

Productivity Commission
National Water Reform Inquiry

May 2017



CENTRAL NSW
COUNCILS



Centroc's Mission is to be recognised as the lead organisation advocating on agreed regional positions and priorities for Central NSW whilst providing a forum for facilitating regional co-operation and sharing of knowledge, expertise and resources; effectively nurturing sustainable investment and infrastructure development.

www.centroc.com.au

9 May 2017

Reference jm:mm 051703
Enquiries: Ms M Macpherson

National Water Reform Inquiry
c- Ms T Horsfall
Productivity Commission
GPO Box 1428
Canberra City ACT 2601

Dear Ms Horsfall,

Re: Inquiry into the reform of Australia's water resources sector

Thank you for the opportunity to respond to the Productivity Commission inquiry into the reform of Australia's water resources and for granting an extension for Central NSW Council's (Centroc) to submit to this inquiry.

Central NSW Councils (Centroc) represents over 200,000 people covering an area of more than 50, 000 sq kms comprising the Local Government Areas of Bathurst, Blayney, Cabonne, Cowra, Forbes, Hilltops, Lachlan, Lithgow, Oberon, Orange, Parkes, Upper Lachlan, Weddin, and Central Tablelands Water.

It is about the same size as Tasmania with half the population and a similar GDP.

Centroc's vision is to be recognised as vital to the sustainable future of NSW and Australia.

Its mission is to be recognised as the lead organisation advocating on agreed regional positions and priorities for Central NSW whilst providing a forum for facilitating regional cooperation and sharing of knowledge, expertise and resources.

Centroc has two core objectives:

1. Regional Sustainability - Encourage and nurture suitable investment and infrastructure development throughout the region and support members in their action to seek from Governments financial assistance, legislative and/or policy changes and additional resources required by the Region.
2. Regional Cooperation and Resource Sharing – Contribute to measurable improvement in the operational efficiency and effectiveness of Member Councils through facilitation of the sharing of knowledge, expertise and resources and, where appropriate, the aggregation of demand and buying power.

The Centroc Board is made up of the 28 Mayors and General Managers of its member Councils who determine priority for the region. These priorities are then progressed via sponsoring Councils. For more advice on Centroc programming and priorities, please go to our website www.centroc.com.au

Water security for the region's urban centres including the need for a new storage for the Lachlan catchment is one of the highest priorities for Central NSW Councils with long term water security vital to meet community needs and underpin confidence for continued investment and growth in the region. Water for urban use is crucial for the sustainability of the region's towns.

As a result Centroc has undertaken extensive work on urban water security over the past decade completing the National award winning Centroc Water Security Study (CWSS) in 2009 which identified a range of water security solutions for the Central NSW region.

Following on from recommendations in the CWSS, Centroc members committed to a unified approach to the sustainable delivery of water supply and sewerage services and to achieve and maintain Best Practice forming the Centroc Water Utilities Alliance in 2009.

The Alliance provides support to member Councils in meeting Best Practice in water and sewer management and in achieving cost savings and efficiencies including in asset management and workforce training and development. It does this through a regional procurement program, mentoring, sharing of knowledge and resource sharing. Centroc also has a strong track record in grant acquisition and in the management of regional grant funded activities and is a tireless advocate for water security for the region.

The CWUA demonstrates the efficiencies of co-operative partnerships in delivering the National Water Initiative strategic agenda. Programming is innovative and focused on compliance based best practice service delivery to achieve optimal outcomes for communities.

Comments on Inquiry into the reform of Australia's water resources sector

Centroc understands that the Terms of Reference for this inquiry requires the Commission to:

- Assess the outcomes of the National Water Initiative (NWI) and related water reform efforts
- Consider the potential and realised benefits of NWI implementation
- Consider the scope for improving the NWI
- Assess progress against the recommendations in the National Water Commission's 2014 National Reform Assessment
- Make recommendations on future reform priorities and
- Consider the interaction of water policy with other policy areas such as energy, agriculture, planning and urban supply.

Where individual member Councils may make independent submissions, Centroc provides the following high level comments based on Centroc Board policy with specific reference to the regional New South Wales context. Drawing on Centroc's extensive experience in regional water planning and the work of the Centroc Water Utilities Alliance, this submission focusses on the areas of water planning and urban water services. Response will be provided on issues where Centroc has policy.

Water Resource Management

Entitlements for alternative water sources

The following response is provided by Orange City Council who faced with continuing dry conditions over many years and the uncertainty of future rainfalls, has broken new ground in the harvesting of stormwater for urban use.

