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9 November 2010

The Productivity Commission
Urban Water Inquiry
LB2 Collins Street East
MELBOURNE VIC 8003

Dear Commissioner

RE: THE AUSTRALIA'S URBAN WATER SECTORS ENQUIRY INTO THE AUSTRALIAN WATER INDUSTRY

Due to the tight timeframes MidCoast Water (MCW) is not the issue within the scope of the enquiry. MCW is of the view that particularly in NSW there needs to be a complete review of how water and sewerage services are delivered in regional NSW. In 2008 the NSW Government commenced an enquiry into the delivery of water and sewerage services to communities across NSW.

MCW made a comprehensive submission which an update version is attached.

The main thrust of our submission was that there should be only 14 utilities to deliver water and sewerage services throughout regional NSW. This excludes Sydney and Hunter Water and the newly formed Central Coast Water Authority. MCW model was for Local Government to still remain control through the County Council system. Since the enquiry, in Tasmania the model of Council owned utilities has been implemented.

MCW submission was not popular within the Local Government industry in NSW. NSW Councils have used the water and sewer funds to heavily subsidise the other Council business units due to the imposition of rate pegging in NSW.

The draft report arising from the inquiry recommended that there be 32 groups of Councils across NSW and it would be left to the Councils on the type of group that they could belong to. This ranged from large stand alone Councils, County Councils and alliances between Councils. The final position of the State Government has not been finalised.

Also enclosed for the Commissioner's information is a copy of MCW's Water for the Future, which shows how we have implemented our integrated water management systems for the next 25 years

Yours faithfully

_____
NEIL HANINGTON
GENERAL MANAGER
Enc: 2

#318216

Our vision for the future

MIDCOAST WATER

Submission to the Ministerial Inquiry into the delivery of water and sewerage services to communities across New South Wales

Update November 2010

Introduction

MidCoast Water supports the need for a review of the delivery of water and sewerage services throughout regional NSW.

> *"MidCoast Water, and the Australian water industry in general, is standing on the threshold of a new understanding in water management. The way our society values, uses and conserves its water resources is changing rapidly and those who are entrusted with the management of these resources need to capture this vision of change.*
>
> *....MidCoast Water realises that we could no longer operate as a traditional water & sewerage utility. We must see ourselves as a part of the wider community, with a stronger role in protecting and managing our regional catchment. We must see ourselves as part of an emerging water industry, with changing need and priorities, and we must see ourselves as part of a global community with responsibility and compassion.*
>
> *We believe that water management in our region will change significantly over the next six years, not only through changes in technologies and environmental controls, but also through the changing expectation of our customers and the wider community."*
>
> Future Directions in Water Management Strategic Plan 2006-2030 – MidCoast Water, April 2006.

MidCoast Water has, at the last two LGSA regional water conferences, raised the issue that in its present form, the delivery of water and sewerage services to regional NSW is unsustainable citing the same reasons as contained within "the Challenges" section of The New South Wales Office of Water's discussion paper (January 2008).

It is not MidCoast Water's intention to discuss the various models that could be used in our industry as all submissions will concentrate on their own particular model.

One of the fundamental problems of our industry is that we tend not to look beyond our own boundaries and often do not see the bigger picture.

In this submission MidCoast Water is putting forward ideas for the whole of the industry and not only focusing on our own "patch".

Current problems within regional NSW

MidCoast Water believes that the regional NSW water industry suffers from fragmentation, too many water authorities and lack of financial transparency, particularly in the general purpose councils.

Other problems include: - skills shortages, lack of government funding for backlog works, poor co-ordination of funding between federal and state governments particularly the administration of the Australian Water Fund, and the inability of smaller councils to maintain their existing water and wastewater systems.

At present in NSW there are 152 general purpose councils of which 50 do not have control over their water and wastewater functions, and a further 10 have no water services. This shows that there is inequity in the NSW Local Government system.

Of those councils involved in the delivery of water and sewer services, the vast majority operate as units within the broader council. While funding is theoretically tied for water and sewerage, this 'embedding' inevitably results in resources being diverted from the core water and sewerage services, which further exacerbates both the funding and resourcing issues. In turn this perpetuates the belief of most general purpose councils that the State should continue, and indeed increase, their subsidy for water and sewerage services in country regional areas.

Over the past number of years it has been common practice in some councils to use the water and wastewater funds to supplement the restrictions of rate pegging by:-

- Over charging for administration services
- Not allowing competition for services ie: lawn mowing, vehicle and plant repairs etc.
- Using their water pricing to offset application for general fund rate rises in excess of the NSW governments annual CPI increases.
- Overcharging for depot and maintenance charges
- Charging rentals under section 611 of the Local Government Act for water and sewer reticulation mains in public roads & footpaths.

The table (*over*) shows the water and wastewater administration charges for 2008/2009 for all water authorities over 10,000 customers.

Water and sewerage management expenses - councils over 10,000 properties

Council	Cost per property
Bega	$387
Eurobodalla	$316
Dubbo	$310
Country Water (Energy)	$300
Kempsey	$300
Tweed	$294
Byron	$293
Ballina	$288
Bathurst Regional	$277
Shoalhaven	$277
Wingecarribee	$269
Orange	$267
NSW Statewide median	$266
Coffs Harbour	$247
Clarence Valley	$240
Tamworth Regional	$234
Port Macquarie Hastings	$217
Goulburn Mulwaree	$216
Queanbeyan	$216
Lismore	$201
Goldenfields County (water only)	$194
Albury	$146
MidCoast County	$164
Rous Water (bulk supply)	$85
Riverina County (water only)	$85

Source: 2008/09 NSW Water Supply & Sewerage Benchmarking Report - DWE 2009

The above table illustrates the considerable variability in management expenditure among water utilities servicing more than 10,000 properties.

Being operationally and financially independent from the other activities of general pupose councils, county councils can focus their efforts in more effective planning, investment and service delivery.

Clearly reform of the current fragmented water industry would provide significant opportunities to improve financial, environmental and customer service performance, while reducing the current dependency of country regional water utilities on NSW State Government subsidies.

Solving the problem

The discussion paper summarised the industry in each of the States. As usual in Australia we have a mixture of models some appear to be working better than others and the top local government water authorities in Regional NSW (including MidCoast Water) appear to be operating as well, or if not better, than the equivalent country water authorities in other states.

MidCoast Water believes the State government could reduce the number of water authorities in regional NSW from 107 to 14 - excluding Sydney, Hunter, Gosford/Wyong and State Water.

For the purpose of this modelling, the State can be divided into two sections, the coast which can be divided into four utilities and the area west of the Great Dividing Range could be divided into ten. These groupings have been based closely on the existing catchment management authorities' boundaries but allowance has been made where councils areas overlap catchments, social demographics sit within regions, and where they're logically like catchments or sharing of local water supplies.

In advocating this model MidCoast Water is recommending that the utilities have the functions of both water and sewerage.

Proposed new utility	Local Government areas	Turnover	Comments
Far West or Country Water	Bourke Central Darling Wentworth Country Water	$22.5M	
Namoi	Brewarrina Walgett Coonamble Narrabri Warrumbungle Gunnedah Liverpool Plains Tamworth regional Walcha	$50.5M	
New England/ North West	Moree Plains Gwydir Inverell Tenterfield Glen Innes/Severn Guyra Armidale/Dumaresq Uralla	$29.4M	

Proposed new utility	Local Government areas	Turnover	Comments
Macquarie	Cobar Bogan Warren Narromine Gilgandra Dubbo Wellington Mid Western Regional Bathurst Regional	$65.6M	Option of transferring Cobar Water Board to new water utility
Upper Hunter	Singleton Muswellbrook Upper Hunter	$19.8M	Option of transfering to Hunter Water
Lachlan (Central Tablelands)	Lachlan Parkes Forbes Central Tablelands Water Orange Cowra Boorowa Blayney Weddin Cabonne Yass	$59.5M	
Goldenfields	Balranald Carrathool Hay Murrumbidgee Leeton Griffith Goldenfields Water Bland Temora Coolamon Cootamundra Harden Junee Narrandera Young	$41.02M	
Goulburn	Lithgow Oberon Wingecarribee Goulburn/Mulwaree Upper Lachlan	$41.02M	Option of transferring Fish River water supply, whose primary function is to service some of these areas, from State Water to new water utility.

Proposed new utility	Local Government areas	Turnover	Comments
Riverina	Wakool Conargo Deniliquin Murray Jerilderie Berrigan Corowa Albury Riverina Water Wagga Wagga Urana Greater Hume Lockhart	$72.9M	
Upper Murrumbidgee	Queanbeyan Palerang Gundagai Tumut Tumbarumba Cooma-Monaro Snowy River	$35.5M	

In summary

In summarising the western area reorganisation, three of the utilities could be based around the existing county council administration centres, while three others have the regional cities of Bathurst/Dubbo, Tamworth and Queanbeyan.

These centres would be able to support the smaller areas. The remaining four have various medium size towns which together would be able to support the smaller areas.

Of these ten new utilities, the Far West or Country Water may need additional help to become viable, as at present, particularly the area of the old Australian Inland Energy Authority is unviable and relies on Country Energy to remain operational.

Coastal New South Wales

Proposed new utility	Local Government areas	Turnover	Comments
Rous	Kyogle Tweed Rous Water Byron Ballina Lismore Richmond Valley	$118.1M	
North Coast	Clarence Valley Coffs Harbour Bellingen Nambucca	$66.2M	
MidCoast	Kempsey Port-Macquarie Hastings MidCoast Water Great Lakes Greater Taree Gloucester	$108M	
South Coast	Eurobodalla Bega Valley Bombala Shoalhaven	$95M	

In summary

Within the coastal utilities of Rous Water, South Coast Water and Far South Coast Water there are the Brogo and Toonumbar dams which are currently operated by State Water. Both dams are marginal at best and it may improve State Water profitability if they were transferred to the respective coastal utility.

The majority of the coastal rivers are unregulated and at present the NSW Office of Water contract the billing and account collection to State Water. Perhaps an agreement with the new coastal utilities to carry out those functions may be appropriate and these utilities could also work much more closely with NOW in the overall water management of the unregulated catchments.

The advantages of the formation of 14 water utilities would meet the objectives of the terms of reference ie:-

- To respond professionally to industry challenges (existing & future).
- Be financially self sufficient.
- Be able to comply with appropriate stringent environmental and public health standards.
- Implement cost effective service standards.

