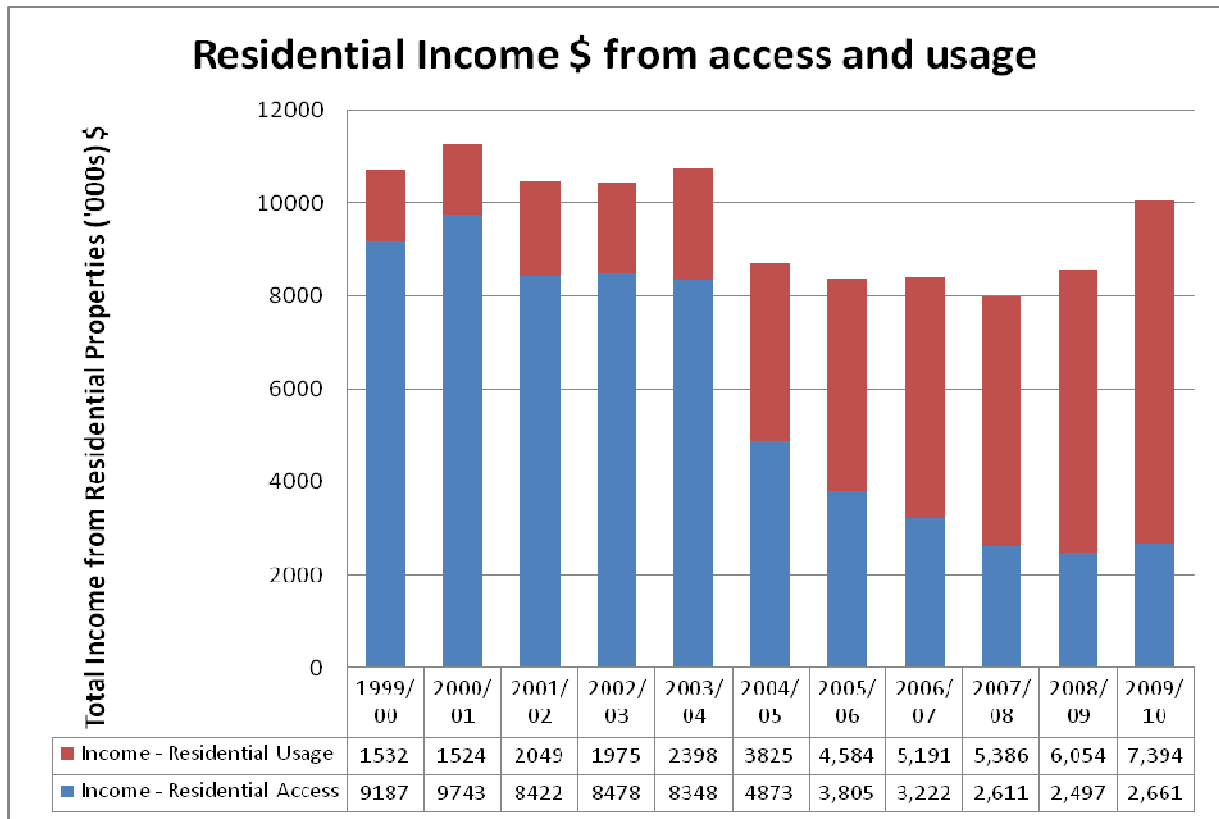
There are a number of demands on the Urban Water Sector that have increased operating costs, driven major capital programs while meeting the challenges of an ageing workforce, reducing pools of technically skilled people and increasing community expectations. Council believes that the opportunities for efficiency gains in the Urban Water Sector primarily rest with technological changes, red tape removal (including legislation changes) and paradigm shifts through community education and awareness.

The Commission suggests that improving the efficiency of the urban water sector can reduce the average price of water and wastewater services (below what it would have been otherwise) and improve levels of service, for example, less frequent resort to water restrictions.

In terms of water supply, Council has already driven down average water bills (in real terms) through pricing mechanisms. The graph below illustrates this point.