Stormwater Harvesting

In response to the millennium drought and huge pressures on its urban water supply, Orange City Council is leading the way with its innovative stormwater harvesting schemes becoming an integral part of Council's water supply. The *Blackmans Swamp Creek Stormwater Harvesting Scheme* represents the first large scale, indirect-to-potable stormwater harvesting project in NSW, if not Australia. This project is capable of providing between 1300-2100ML of additional water into the Orange's raw water supply each year from the city's stormwater system, meeting up to 40 per cent of the city's total water needs.

The basic concept of the *Blackmans Swamp Creek Stormwater Harvesting Scheme* involves capturing a portion of the high flows in Blackmans Swamp Creek during storm events, and transferring these into the nearby Suma Park Dam to augment the city's bulk water supply. For more detail:

<http://www.orange.nsw.gov.au/site/index.cfm?display=147115>

The *Ploughmans Creek Stormwater Harvesting Scheme* follows on the heels of the multi award winning *Blackmans Swamp Creek Stormwater Harvesting Scheme*. This scheme will transfer a portion of the storm flows from the Ploughmans Creek catchment into Suma Park Dam where it will supplement the City's raw water supplies.

A drier future, albeit with more extreme storm events, makes stormwater harvesting from an urbanised catchment a sensible option to consider. The challenge is to adaptively manage the scheme's use so that the downstream impact is not significant and that the needs of downstream users and the aquatic environment are not compromised. The urbanisation of the Ploughmans Creek catchment, compared to its natural condition, has generated additional stormwater runoff. The harvesting scheme, as proposed, has been designed and will be operated to capture and use this extra runoff.

The *Ploughmans Creek Stormwater Harvesting Scheme* was constructed and will operate without risk of serious or irreversible damage; without degrading the health, diversity and productivity of the environment for future generations; and without jeopardising biological diversity or ecological integrity.

The Review of Environmental Factors (REF) placed on public exhibition in November/December 2009 concludes that the construction and operation of the scheme is unlikely to result in a significant adverse environmental impact.

The *Ploughmans Creek Stormwater Harvesting Scheme* comprises four (4) wetlands to provide stormwater quality and quantity controls and two (2) small V-notch weirs and associated pumps to pool and harvest stormwater flows. The average volume harvesting by the scheme under current catchment conditions is estimated at 700ML/year however, when the catchment is fully developed

this is estimated to increase to an average of 800ML/year. For more detail:

<http://www.orange.nsw.gov.au/site/index.cfm?display=158554>



Ploughmans Creek Stormwater Harvesting Scheme

Managed Aquifer Recharge

In 2011, Orange was identified by the National Water Commission (NWC) as an area that could potentially benefit from a Managed Aquifer Recharge scheme.

As a result, Council received \$150,000 funding from the Australian Government through the National Water Commission's Raising National Water Standards Program to assess the feasibility of a Managed Aquifer Recharge Scheme within the Orange Local Government Area.

The Project consisted of 2 Stages:

Stage 1

Initial viability assessment of potential sites within the Orange LGA, including the provision of a progress report identifying the site that will be considered under Stage 2.

Stage 2

A completed desktop feasibility study, including a Business Case, of a managed aquifer recharge scheme, for up to two sites, in the Orange, New South Wales region. The final report includes findings of the desktop investigations on:

- the scheme's costs and projected demand,
- the availability assessment of water, including analysis of records to model surface water hydrology, to model water quantity and quality calibrated against flow records,

- the assessment of existing hydro geological data, report and/or maps, and modelling of the hydrogeology of the aquifer, and
- the scheme's regulatory requirements.

The two sites (A & B) identified in the Study are shown on the map provided as attachment 1.

Attachment 1 (for reference):

- Business Case Managed Aquifer Recharge prepared for Orange City Council (MWH, 15 June 2011). The Business Case Executive Summary recommends a Managed Aquifer Recharge Scheme Trial be undertaken by Orange City Council; and
- Final Progress Report of July 2011 to the National Water Commission recommending that any progression of the trial project will be subject to external funding becoming available to Council.

Chapter 8 from the Business Case identifies barriers and risks associated with developing, implementing, constructing and operating a Managed Aquifer Recharge Scheme in NSW. Figure 8 of the Business Case shows that the highest relative risks/barriers for such a Scheme relate to:

- Regulatory Risk – difficulty in obtaining Regulatory Approvals from Government (NSW Health, DPI Water, EPA).
- Funding Risk – currently no funding is available for such a Project (cutting edge/new technology which Government hasn't caught up with); and
- Technical Risk (Pressure, flow rates and groundwater levels) – hence the concept of a Trial is recommended in the first instance in order to gain a knowledge of such a Scheme (Data collection etc.)