Additional advantages of these new utilities include:-

- Reduces the number of water utilities from 107 down to 14, which would be closely aligned with the current State government 'regional catchment' approach to resource management.
- Provide opportunities to alleviate the skills and resources crisis that has been affecting the NSW water industry for several years.
- As well as water and sewerage activities, the new utilities would also work closely with Catchment Management Authorities and the existing general purpose councils in improving the health of the catchments. This would result in alignment of roles along catchment interests which will improve the combined investments of landholders, state government and the activities of water utilities, thereby enabling each ones investments to provide the best overall outcomes at regional and local levels.
- These utilities would provide information to the local councils in order that their LEP's would align with the utility servicing strategies. This would ensure a transparent decision making process in relation to service provision for future development.
- By reducing the number of utilities, government departments such as NOW, Health, DECC and CMA's would have reduced expenses in regulatory and administration functions because of the lesser numbers. These departments could focus their efforts on State-wide policy outcomes, improving regulatory tools, and the effectiveness of benchmarking.
- Under our proposed model there should be no need for future State Government funding for growth, renewals or augmentations, and that would further advance the State's profile in achieving the 1994 COAG reforms on water.

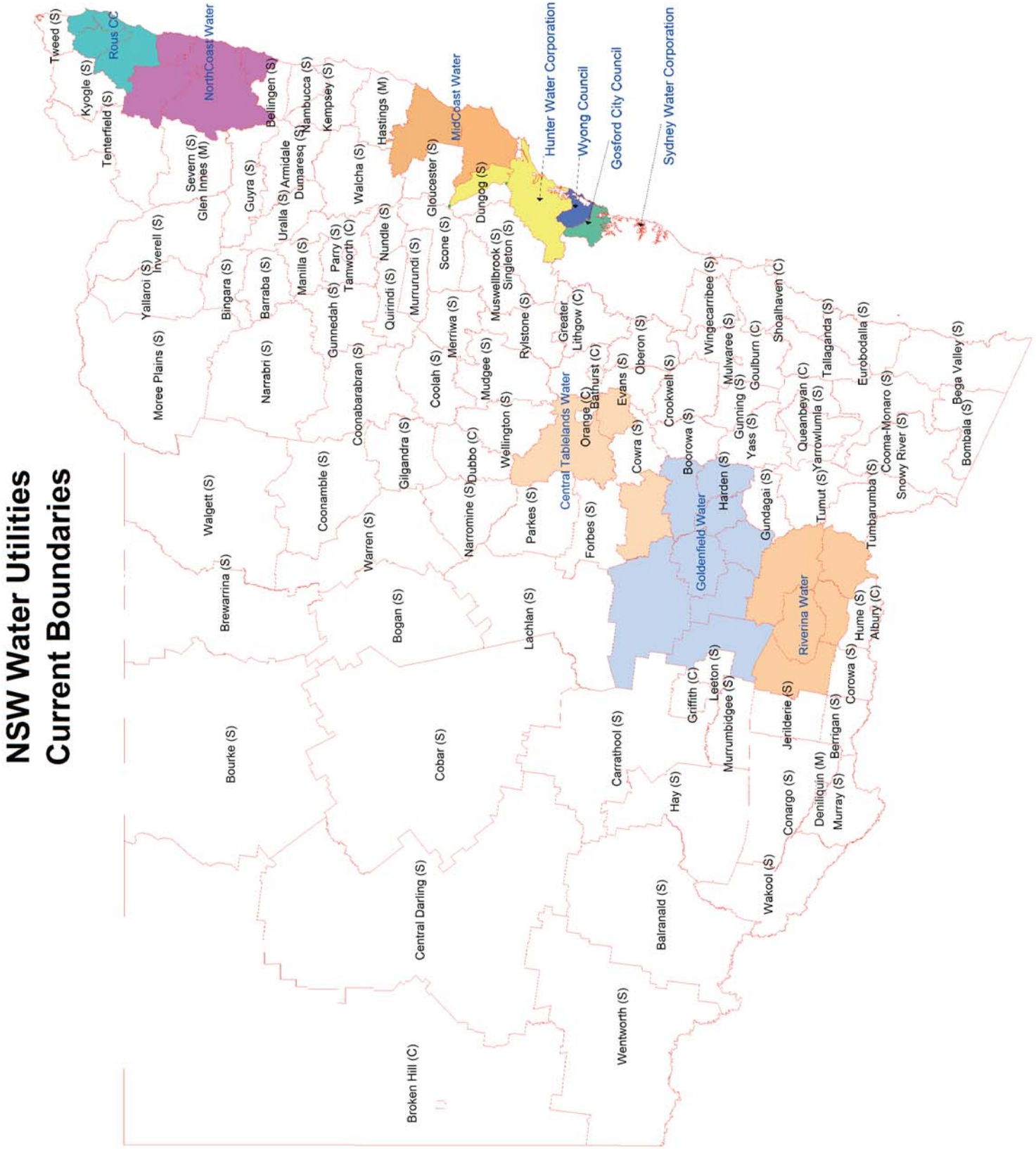
Note

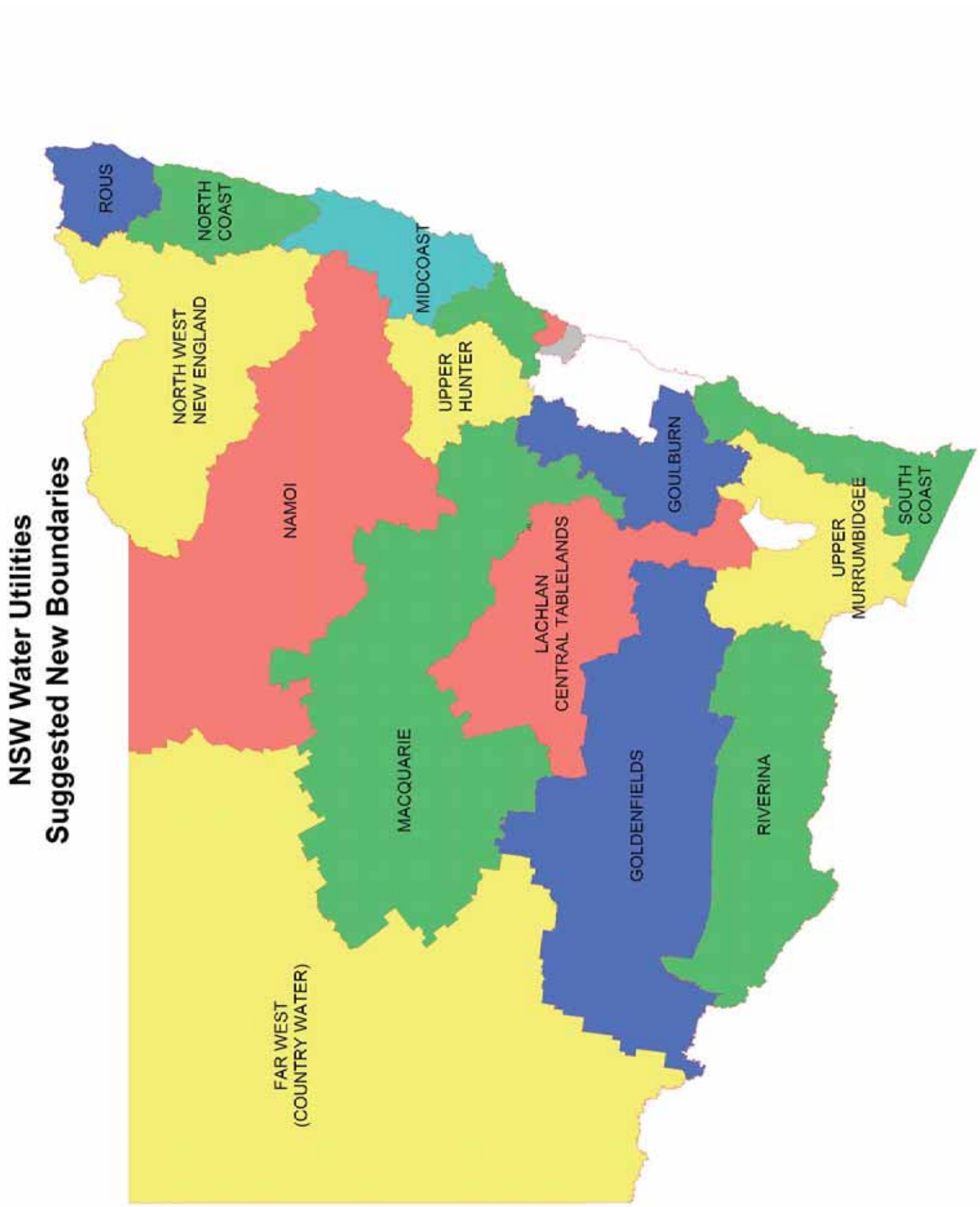
It should be noted that MidCoast Water in its submission has not included the Dungog or Hawkesbury local government areas in our modelling for the following reasons:-

1. Dungog Council has transfered its water and sewer functions to Hunter Water.
2. It is logical to assume the sewer functions of the Hawkesbury Council should be transferred to Sydney Water.