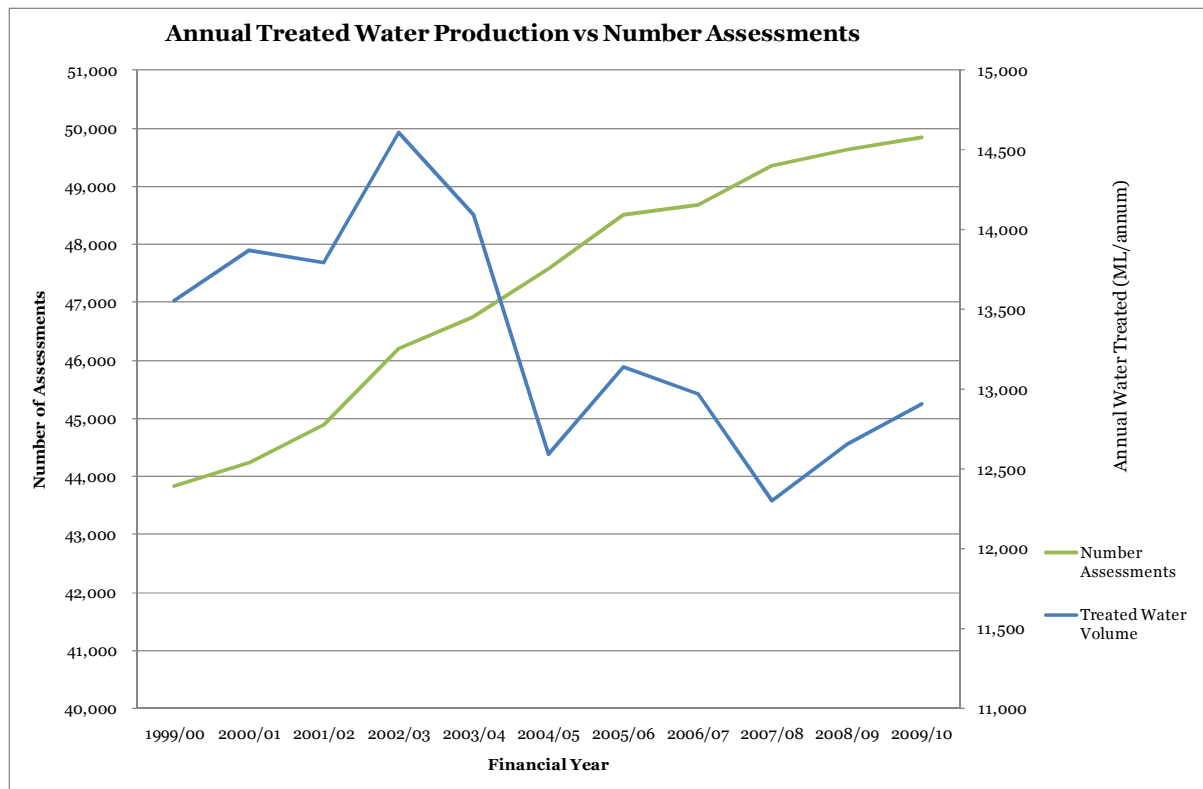
The graph below shows the income to Council from residential water bills, and the proportion of fixed charges vs usage charges.



	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Residential Access Charge	\$230	\$220	\$220	\$220	\$212	\$130	\$95	\$79	\$81	\$61	\$65
Residential Usage Charge (per kL)	\$0.10	\$0.10	\$0.15	\$0.15	\$0.20	\$0.60	\$0.75	\$0.80	\$0.95	\$1.00	\$1.30

The table above shows the pricing path used to achieve this change in income pattern. The change in pricing path has driven the residential water usage down, as well as the typical residential bill.

The graph below clearly illustrates the change in consumption pattern.



In summary, from the information given above, it is suggested that in the Shoalhaven the structure of water pricing has achieved significant savings for customers over a number of years, as well as achieving deferment of capital works due to overall consumption reduction.

Council’s wastewater service prices have been driven over recent years by major capital expenditure for backlog sewerage schemes and major treatment upgrades. These activities are contracted out in a competitive manner to the private sector.

It is therefore considered that the price of water and wastewater services in the Shoalhaven have been reduced to an efficient level. These prices have included an appropriate dividend to Council, in accordance with regulatory requirements.

In regards to levels of service, Council compares favourably to other utilities in the relevant indicators in the National Performance Reports. Shoalhaven is favoured with a strong security of supply, and as such has had relatively low reliance on heavy water restrictions.

The history of restrictions in the Shoalhaven is given below.

Water Restriction History

	Year	In Force	Lifted	Days	Level
1	1997-98	18/02/1998	27/05/1998	98	2
2	1998-99				
3	1999-00				
4	2000-01				
5	2001-02				
6	2002-03	04/12/2002	18/03/2003	104	2
7	2003-04				
8	2004-05	06/09/2004	23/12/2004	108	1
9	2005-06	15/03/2006	21/07/2006	128	1
10	2006-07	18/12/2006	14/03/2007	86	1
11	2007-08				
12	2008-09	16/02/2009	15/06/2009	119	1
13	2009-10	05/10/2009	10/02/2010	125	1

Council considers that the use of water restrictions has been an effective tool over a number of years of drought. One of the current impediments to Council introducing “permanent water conservation measures” similar to that of Sydney, is that current regulations relating to NSW Local Government precludes this option. This has been taken up with the NSW Office of Water through the NSW Water Directorate.

The issue of scarcity pricing has been raised in a number of forums as a possible method of gaining efficiency. Council does not support the use of scarcity pricing as it simply cannot be implemented in a practical way without significant expense. Such expense cannot be justified at the current time.

5. What are the Main Reasons that these Potential Gains are not being Realised at Present ?

It is recognized that there are differences in performance between organizations within Australia and within NSW itself. Through the National and NSW performance reporting mechanisms the primary performance indicators can be analysed. Shoalhaven Water uses these mechanisms to compare its own performance to other organizations throughout Australia and this is reported to Council each year. This analysis also provides input into Council’s business planning. Those organizations that have not achieved a comparable level of efficiency may not be fully utilizing these mechanisms.

As discussed in Question 2, there are also a number of ways that legislative “streamlining” and rationalization could assist local government in improving its urban water utility functions and efficiency. Despite representations to previous reviews, no legislative reform has been forthcoming.

6. Which Options for Reform Offer the Largest Benefits in Metropolitan and Regional Urban Areas ?

Being a regional urban area, Shoalhaven believes that the size and structure of Council’s local water utility, Shoalhaven Water, is a good model for similar areas with similar challenges. Council’s decision a number of years ago to clearly define its water business unit and its subsequent decisions to continue this process has enabled Shoalhaven Water to clearly and transparently demonstrate its performance. This model has been in contrast to a number of other NSW Councils in recent years that have less clearly defined water business structures. Shoalhaven believes that its organizational model offers a strong structure that can achieve further efficiency gains via legislative improvements outlined in Question 2.