Information Request:

What new water sources should be brought into a water entitlement process and why?

Centroc response:

- *Stormwater harvesting and aquifer re-charge should be brought into a water entitlement process*
- *As the City of Orange has demonstrated, Stormwater harvesting is a viable alternate water source. In delivering this innovative Project, Council was confronted with many regulatory barriers along the way. Whilst these barriers were able to be dealt with, Council suggests that the regulatory framework for such Projects be reviewed.*
- *Managed Aquifer Recharge (MAR) is a relatively new, leading edge technology in New South Wales. MAR currently does not fall into the water entitlement process and needs to if Government wants it to be considered by Water Authorities as a viable alternate water source for the future. More research is yet to be undertaken in order to understand the risks associated with implementing an MAR Scheme. As such, a Triple Bottom Line/Cost-benefit approach is suggested as the best way forward. A trial MAR Scheme which is funded at either a State or Federal Government level is one way to gain an understanding of the technical suitability of MAR at a particular location before a full MAR Scheme can be considered. Such a trial can pave the way in addressing major risks and barriers in implementing an MAR Scheme, including Regulatory/Social Risk, Funding Risk and Technical Risk.*

Water Planning

Given the priority for the Centroc Board of water security for the region's cities and towns and its maturity in regional water security planning, Centroc has a particular interest in the NSW Government's strategic framework for water planning. Currently this strategic framework is missing. In addition to this the NSW Government's funding framework for water infrastructure which requires projects to meet a Business Case Review/ Gateway approach does not fit the needs of regional communities.

Under this section we address:

1. Streamlining Planning Requirements
2. Dynamic and Responsive Planning Arrangements
3. Accounting for Climate Change and extreme events
4. Ensuring water planning and entitlement frameworks support new infrastructure investment
5. Water Quality
6. Environmental Management

Of note is this region's work in water security planning through its 2009 National award winning Centroc Water Security Study and prioritisation of regional water infrastructure needs which clearly illustrates challenges in the NSW Governments planning and funding framework for water.

1. Streamlining Planning Requirements

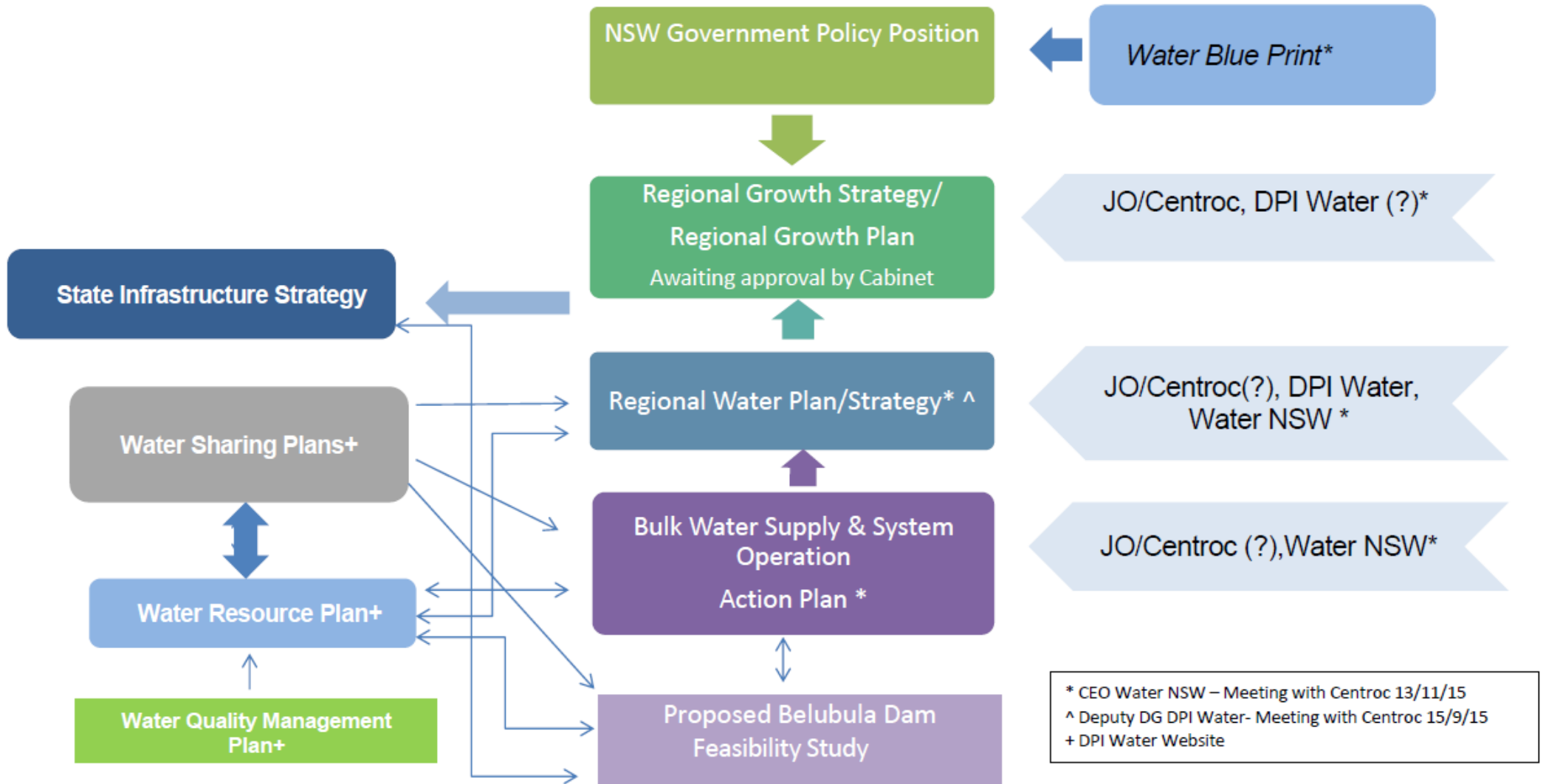
As a pilot Joint Organisation under the NSW Government's *Fit for the Future* Local Government reform agenda, a key objective for Centroc over the past 2 years has been improved regional planning through inter-governmental collaboration between Local, State and Federal Government and at the regional level.