References

Page 10	Map of existing boundaries
Page 11	Map of suggested utilities
Page 12	Map of the Local Government areas in each utility
Page 13	Map of suggested utilities - alternate coastal option
Page 14	Statistical Information


NSW Water Utilities
Current Boundaries
NorthCoast Water
Rous CC
MidCoast Water
Hunter Water Corporation
Wyong Council
Gosford City Council
Sydney Water Corporation
Central Tablelands Water
Goldenfield Water
Riverina Water
Tweed (S)
Kyogle (S)
Tenterfield (S)
Severn (S)
Glen Innes (M)
Inverell (S)
Yallaroi (S)
Moree Plains (S)
Bingara (S)
Guyra (S)
Barraba (S)
Narrabri (S)
Uralla (S)
Armidale
Dumaresq (S)
Manilla (S)
Bellingen (S)
Nambucca (S)
Kempsey (S)
Parry (S)
Tamworth (C)
Gunnedah (S)
Walcha (S)
Nundle (S)
Quirindi (S)
Coonabarabran (S)
Hastings (M)
Gloucester (S)
Murrurundi (S)
Scone (S)
Merriwa (S)
Coolah (S)
Dungog (S)
Muswellbrook (S)
Singleton (S)
Mudgee (S)
Rylstone (S)
Greater Lithgow (C)
Bathurst (C)
Orange (C)
Evans (S)
Oberon (S)
Cowra (S)
Crookwell (S)
Boorowa (S)
Wingecarribee (S)
Mulwaree (S)
Gunning (S)
Yass (S)
Goulburn (C)
Shoalhaven (C)
Queanbeyan (C)
Yarrowlumla (S)
Tallaganda (S)
Eurobodalla (S)
Bega Valley (S)
Bombala (S)
Cooma-Monaro (S)
Snowy River (S)
Tumbarumba (S)
Tumut (S)
Gundagai (S)
Harden (S)
Wellington (S)
Dubbo (C)
Narromine (S)
Parkes (S)
Forbes (S)
Lachlan (S)
Coonamble (S)
Warren (S)
Gilgandra (S)
Bogan (S)
Walgett (S)
Brewarrina (S)
Bourke (S)
Cobar (S)
Central Darling (S)
Broken Hill (C)
Wentworth (S)
Balranald (S)
Carrathool (S)
Griffith (C)
Leeton (S)
Murrumbidgee (S)
Hay (S)
Jerilderie (S)
Conargo (S)
Wakool (S)
Deniliquin (M)
Murray (S)
Berrigan (S)
Corowa (S)
Hume (S)
Albury (C)


NSW Water Utilities
Suggested New Boundaries
ROUS
NORTH COAST
MIDCOAST
NORTH WEST NEW ENGLAND
UPPER HUNTER
NAMOI
GOULBURN
SOUTH COAST
UPPER MURRUMBIDGEE
LACHLAN CENTRAL TABLELANDS
MACQUARIE
GOLDENFIELDS
RIVERINA
FAR WEST (COUNTRY WATER)

Statistical information

Western New South Wales

FAR WEST (COUNTRY WATER)

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
BOURKE	1200	1.9	341	0.10%
COUNTRY WATER	10450	17.1	300	-0.95%
CENTRAL DARLING	690	0.8	N/A	-0.43%
WENTWORTH	2240	2.7	131	0.35%
	14580	22.5		

NAMOI

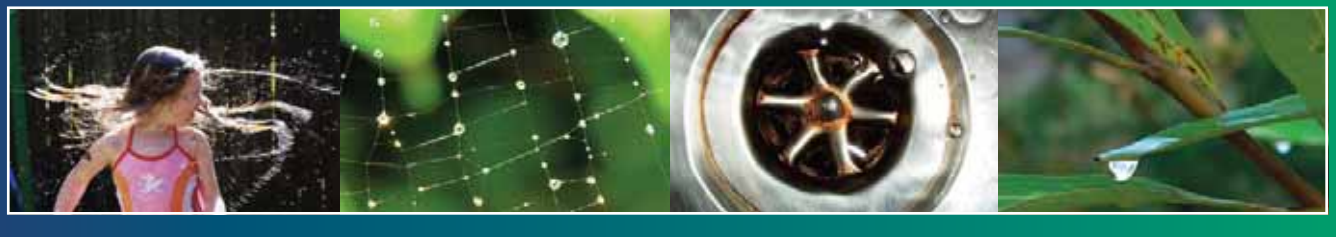
COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
BREWARRINA	480	1	404	0.13%
WALGETT	1590	1.9	160	-1.00%
COONAMBLE	1670	0.9	92	-0.78%
NARRABRI	4370	3.2	129	-0.38%
WARRUMBUNGLE	3300	3.2	169	-0.52%
GUNNEDAH	4530	4	135	-0.60%
LIVERPOOL PLAINS	2530	1.9	165	-0.26%
TAMWORTH REGIONAL	20350	33.6	234	0.32%
WALCHA	890	0.8	248	-0.01%
	39710	50.5		

NORTH WEST/NEW ENGLAND

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
MOREE PLAINS	4420	6.7	345	0.04%
GWYDIR	1450	1.8	214	-0.84%
INVERELL	5270	5.3	234	0.25%
TENTERFIELD	1990	2.3	442	0.04%
GLEN INNES /SEVERN	2880	2.2	298	-0.40%
GUYRA	1170	1.3	196	0.14%
ARMIDALE/DUMARESQ	8460	8.7	435	-0.27%
URALLA	1570	1.1	254	0.19%
	27210	29.4		

MACQUARIE

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
COBAR	2190	2.2	47	-0.94%
BOGAN	1030	1.2	360	-0.77%
WARREN	960	0.9	280	-0.425
NARROMINE	2220	2.1	290	0.145
GILGANDRA	1370	1.2	93	-0.73%
DUBBO	16120	18.9	310	0.48%
WELLINGTON	2910	3.5	325	-0.41%
MID WESTERN REGIONAL	7100	7.2	327	0.09%
BATHURST REGIONAL	14940	18.4	277	0.96%
	48840	55.6		



UPPER HUNTER

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
UPPER HUNTER	4200	5.1	325	-0.24%
MUSWELLBROOK	5310	8	284	0.03%
SINGLETON	6300	6.7	220	1.29%
	15810	19.8		

LACHLAN /CENTRAL TABLELANDS

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
LACHLAN	2810	2.8	97	-0.45%
PARKES	5840	8.2	111	0.01%
FORBES	3530	3.9	85	-0.37%
CENTRAL TABLELANDS WATER	5260	4.1	201	
ORANGE	15890	26.2	216	0.69%
COWRA	5250	6.9	405	0.31%
BOOROWA	620	0.9	58	0.36%
BLAYNEY		0.9	127	0.94%
WEDDIN		0.2	27	0.15%
CABONNE	1150	2.3	157	0.45%
YASS	3040	3.1	NA	1.91%
	43390	59.5		

GOLDENFIELDS

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
BALRANALD	860	0.7	171	-0.65%
CARRATHOOL	1010	1.1	214	-0.01%
HAY	1310	1.4	227	-0.42%
MURRUMBIDGE	900	0.5	147	0.17%
LEETON	3910	4.8	227	0.59%
GRIFFITH	8730	10.9	397	0.90%
GOLDEN FIELDS WATER	28580	11.9	194	
BLAND		10.9	64	-0.25%
TEMORA		0.5	32	0.24%
COOLAMON		0.6	62	0.30%
COOTAMUNDRA	2900	2.3	107	-0.09%
HARDEN	1750	2	157	-0.50%
JUNEE		0.6	53	-0.03%
NARRANDERA	2060	2.3	272	-0.72%
YOUNG	4580	3.9	108	0.32%
	56590	41.02		

RIVERINA

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
WAKOOL	1410	1.8	139	0.19%
CONARGO				-0.48%
DENILIQUIN	3340	3.7	424	0.00%
MURRAY	2940	3.1	208	2.29%
JERILDERIE	460	0.6	182	-0.54%
BERRIGAN	3490	4	150	0.39%
COROWA	4790	6.2	344	0.57%
ALBURY	22210	20	146	1.03%
RIVERINA WATER	28260	17.7	85	
WAGGA WAGGA		13.6	54	0.48%
URANA		0.2	111	-98%
GREATER HUME	1690	1.7	160	-0.11%
LOCKHART		0.3	63	-0.33%
	68590	72.9		

GOULBURN

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
LITHGOW	7820	7.1	88	0.49%
OBERON	1310	1.4	253	1.23%
WINGECARRIBEE	18000	18.8	269	1.29%
GOULBURN/MULAREE	10540	15.5	216	0.49%
UPPER LACHLAN	1920	3.1	223	0.05%
	39590	45.9		

UPPER MURRUMBIDGEE

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
QUEANBEYAN	15780	15.5	216	2.88%
PALERANG	1920	4	280	1.73%
GUNDAGAI	1050	0.9	167	-0.15%
TUMUT	4410	4.6	126	0.05%
TUMBARUMBA	1140	1.1	206	-0.69%
COOMA-MONARO	3830	5.1	338	0.22%
SNOWY RIVER	4090	4.3	269	0.95%
	32220	35.5		

Coastal New South Wales

ROUS

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
KYOGLE	1830	1.9	242	-0.41%
TWEED	31660	45.8	294	2.08%
ROUS WATER	45660	13.8	88	
BYRON		16.7	293	1.14%
BALLINA		14.8	288	1.28%
LISMORE		14.9	201	0.25%
RICHMOND VALLEY	6960	10.2	419	-0.19%
	79150	118.1		

NORTH COAST

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
CLARENCE VALLEY	20810	25.7	339	0.70%
COFFS HARBOUR	23830	36.7	221	1.60%
BELLINGEN	4010	3.8	251	0.10%
NAMBUCCA	6210	6.3	161	0.79
	54860	66.2		

MIDCOAST

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
KEMPSEY	12290	13.7	245	1.19%
PORT MACQUARIE / HASTINGS	29880	40.7	217	1.99%
MIDCOAST WATER	36270	45.5	164	
GREAT LAKES				1.96%
GREATER TAREE				1.16%
GLOUCESTER	1620	1.8	173	-0.10%
	80060	101.7		

SOUTH COAST

COUNCIL	CUSTOMER NOS	TURNOVER	MANAGEMENT COST PER CUST.	GROWTH RATES
EUROBODALLA	19200	26.4	316	1.86%
SHOALHAVEN	45670	46.9	277	1.77%
BEGA VALLEY	14050	20.9	387	1.48%
BOMBALA	840	0.8	213	-1.28%
	79760	95		

Preferred model

MidCoast Water prefers the existing county council model be adopted. Over a number of years the county council model has been investigated and found to be acceptable and suitable for the delivery of water and wastewater services.

In 1992 there was a review of the performance and administrative arrangements for water supply to county councils which was prepared for the then NSW Water Resources Council.

The report found that the county councils have achieved better overall performance with regard to efficiency and effectiveness than general purpose council water suppliers. The county councils were working within the constraints of the planning system in consultation with their constituent councils.

The advantages of a county council are:-

- They are more efficient by focusing on specialised services
- Commercially focused
- They are owned by the community through the constituent councils
- All communities have input to management and planning decisions through their elected representatives
- All member councils have equal representation
- Provides future opportunities for the new 14 'regional county councils' to benefit from the efficiency gains that have been delivered by the existing 'trial' county council - eg MidCoast Water

The disadvantages are:-

- The perception that the elected members could make political decisions with little regard for sound financial management.
- The ability of the constituent councils to co-operate with each other.

Recommendations

MidCoast Water recommends that the enquiry considers:-

- The establishment of 14 county councils in regional NSW.
- That the Fish River and Cobar Water Authorities be transferred to the appropriate county council.
- That consideration be given for the transfer of the Brogo and Toongumbar dams to the appropriate county council.
- That the county councils be given greater powers to engage with local councils to improve and achieve better planning outcomes.
- That the county councils be given greater powers with regard to catchment management.
- That the coastal county councils enter into negotiations with NOW to provide services that are usually carried out by State Water on all unregulated coastal rivers.

Issues to consider

Inter government funding

The enquiry should review the current funding arrangements between all levels of government starting with the distribution of funding from the Australian Government's Water Fund.

Under this fund some $1.6 billion was allocated to the Water Smart Australia Program and was administered by the National Water Commission.

MidCoast Water believes :-

- The majority of the projects provided funding subsidies to projects that should have been funded by the commercial pricing of the water utilities.
- Few of the projects demonstrate innovation that would lead to the improved future performance of the water industry and its service provision.
- Much of the funding went to projects that had already been committed to by councils and had funding plans in place. The result is that infrastructure is being built which is not being funded by the users under a transparent commercial arrangement that reflects the true cost.
- The outcome of the vast majority of funding has been to reinforce the old "hand-out" mentality of many local governments thereby eroding the benefits of the 1994 COAG water reforms.

RECOMMENDED **the NSW Government request the new federal government to review the allocation of funds from the existing Australian water fund, in order to fund projects that demonstrate emerging approaches and technologies that will help sustain cost effective and efficient services to future generations and demands, as opposed to funding projects that follow current or historical approaches.**

Country Towns Water Supply and Sewerage Program

At present the existing program has insufficient funds to complete the known backlog of projects, particularly the small villages. MidCoast Water has identified nine villages that do not have water or sewerage services and it is estimated that it will cost in excess of $90 million to provide these services.

One of the problems with the current backlog list is that in 1995 when all councils were asked to provide detailed lists of all unserviced villages list were compiled of all their existing villages without proper community consultation and/or conducting a proper risk assessment and as a result we have a backlog list that will never be overcome.

RECOMMENDED **that the existing small village backlog list be scrapped and that small villages only be included in any new program once the local water utility carry out a proper risk assessment and that the utilities be given twelve months to comply.**

Reform % funding model

The State Government in 2004 changed the percentage allocations applicable to the country towns program.The small village component was slashed from 75% to 50% and the backlog funding for those councils over 10,000 customers was slashed from 50% to 20% this has contributed to the deteriorating financial positions of some councils.

Issues to consider

Under MidCoast Water's 14 county council model because of their greater size and capacity for performance improvement, all projects other than currently unserviced towns would be funded by those utilities. This allows state funds to be more constructively focused on the unserviced towns, which would still be beyond the economic capabilities of the new utilities.

Many of these small unserviced areas will require innovative solutions providing an opportunity to align State and NWI funds in a combined effort to assist in servicing the expensive and environmental at risk communities.

RECOMMENDED **that the percentage of government funding for both the small village and other backlog projects be restored to post 2004 levels.**

Other issues

During our research in preparing this paper and after reviewing the industry in NSW, it became apparent to MidCoast Water that perhaps the operations of State Water in coastal NSW should be looked at even though it is not within the scope of this enquiry.

In our submission we have already flagged the possibility of Fish River Scheme, the Brogo Dam and Toonumbar Dams being transferred to local water utilities. At present State Water is reviewing its activities and management structures and MidCoast believes that it is focusing more on the western areas and centering everything around Dubbo and will be working very closely with the Murray/Darling Basin Commission.

There may be an opportunity for the State Government to transfer the Glenbawn, Glennies Creek and Lostock dams to the Hunter Water Corporation. Hunter Water already operates the Grahamstown and Chichester dams and is commencing the construction of Tillegra Dam. It would make good economic sense to transfer these dams to Hunter Water and would lead to increased levels of service to those customers serviced by State Water as Hunter has a proven record in customer service satisfaction.

RECOMMENDED **that the State Government investigate the possibility of transferring the Hunter Valley Dams to Hunter Water.**

Obsolete acts

MidCoast Water when reviewing the Government Gazette Special Supplement Number 47 was amazed how many Acts the Minister for Local Government was responsible for.
We question whether some of the following Acts are necessary:-

- Collarenebri Water Supply Act 1968 No 18
- Glen Davis Act 1939
- Country Towns Water Supply and Sewerage (debits) Act 1937 No 32
- Grafton Water Supply Act 1956 No 33
- Walgett Water Supply Act 1959 No 17

There maybe other Acts administered by the Department of Water & Energy that are obsolete.

RECOMMENDED **that a review of all water related Acts be undertaken to assess their relevance.**

The MidCoast Water story

MIDCOAST WATER

A County Council experience of water and sewerage service delivery

MidCoast Water - our history

MidCoast Water is a structured County Council responsible for the reticulated water supply and sewerage systems in the Greater Taree and Great Lakes local Government areas.

The area stretches from Johns River in the North to Karuah in the South *(see map over)* and operates four water supply and 13 sewer systems. Both Great Lakes and Greater Taree City councils provide three elected representatives to form the board of MidCoast Water.

MidCoast Water was formed in 1997 after a two year review into the water functions of electricity distributors.

The review committee identified the following key issues in the review of the water function:-

1. Integrated resource management and separation of the functions of the resource manager, regulator and service provider.
2. Community involvement and input in decision making processes for provision of water supply and sewerage services.
3. Commercial provision of services and pricing policies which reflect costs, with identification/removal of cross subsidies.

The committee reviewed the possible structural arrangements for the provision of water supply and sewerage schemes including:-

- General Purpose Councils
- County Councils
- Water Supply Authorities
- Other types of statutory authorities e.g. Water Boards,State owned Corporations.

The committee recommended a County Council be formed to deliver the water supply functions of NorthPower Energy and Great Lakes Council and the sewerage functions of Greater Taree and Great Lakes Councils - thus MidCoast Water was born.

This decision of a single water supply and sewerage provider was based on:-

- Economics through scale of size
- Rationalisation of operational, design and other technical functions
- Multi-skilling of staff
- Enhanced demand management, ecologically sustainable development and capital investment decisions through control of the water cycle, from harvesting through to re-use and disposal.

MidCoast Water - our service area

Embracing future pathways

Since its formation, MidCoast Water has moved from a traditional water and sewer authority to a community water utility that also embraces sustainable water cycle management as well as business and community development. MidCoast Water is now following these strategic directions for the future development of our business. (Refer to Appendix D *Future Directions in Water Management - Strategic Plan 2006-2030* - MidCoast Water, April 2006).

"MidCoast Water is one of the youngest, yet most progressive water utilities operating within regional Australia. Eight years after its formation, the utility has built a strong internal organisation, and is regarded highly by its customers." (*Sustainable Water Solutions 2004*)

Since 2004, MidCoast Water has consistently been recognised as one of the leading water utility in regional NSW and meets the Department's Best Practice Guidelines. MidCoast Water has wonnumerous Industry Awards over the last five years *(refer to MidCoast Water fact sheet, page 25)*.

Water and sewerage services

Over the past ten years the following major capital works have been financed:-

Pacific Palms Sewerage Scheme	$33M
Nabiac Sewerage Scheme	$10M
Lansdowne, Coopernook, Manning Point sewerage schemes	$10M
Old Bar Sewerage Treatment Plant upgrade	$ 8M
Hallidays Point Sewerage Treatment Plant upgrade	$21M
Six new water supply reservoirs	$12M
Dawson River Sewerage Treatment Plant upgrade	$21M
Forster Sewerage Treatment Plant upgrade	$ 3M

Presently we have under construction the following projects:-

Bootawa Dam water treatment plant	$82M
Wingham Sewerage Treatment Plant upgrade	$ 6M
Taree Wingham Effluent Reuse Scheme	$21M
Crowdy Head Sewerage Scheme	$2.3M
Nabiac borefields	$31M

It should be noted that all projects are managed by MidCoast Water Project Managers. We are one of the few authorities that do not rely on the Department of Commerce to manage its projects. Currently our project management costs are 2-3 per cent of our total project costs.

Future major construction works are:-

Bootawa Dam wall raising	$30M
Tea Gardens Water Treatment Plant	$18M
Stroud Sewerage Treatment Plant	$11M
Pacific Palms Sewerage Treatment Plant	$18M
Wingham effluent reuse	$7.7M

The majority of these projects have, or will be, fully funded by MidCoast Water.

Embracing future pathways

Sustainable Water Cycle Management

MidCoast Water has consulted with all stakeholders on the implementation of a Sustainable Water Cycle Management Plan for our area, finalised in June 2008. The plan includes:

- Rebates for rainwater harvesting, water saving appliances and water efficiency. MidCoast Water will be allocating $5 million over 10 years towards these rebates.
- Funding targets for alternative water sources set at $6.3m and $18.3m for catchment and environmental management over the next 30 years
- Research and development of alternative technologies such as small towns waste water treatment using Membrance Biological Reactor (MBR) technology, currently being piloted. These and other innovations mentioned later will aid MidCoast Water and the rest of the water industry.

MidCoast Water places a high value on our environment and has established an Environmental Fund to purchase environmental land (i.e. wetlands) and carry out environment works that will improve the water quality in our catchments. Over the past two years MidCoast Water has committed some $2.4 million towards such projects as:-

- $200,000 for the Crawford River Study (in partnership with the Great Lakes Council).
- $100,000 for online monitoring equipment in our catchment streams.
- $100,000 for the employment of a Waterwatch coordinator (this is a permanent position).
- $2 million for land purchases.

Other projects funded out of general revenue:-

Dairy Farmers Trust Fund
$165,000 over three years to enable local farmers to modify their farm management practices to improve water quality in our main water supply sources (in partnership with the Department of Primary Industries).

Manning River Ecological Study
We are currently undertaking a five year ecological study of the Manning River, at a cost of $500,000 to ascertain the health of the river.

Greenhouse Gas reduction
We have committed $320,000 to establish tree plantations for greenhouse gas reduction.

Water quality database
MidCoast Water has set up a regional water quality database in conjunction with the Taree, Great Lakes and Gloucester Councils, the CMA and DECC. This database is maintained by MidCoast Water and all the information is available to the partnering authorities.

Environmental Committee
MidCoast Water has established an Environmental Committee with the Taree and Great Lakes Councils and the CMA to discuss and address environmental matters that affect our catchments.

Embracing future pathways

Business leadership

MidCoast Water encourages innovation within our workforce and as such, innovative ideas are pushed to approval quickly. Our flat structure reduces bureaucracy which means decisions are made quickly. Small cross-functional workgroups are assembled with a management "mentor" and partnerships are established with regional, Australian based and International experts to guide and implement our innovations.

These include partnerships with:-

- Smart Stream Technologies – developing a lightweight manhole cover
- Tyco Industries – developing a stop valve thrust restraint
- Benchmark International – developing an industry cost estimating software package

MidCoast Water has joined with "One Spatial", a leading British GIS Company to introduce a new concept called "Radius Studio" which is a software package to check an existing mapping system for errors. MidCoast Water is the Australian reference site for this product.

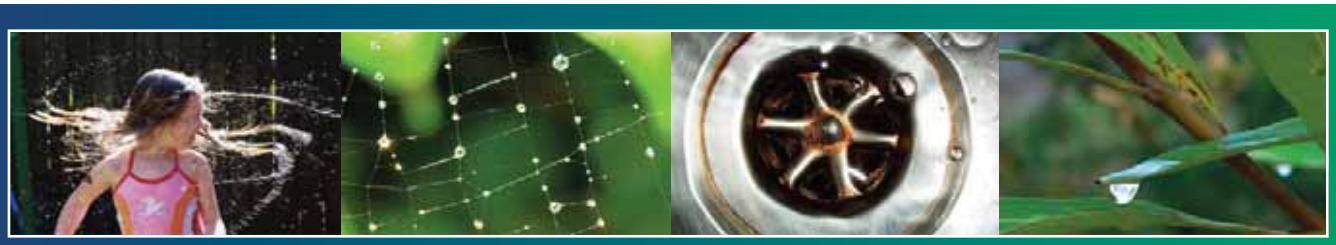
MidCoast Water has recently signed an memorandum of understanding with AutoDesk USA to adapt its GIS system to suit Australian water authorities.

"Autodesk has observed that MCW has a pro-active and proven track record of industry and technology leadership. Moreover, MCW's early and proactive adoption of database-driven asset and network management systems means that Autodesk is eager to enter into a relationship with MCW, nominating MCW as a premier customer within the ANZ industry."
– Autodesk, November 2007.

Innovative approach: A MidCoast Water project team's design of a lightweight, watertight and lockable manhole lid has been recognised with a number of awards. The design has safety and environmental benefits.

These examples reflect MidCoast Water's commitment to providing quality training and education opportunities to our employees by our innovative education assistance program. Through this program over 70 employees have gained higher qualifications through University and TAFE, including postgraduate and master levels.

MidCoast Water is unique within Australia as having its own communication network carrying both business and engineering information systems. This network saves approximately $0.5M per year in operating costs, covers the whole of our operational area and is capable of further expansion.



Embracing future pathways

Community leadership

MidCoast Water provides over $30,000 yearly in local sponsorships and provides $219,000 to Water Aid Australia for overseas water projects. Council believes that we have an obligation not only to provide water and sewer services to our community but to help those overseas that do not have basic services.

An independent review of Council's internal and external communications revealed that "the community is now seeing MCW as not just another piece of public necessity but as their MidCoast Water. This, of course, has the general flow on effect of improving staff morale by making MidCoast Water an accepted and respected community entity". *(Phil Richardson, 2007)*

Two recent surveys have also indicated that MidCoast Water is progressing down a positive track in the opinion of the local community.

A June 2007 survey looked at how MidCoast Water responds to the needs of those customers who have detected a fault or have a particular issue with the service. The survey spoke to 100 customers who had recently been in contact with MidCoast Water, with key findings indicating a high level of satisfaction. *(Refer to Appendix A - MidCoast Water Faults and Complaints Satisfaction Survey, June 2007, The Lake Group)*

A November 2007 Stakeholder Analysis surveyed a cross section of MidCoast Water customers, stakeholders and community groups. This report indicated an extremely positive set of results, with the report stating "even the groups that can be the hardest to please (regulators, unions and the media) have produced high scores and rank MidCoast Water amongst the best organisations they deal with."

> *"The findings in this report reflect MidCoast Water's increasingly holistic approach to what it does and how it supports the community and other organisations. Rather than seeing itself as the custodian of pipes, dams and other infrastructure, MidCoast Water fully delivers against its role as (a) a key player in the industry, (b) a critical part of the community and (c) an organisation that can use its knowledge and influence to make a positive contribution across the whole of the water cycle."*

(Refer to Appendix B - Stakeholder Analysis 2007, The Lake Group)

Supporting our community:
Through the sponsorship of environmental education sections at local libraries, left, and the support of the local Science and Technology Challenge for high school students - which aims to foster an interest in engineering amongst students, thus providing a future for our industry.

MidCoast Water: the facts

Area:	7,092 square kilometres
Population:	81,681
Customers:	water 38,574 sewer 34,277
Employees:	173 full time
Operating budget 09/10:	$62.2M (ex-depreciation)
Capital works budget 09/10:	$35.2M
Asset value	$853.8M

Major Assets

2 Dams
4 Water Treatment Plants
40 Reservoirs
31 Water Pump Stations
1190km water mains
205 Sewerage Pump Stations
13 Sewerage Treatment Plants
934km Sewerage mains

Recent Awards

2004 State Cover OHS Excellence Awards – Highly Commended
2004 Pace Zenith Award – SCADA System Integration
2004 IPWEA NSW Excellence Awards - OH&S Winner
2005 GITA (Geospatial Information & Technology Association) Australian and New Zealand Excellence Awards – Winner
2005 Asia-Pacific (Spatial Sciences Institute) Excellence Awards – Finalist
2005 IPWEA NSW Excellence Awards – Finalist New or Improved Technologies
2005 National Awards for Local Government – Finalist Asset Management
2006 IPWEA NSW Excellence Awards – Finalist New or Improved Technologies
2006 State Cover – Winner OH&S
2006 AWA – Water Environmental Merit Award – Commended
2006 R H Dougherty Award – "Reporting to your Community"
2007 IPWEA NSW Excellence Awards – Winner Environmental
2007 IPWEA NSW Excellence Awards – Winner OH&S
2007 IPWEA NSW Excellence Awards – Finalist New or Improved Techniques
2007 Master Builders Association – Civil Engineering & Infrastructure
2007 NSW Operator of the Year - Pat Welsh, MidCoast Water
2007 National Awards for Local Government – Highly commended
2008 RH Dougherty Awards, Excellence in Communications - Highly commended
2009 WorkCover NSW Safework Awards - Best solution to identified workplace issue
2009 IPWEA NSW Excellence Awards- highly commended new or improved technologies
2009 RH Dougherty Awards, Excellence in Communications - Highly commended

References

• 1992 Review of Performance and Administrative Arrangements for Water Supply County Councils – NSW Water Resources Council, 1992.

• 1995 Review of Water Functions of Electricity Distributors – prepared for the Minister for Land & Water Conservation – 1996

• 2004 Vision and Strategy Review for MidCoast Water – SWS, 2004

• 2005/06 Water Supply and Sewerage NSW Benchmarking Report – DWE, 2007

• 2005/06 Comparative Information on NSW Local Government Councils – DLG, 2007

• 2006 Future Directions in Water Management – MCW, 2006

• 2007 A Review of Internal Communications at MCW – Phil Richardson, Oct 2007

Our water, Our future

MIDCOAST WATER

Sustainable Water Cycle Management for the Manning, Great Lakes and Karuah catchments

Draft for community comment April 2008

Sustainable Water Cycle Management

For the Manning, Great Lakes and Karuah catchments

If there is magic on this planet,
it is contained in water.

Loran Eisely, The Immense Journey 1957

MIDCOAST WATER

Prepared by MidCoast Water
ABN 33 274 468 218
April 2008

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Sustainable Water Cycle Management - what is it?

Water is a precious natural resource – we as humans need it to survive, and the environment needs it to maintain ecosystems.

As one of the highest consumers of water in the world, it has come time for Australia to look at how we manage our water. Droughts across the country, and in our region, in recent years have meant we are all thinking more about water – where it comes from, how we use it, and how much of it we have to go round.

Sustainable water cycle management is about managing our water so it will be available for future generations. Water is used, reused and returned to the environment in a way that provides maximum benefits to both our community and our environment.

Rather than just taking water from the environment to supply the community with tap water, MidCoast Water needs to look at the bigger picture. This means considering all aspects of the water that falls on, flows through and passes out of our catchment. It means working to preserve habitats that are critical to water quality to ensure a healthy, reliable and secure water supply for our community – now and into the future.

Water cycle management recognises that water services – including water supply, wastewater treatment and stormwater management – are all related and linked to our waterways and catchments.

With a number of other organisations involved in water management, how we implement sustainable water cycle management needs to be integrated.

MidCoast Water & the water cycle

As the water and sewerage authority for the Manning and Great Lakes region, from Johns River in the north to Hawks Nest in the south and west to Stroud, MidCoast Water is also part of the wider community and has a responsibility to the regional water catchment and the protection of our unique environment.

Increasing populations, lack of suitable land for development, more stringent regulations, more extreme climatic variations and the availability of new technologies means water cannot be used in the same manner it has been in the past. The existing resource needs to be conserved and utilised in a sustainable way.



How has this strategy been developed?

Developing a plan for the future has involved identifying the key issues at stake in our local water cycle and suggesting potential actions.

To do this, we have had to take into account climate change, which is a major issue for water utilities as we assess our ability to meet the forecast demands in our area.

In preparing this strategy we have worked with our local councils, Greater Taree City Council and Great Lakes Council, who manage stormwater and onsite wastewater in our area.

The SWCM team looked at a number of key components identified as part of the sustainability 'jigsaw'. These included:

- Strategic planning
- Monitoring and forecast
- Pricing
- Community education
- Regulation and codes
- Pressure and leakage management
- By-product utilisation and minimisation
- Triple bottom line reporting
- Stormwater reuse
- Retrofit and Rebate Program
- Catchment Management

We also established a 'project reference group' to evaluate the catchment and actions required. This group was made up of representatives from the three local councils – Great Lakes, Greater Taree and Gloucester – 15 government agencies and community groups including water regulators, environmental groups and users within the catchments. This strategy has been developed in accordance with the Department of Water and Energy guidelines.

In preparing this strategy we looked at extensive research on the climate, vegetation and soil conditions for our area and the environmental implications of water use.

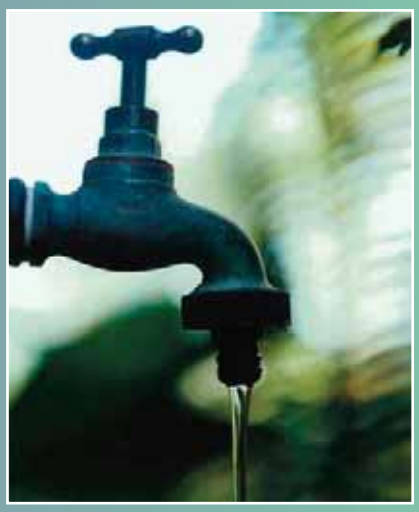
A catchment audit, water resource audit and urban area audit were also carried out as part of the strategy's research. These audits provided valuable information about the current state of the environment and the issues we need to pay particular attention to in the future to ensure our catchment is protected.

This plan has been developed in cooperation with Gloucester Shire Council.



An essential ingredient

Today safe water is one of the greatest bargains of our modern world.



At the turn of a tap, or the push of a button, water is supplied into our homes, right when we want it.

In urban areas water is one of the few products still delivered to your home!

And it is economical - in fact it is cheap. We get one thousand litres of water from our taps for just $1.45, while we pay $2 for just half of one litre of water from the local store.

To get water to each serviced property, we rely on rain falling somewhere in our catchment.

Water is then extracted from either a river or groundwater source, treated and moved through a network of high pressure pipes to each household – ready and waiting, 24 hours a day, seven days a week.

Wastewater is likewise removed and conveyed through an underground pipe system for treatment and returned to the water cycle, where the whole process is repeated, time and time again.

What are the aims of this strategy?

MidCoast Water's aims in developing a strategy for the sustainable management of our water cycle are to:

- Identify and evaluate catchment issues that affect and are affected by water utility activities
- Establish overarching goals and principles to guide the development of future planning and management options
- Develop and evaluate regional and local scenarios that are feasible
- Define, endorse and implement a strategy that will develop sustainable water services for the communities of the future

Water is the best of all things

Pindar 500BC

Why is this important to me?

Here in the beautiful Great Lakes and Manning regions water isn't just an essential ingredient of our every day lives – it is an important ingredient in our lifestyles.

Blessed with an abundance of lakes and rivers, water is something we enjoy.

Our recreational pursuits – swimming, surfing, boating, fishing and more – rely on the health of our waterways.

The area supports a profitable fishing industry, worth millions of dollars annually to the region.

Our vibrant tourism industry is built on the area's beauty, and its aquatic pursuits.

For this to continue well into the future we need to ensure our waterways are looked after and the water cycle is managed in a way that is sustainable.

We need to ensure there is enough water for us to use – and for future generations to use, as well as enough water for us to enjoy.

If we don't plan for the future, and don't become more efficient with our water use – we will have to draw more and more water from our rivers and groundwater in the short term – and this affects the overall health of the environment.

The provision of timely and affordable water services is vital to maintain a sound economic future and prosperous communities.

As a community and as individuals, householders, businesses and families, we must accept the need to change the way we value – and use – water.

We cannot continue to think of water as something that just comes out of a tap and goes down a drain.

Projected population growth for our area will also place increased development and environmental pressures on our water resources.

So developing a strategy to manage our water cycle sustainably isn't just about MidCoast Water coming up with a plan – it also needs the community to understand how important it is. It is Important to us today, and even more important to us tomorrow.

The communities of the Great Lakes and Manning have already shown they understand the importance of water – with customers using an average of 178,000 litres per year in 2006-07. This is a significant reduction in the amount of water we were using just 10 years ago – with customers using an average of 265,000 litres a year from the MidCoast Water supply in 1997.

While this is a fantastic effort, we do need to do more to ensure future water supplies. In the future we will all need to embrace new ways of thinking about water use, and looking for alternative sources of water – whether it be through recycling purified water, desalination or the construction of new dams.

If we are to properly manage our resources and maintain the great lifestyle we value we need your cooperation.



The cycle of life

Water is part of every day – we drink it, wash in it, wash with it, cook with it, swim in it, and water our gardens… the list goes on!

Water doesn't just sustain us; it sustains our wildlife and natural areas.

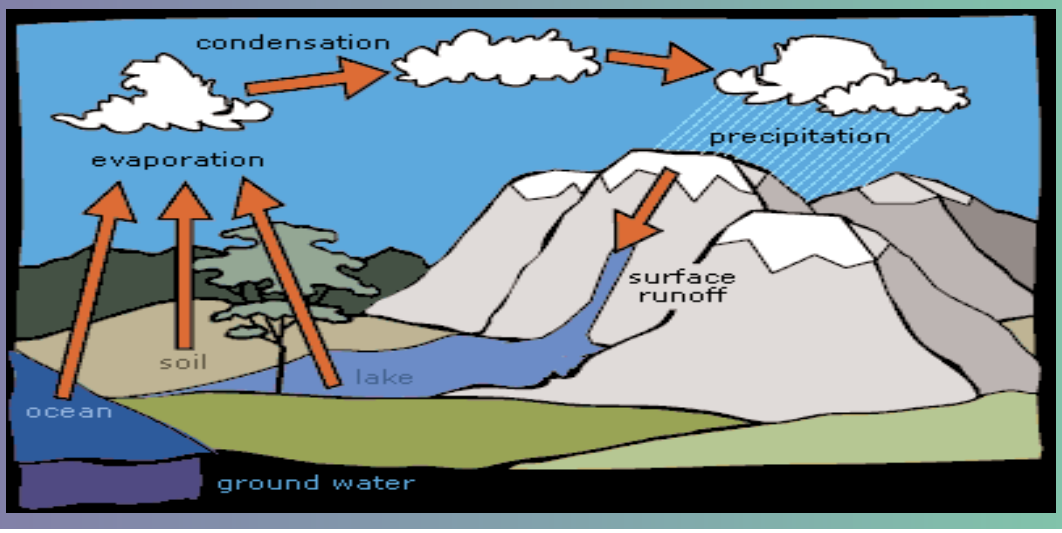
When you just turn a tap to get as much water as you like, it is easy to forget it is actually a limited resource.

Fresh water is finite - new water isn't created, and water doesn't disappear – so the water we use is recycled over and over.

The water cycle is the simplest natural cycle on earth.

The sun evaporates water from the ocean, lakes and rivers.

Once in the atmosphere the vapour cools and turns into clouds – from which water eventually falls back into our streams and rivers, before flowing into lakes or the sea.





The Past

..... Our Water Story

MidCoast Water is the local government authority responsible for reticulated water supply and sewerage systems in the Greater Taree and Great Lakes local government areas.

The area stretches from Johns River in the north, to Karuah in the south taking in Taree, Wingham, Forster, Tuncurry, Krambach, Stroud, Bulahdelah, Tea Gardens and Hawks Nest covering 7000 square kilometres.

MidCoast Water operates four water supply systems. The main water supply for the district is derived from the Manning River. Water is pumped to a storage dam at Bootawa, near Wingham, for distribution to settlements as far north as Crowdy Head, and south to Smiths Lake.

Water supply schemes also serve the communities of Bulahdelah, Stroud and Tea Gardens Hawks Nest.

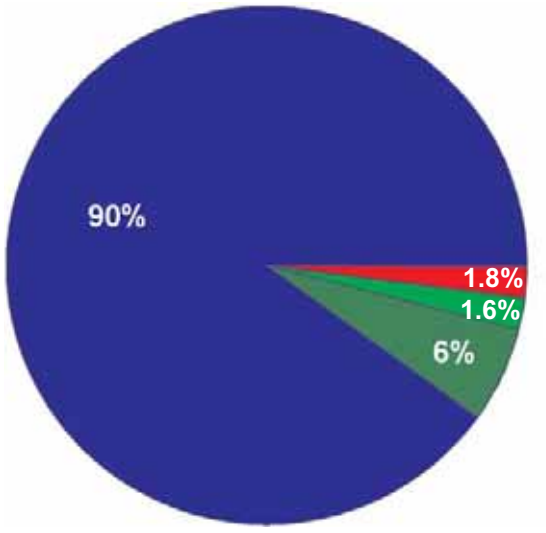
To supply water and sewerage services to 36,000 customers, MidCoast Water harvested 10 billion litres of water in 2006/7.
To do this we have 2000 kilometres of water and sewer mains, four water treatment plants, 40 reservoirs, 205 sewer pump stations and 13 sewage treatment plants.

The catchments of the Manning, Karuah and Great Lakes are used extensively for fishing activities which are worth about $31 million annually to the region, most of which is from the Wallis Lake and Myall Lakes/Port Stephens area.

Our agricultural industry - worth about $110 million annually - also depends on water.

As we move into the future our efforts and resources will be directed towards ensuring there is an ample supply of drinking water and an efficient process for sewage treatment and effluent management.

Where our water comes from



Manning River: 90%
Crawford River: 1.8%
Tea Gardens Aquifer: 6%
Karuah River: 1.6%



The Present

..... Our Current Situation

As a result of increased growth in the Manning and Great Lakes regions, and growing community expectations for higher quality drinking water and wastewater management MidCoast Water is constantly working to take the lead in using the latest and best thinking and technology to manage our resources and pioneering solutions for future challenges.

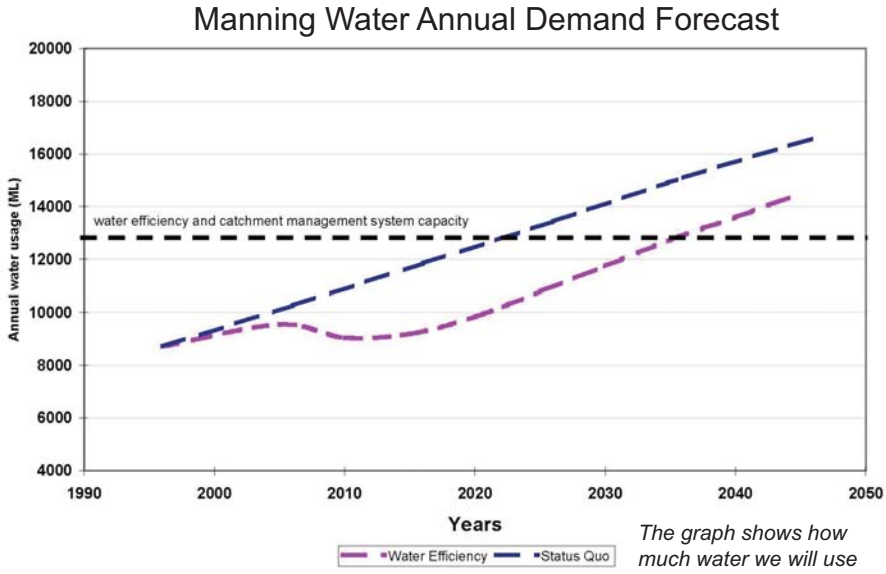
We are committed to ensuring we consider innovative solutions which meet our needs, those of our community and those of the environment.

We are also committed to working with businesses, industry and others to support the wiser use of water.

MidCoast Water has invested in a range of programs to secure supply and reduce demand.

Between 1997 and 2007 MidCoast Water customers have reduced their water use from 265,000 litres per year to 178,000 litres per year.

While the Sustainable Water Cycle Management Strategy is about providing long-term options for securing water supply for our communities – the security of supply and reductions in demand form an important part of MidCoast Water's ongoing operations.



The graph shows how much water we will use beyond 2030 if we continue as we are (blue line) and if we adopt water saving measures (pink line). The black line indicates how much water we have available to us.

We have a number of projects that are currently underway which will assist in securing this future.



The Present

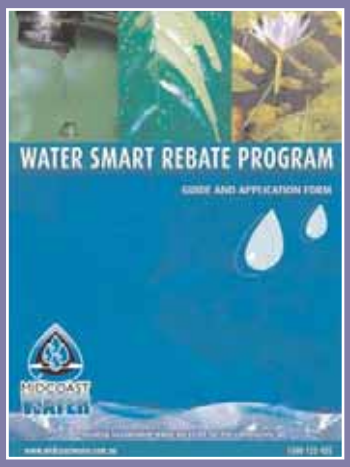
..... Our current activities

Environmental monitoring

MidCoast Water conducts a number of water quality monitoring programs including the Manning River, Dingo Creek, Mills Creek, Browns Creek, Myall River, Lansdowne River, Dawson River, Karuah River and Crawford River. We take more than 5 000 samples every year across the region for purposes of environmental monitoring. We also undertake environmental monitoring of reuse schemes such as the Lansdowne and Coopernook schemes.

Water Smart Rebate Program

MidCoast Water customers are now able to access up to $1500 in a cash rebate scheme to help make their homes more water efficient.
The Water Smart Rebate Program works on a points basis, with each point worth a $100 rebate. The most water efficient appliances attract the highest points, as does the greatest use of the rainwater tanks. Water efficient devices covered by the program include: showerheads, toilets, washing machines, dishwashers, rainwater tank connections and greywater treatment systems.



..... Our current activities

Bootawa Water Treatment Plant

A $60 million project to improve water quality in the Manning Water Supply Scheme will see the construction of a membrane filtration plant at Bootawa Dam. This is complemented by a $25 million plan to increase the size of the dam to improve water security and the environmental flows of the Manning River.

Once completed the new treatment plant will deliver an improvement and greater consistency in the biological, chemical and physical properties of the water supplied by the Manning scheme – providing better quality drinking water.

The new treatment plant is expected to be online in 2009, with the increase to the water storage scheduled to be completed by 2011.

Nabiac borefield water supply

To ensure MidCoast Water is able to continue to meet customer demand during dry times we are undertaking a $18 million project to develop a borefield on the Nabiac Aquifer and a new water treatment plant as a supplementary supply for the Manning Water Scheme. This will also reduce pressure on the Manning River during drier times, giving protection to environmental flows.

Tea Gardens Water Supply upgrade

A $15 million project to upgrade the Tea Gardens Water Supply Scheme to improve water quality and increase security of supply. This included the construction of an 8.1 million litre reservoir and a new water treatment plant.

..... Our current projects

Agricultural reuse

MidCoast Water has reuse schemes in place at Coopernook, Lansdowne and Stroud, where recycled effluent is used on dairy pastures.
The Taree and Wingham Effluent Management Schemes are scheduled for completion during 2008 and will provide for the beneficial use of treated effluent on agricultural lands.
This will reduce the level of effluent released into the local waterways, reducing the levels of nutrients entering our rivers and improving overall river health.
Once fully operational the project will reduce release of effluent into the Manning River by up to 70 per cent at Wingham and 50 per cent in Taree.

Golf course reuse

We are currently in the planning stages for using recycled water on golf courses at Hawks Nest, Harrington and Tuncurry. Using recycled water in areas where it is safe and economical to do so means we reduce the volumes of drinking water we extract from the environment.

The Future

..... The challenges we face

MidCoast Water's Sustainable Water Cycle Management Strategy recognises there are major challenges ahead for managing the water cycle in the Manning, Great Lakes and Karuah catchments.

There is a need for us to investigate how we will continue to supply water to a growing region into the future - as demands and needs will increase.

If we don't recognise and plan for this now, it is likelyour region may not be able to maintain our future water needs sustainably.

Healthy waterways are essential to maintaining our lifestyle, our economy and our environment. They are an integral part of our primary industries such as fishing and oyster production. They also provide safe places for fun!

In the past water authorities have had fairly narrow aims – they built dams, installed pipework and provided water to customers. Now, with more financial constraints and increased environmental standards we are looking towards to a period when water resources will be scarce, requiring a more integrated and efficient management approach.

For this we need greater innovation and application of new technologies. To do this the Strategic Water Cycle Management team developed a number of options which have been evaluated against their economic, social and environmental values.

The overall aim was to come up with a strategy that provides:

- A surplus of water
- An economically viable water service business
- Levels of service that match community requirements and
- Delivers the least environmental impact, while being affordable

We recognise our community wants their drinking water treated to a safe and reliable level while minimising energy and chemical use.

Currently our system supplies 10 billion litres of water a year, serving 36,000 households. By 2030 the forecast is for 50,000 households – a 40 per cent increase. Without water-wise measures the forecast usage for MidCoast Water in 2030 will be 16 billion litres a year, with water-wise measures in place this could be reduced to 13 billion.



The Future

..... The solutions

In preparing the SWCM Strategy we looked at ways in which we can achieve both the required amount of water for our population and the protection of our environment into the future.

The project reference group decided on five options to secure our water future. Two of the options – A and B – are about fine-tuning and improving the effectiveness of our existing systems. The other three – C, D and E – require major infrastructure.

A detailed study has shown that if A and B are embraced by our community, the expense of building the infrastructure in opportunities C, D and E can be deferred to the longer term.

While MidCoast Water is not facing crisis point, like many water utilities across Australia we recognise both the consequences of not planning for future variability in climate and the need to involve our customers in selecting a sustainable water future for the region. We do need to plan now for the future, so groundwork can be in place should we experience something out of the ordinary and are required to start work sooner than currently expected.

If the ideas of water efficiency and catchment management, which form the basis of options A and B, are embraced the capacity of the current infrastructure will continue to meet our needs until 2036 delaying the need for more construction. Then by progressing down the path of either C, D or E, we can secure the water resources for our community beyond 2070.

However if we – as a community - don't do anything, we could be looking at undertaking investments into one of the three options which require the building of new infrastructure by as early as 2022 – and it could be even earlier if climate change hits harder than currently predicted.
And this comes with a price tag, which will have to be paid for by the community, and that is why it is important you are aware of the opportunities for our future.

The two options for the short term are:
Option A – Water efficiency and effluent, stormwater and rainwater reuse

Option B – water efficiency and reuse as in Option A plus catchment management

There are three identified opportunities for our future supplies:
Opportunity C- Recycling
Opportunity D - New water storages
Opportunity E- Desalination



The Future

..... Short term solutions in detail

Option A — *Water efficiency and effluent, stormwater and rainwater reuse*

The first option to prepare for our future is already taking place – our community is starting to embrace water efficiency - and MidCoast Water is actively providing incentives such as the Water Smart Rebate Program to encourage customers to use less water.

MidCoast Water is also already looking at fostering local reuse schemes, such as substituting alternative water sources, such as rainwater, effluent and stormwater for tap water and things such as sporting field irrigation.

We waste large volumes of drinking water by using it when it is not needed – for purposes such as watering gardens and flushing toilets. Recycled water, either treated effluent or rainwater, could be used for these purposes and others such as washing machines and hot water systems, conserving our drinking water supplies.

Water from these sources can be treated to an appropriate standard to make it safe and suitable for non-drinking purposes.

As well as reducing demand for drinking-quality water, these projects can reduce stress on urban streams by capturing some of the water, and nutrients, that would otherwise be discharged from drains and wastewater treatment plants.

Treated effluent in the Taree, Wingham, Coopernook, Lansdowne and Stroud is already being used on agricultural land. Investigations are underway to extend effluent reuse to golf courses in the Harrington, Tuncurry, Hawks Nest and Old Bar areas. New developments in Old Bar and Forster are being assessed for 'third pipe' recycled water systems.

Water conservation depends on our customers taking greater control of their water use and being prepared to use alternative sources, such as rainwater tanks or reuse water for irrigation. If embraced by our community, this option can defer large investments in major infrastructure until 2030 and beyond.



The Future

..... Short term solutions in detail

Option B

Catchment management plus Option A

This option involves the water efficiency and reuse elements of option A, plus efficiency in rural irrigation and improvements in the quality of water in our rivers during times of low flow.

This involves MidCoast Water funding rural improvements for irrigation efficiency and identifying and correcting water quality in our water supply catchments to allow improved aquatic ecosystem during low flow. This would extend the need for further solutions to 2036.

Under this option current effluent management as outlined in Option A would continue.

A lot of this work is already underway, however it is important the community is aware and supportive of our efforts to improvement the management of our catchments.

This approach is innovative and brings together knowledge gained by natural resource managers across the State over the past two decades of research in water and catchment reform.

The success of this approach will depend on the uptake and benefits to landowners and industries in the catchments.

If the success in various pilot studies across New South Wales were to be repeated in the region, water quality and quantity targets can be met.

On the other hand, if uptake and delivery of catchment management practices doesn't happen, we will need to bring forward the longer term opportunities of C, D and E which are canvassed over the following pages.

The Future

..... longer term solutions

There are three identified options for our future supplies. All these opportunities take into account a possible 25 per cent reduction in the amount of water available to us, as a result of climate change, and predicted growth in the region. This modelling assumes the success of both options A and B.

Each option has environmental implications and energy demands, for both the construction and ongoing running of each scheme.

Financial modelling was also undertaken on the three longer-term opportunities, indicating all three will cost the same in terms of annual water and sewerage accounts for customers. This modelling assumed the community adopts option A - water efficiency.

	C - Recycling	D - New storages	E - Desalination
Annual water and sewerage charges	$1314 to 2017 $1074 from 2018 to 2025 $948 from 2026 to 2035		

If we, as a community, don't embrace water efficiency as outlined in options A and B, and other sources are needed by 2022, there is a $70 increase in the typical bill.

	If community does not adopt water efficiency
Annual water and sewerage charges	$1314 now until 2014 $1386 from 2015 until 2017 $1146 from 2018 until 2026 $966 from 2027 to 2035

NOTE: All costs are in 2008 dollars and assume no increases in service levels and government legislation. They are based on current assumptions and information available, and exclude CPI.

The Future

..... Longer term solutions in detail

Opportunity C Recycling

Water recycling involves speeding up the natural water cycle by transferring purified water from treated effluent into Bootawa Dam and the groundwater at Nabiac.

This water would then be mixed with the dam water at Bootawa and the groundwater at Nabiac and go through the water treatment plant's microfiltration process before being distributed to customers.

This would involve the construction of an additional treatment plant near Bootawa Dam to treat wastewater from Taree and Wingham and another at the Nabiac aquifer to treat wastewater from Forster and Hallidays Point prior to its injection into the aquifer.

Advanced processes will ensure the community receives purified drinking water. Based on current projections this opportunity would be required by 2036 for the Manning water supply scheme.

In Bulahdelah treated wastewater could be transferred to the water treatment plant for further treatment. This would not be required for the Bulahdelah community until 2070.

If the recycling option was decided on purified water would be required to be injected into the aquifer at Tea Gardens and the off-river storage at Stroud by 2050.

Recycling results in a reduction in existing and future wastewater released to our waterways. However during this process a diluted brine water is released back into the estuary. If MidCoast Water needs to adopt a zero release of brine water, additional costs may be incurred.

The downside of this opportunity is the social 'yuk' factor of using purified water. Other communities, such as Toowoomba, have suffered from this, however within a year of that community voting against a purified water option, Brisbane committed to having 25 per cent of its water coming from purified treated effluent by 2009.

Agricultural, golf course and non-potable reuse as outlined in Option A would also be used to compliment this option. This option would use the greatest volumes of recycled water and reduce the need for extensive environmental discharges.



The Future

..... Longer term solutions in detail

Opportunity D *New water storages*

Another opportunity for securing our future water supplies is to build more water storages such as dams. This has been the traditional approach to water supply in the past, although now rarely undertaken due to a lack of suitable sites and environmental issues.

MidCoast Water is fortunate to own land suitable for a new dam, at Peg Leg Creek in the Manning. For the Manning scheme, a new off-river storage would be needed to supplement Bootawa Dam by 2036.

The construction of this storage would provide a separate storage to the current storage at Bootawa Dam. It would be a low cost scheme to build and require less energy to run than other options. It would, however, remove about 100 hectares of forest and increase the volumes of treated effluent released to our waterways as our population grows.

The Crawford River scheme would require a new dam by 2070.

The provision of new water storages is not possible for the Tea Gardens area. The Karuah River scheme would require additional off-river storage by 2070.

Agricultural, golf course and non-potable reuse as outlined in Option A would also be used to compliment this option.

The Future

..... longer term solutions in detail

Opportunity E *Desalination*

Desalination is a process by which we can filter and purify salty water up to drinking water quality. For practical reasons the most attractive desalination options are for water that does not have much salt in it to start with, such as brackish water found in the upper estuary. If pursued desalination would be required by 2036 for the Manning scheme.

The intake for Bootawa Dam is in the upper tidal section of the Manning River which would be capable of extracting brackish water from this section of the river in times of low flow.

MidCoast Water is well placed to provide cost effective desalination due to its ability to extract water which is much less saline than seawater - other areas such as Perth, Sydney and Melbourne are purifying seawater - reducing the energy required. During the process a diluted brine water is released back into the estuary. If MidCoast Water needs to adopt a zero release of brine water, additional costs may be incurred..

The direct energy consumption of desalination is a major impact. This process would also increase the volumes of treated effluent released to our water ways as our population grows.

For the Crawford River there is an opportunity to extract and treat brackish waster from the upper tidal section of the river. This would be required by 2070. There is no desalination option for the Tea Gardens or Karuah schemes.

Weighing up the costs if built today ....

C	D	E
If this opportunity was chosen the cost of construction, plus ongoing maintenance over its lifespan would be:	If this opportunity was chosen the cost of construction, plus ongoing maintenance over its lifespan would be:	If this opportunity was chosen the cost of construction, plus ongoing maintenance over its lifespan would be:
Construction: $50 million Annual operation and maintenance: $1.8m	**Construction: $39 million Annual operation and maintenance: $0.8m**	**Construction: $25 million Annual operation and maintenance: $1.2m**



The Future

..... it's over to you

This Sustainable Water Cycle Management Strategy has been undertaken by MidCoast Water to provide our community with a clear outline of the issues facing it and the options available.

Now we need our community to think about the options available to our region for the future provision of water supplies - and we look forward to receiving feedback.

The choices we make as a community will have significant impacts on when the larger works outlined will be required – and we must consider the financial impacts of building them sooner rather than later.

If we – as a community - don't do anything, we could be looking at undertaking investments into one of the three options by as early as 2022 – and it could be even earlier if climate change hits harder than currently predicted.

However if we embrace water efficiency, which is being supported by MidCoast Water programs such as the Water Smart Rebate and various reuse schemes we can extend the need for major change out until 2036.

To ensure our water future is provided for, MidCoast Water and the community need to fully investigate alternative solutions for water supply into the future before determining a course of action.

We are not expecting the community to make major decisions at this point in time – but what we do want to do is start our community thinking about the possible solutions.



Where to from here?

MidCoast Water is committed to taking this strategy into the future, and has established a system of targets and reviews. This strategy isn't destined to sit on a shelf gathering dust - it is designed to guide us over the next three decades to ensure we keep focused on the opportunities for our community.

This strategy is also a living document. We will get better information on the impact of climate change and weather patterns over time, as well as how much water has been saved by the introduction of some of the short-term measures outlined in this plan. Such new information may change the options we have for the future - so we will be working to ensure we are aware of new information and incorporate this into our strategy when appropriate.

The MidCoast Water Sustainable Water Cycle Management Strategy is on public exhibition until …….

Once members of the community have their say our future direction, the final strategy will be developed and endorsed by MidCoast Water's board.

The full report – of which this is a summary – can be viewed at MidCoast Water's Customer Service Centres at 16 Breese Parade, Forster or 26 Muldoon Street, Taree.

Responses & feedback

Responses and feedback to *Our Water Future*, MidCoast Water's Sustainable Water Cycle Management Strategy can be mailed to:

Our Water, Our Future
MidCoast Water
Reply Paid 671
Taree 2430

or emailed to: swcm@midcoastwater.com.au
Enquiries: 1300 133 455



Frequently asked questions...

Q **How will this strategy affect how much I have to pay?**

A For information regarding the impact on customer accounts, see page 17

Q **What does Sustainable Water Cycle Management mean?**

A A Sustainable Water Cycle Management is our term to describe the way we manage our use of water as a resource to ensure the maximum benefit to our community for generations to come, while minimising harm to the environment.

Q **Where can I find out more about desalination?**

A On the MidCoast Water desalination fact sheet, which can be found on our website at www.midcoastwater.com.au or is available by phoning 1300 133 455.

Q **Where can I find out more about drinking water made from purified treated effluent?**

A On the MidCoast Water water recycling fact sheet, which can be found on our website at www.midcoastwater.com.au or is available by phoning 1300 133 455.

Q **Why doesn't MidCoast Water just make people use less water?**

A Encouraging our community to use water more efficiently is part of our strategy. However, with our growing population and variable climate, water efficiency alone will not ensure the sustainable management of the water cycle without undertaking other opportunities.

Q **I am not an expert; why does MidCoast Water want my opinion?**

A MidCoast Water is taking a triple bottom line approach to selecting the best opportunity. This mean considering not just the financial costs, but also the effect on the environment and our community. As part of the community, your informed opinion is valued. We encourage you to read this document, and answer the questions on the attached survey.



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Your say ....

Would you support Option A - water efficiency?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Do you support the rebates MidCoast Water is offering?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Do you think you would install a rainwater tank in the next five years?

☐ Yes ☐ No ☐ Already have one

If not, why not? _____

Would you support Option B - water efficiency and catchment management?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Longer term solutions

Would you support stormwater collection for irrigating public playing fields?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Would you support recycled water (purified from treated effluent) for watering gardens and toilet flushing?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Would you support recycled water (purified from treated effluent) for washing clothes and showering?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Would you support recycled purified water (from treated effluent) for drinking?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Would you support the building of more off-river storage dams to cater for future needs?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Would you support desalination of estuarine water to cater for water supply future needs?

☐ Cannot rate ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

Additional comments

_____

_____

_____

_____

_____

_____

_____

Please feel free to provide more feedback on a separate sheet, or submit your thoughts and suggestions independently of this page.

Water saving facts

- Check for leaking taps - both inside and out. It is an easy thing to do and it can save lots of water. One dripping tap can waste up to 200 litres a day. Be careful not to overtighen taps, as this can damage washers and valves and cause leaks.

- Leaking toilets can be the biggest water waster in your home. A silent toilet leak can waste 150 litres or more a day. To check place some bright food colouring in the cistern. Don't flush for 30 minutes then check if there is any colour in the bowl. If there is, you have a silent leak.

- Use a broom to clean paths rather than a hose. Ten minutes hosing driveways can waste 200 litres of water.

MIDCOAST WATER

1300 133 455

www.midcoastwater.com.au

Fold



Our water, Our future

MIDCOAST WATER

Sustainable water cycle management for the Manning, Great Lakes and Karuah catchments

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No stamp required if posted in Australia

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