Given this and the priority for the Centroc Board of water security for the region, Centroc has a particular interest in the NSW Government's strategic framework for water planning and has sought clarification on this from the NSW Government.

Currently there would appear to be a number of planning processes with legislative requirements for water across multiple agencies including, at the State level, DPI Water, the Natural Resource Commission and WaterNSW and for this region, the Murray Darling Basin Authority at the Federal level.

The current water resource planning processes are confusing and not integrated. These are summarised in the table provided as figure 1- see page 9.

NSW GOVERNMENT STRATEGIC FRAMEWORK FOR WATER PLANNING ?



Centroc has advocated for a regional water planning framework that takes into consideration water supply and demand options for the Local Water Utilities (LWUs) across the catchment and most importantly that aligns Local, Regional, State and Federal planning processes. Greater alignment of planning processes at the regional level will deliver optimal outcomes for our communities including an appropriate balance of socio-economic and environmental water needs and good value investment by Government in infrastructure.



Centroc representatives meet with State Water on scoping for a new storage- Forbes November 2014

Centroc has recommended to the NSW Government that it liaise with the various State Agencies responsible for water management to provide advice on the strategic framework for water planning to ensure a more holistic cross-catchment approach.

Clarification of the following issues has been sought:

- The linkages between Water Sharing Plans, Water Resource Plans, a Regional Water Strategy and a Bulk Water Supply & System Operation Action Plan? What is the sequence for the development of these?
- Which agency has carriage and /or lead of each of these planning functions and what, if any, legislation calls up responsibility for the delivery of these?
- Which agency has the co-ordination role or are some instruments being contemplated?
- How does the Regional Water Strategy feed into the Regional Growth Strategy given that, it is Centroc's understanding that this is near completion for the Central NSW region and requires input from the Regional Water Strategy and Bulk Water Supply & System Operation Action Plan, both of which are yet to be developed?
- The above being the case, how is the State Infrastructure Strategy informed by the Regional Growth Strategy which as far as we are aware only plots water security needs on a map with little if any commentary or strategic thought given to regional water planning?

Further, in its February 2016 response to the Independent Pricing and Regulatory Tribunal's *Local Government Regulatory Burdens Review Draft Report – January 2016* draft recommendation 10 that:

IPART Recommendation 10

The Department of Primary Industries Water (DPI Water) undertake central water planning for Local Water Utilities (LWUs) to ensure that water supply and demand options are considered in the context of catchments, replacing the water planning LWUs currently undertake individually through Integrated Water Cycle Management Strategies.

Centroc responded with the following recommendation:

That the NSW Government review and co-design the strategic framework for regional water planning with Local Government involved at the decision making level to reflect the need for better alignment and integration on a catchment basis. Consideration also needs to be given to the role of Integrated Water Cycle Management as a significant component of Councils planning process.

This is discussed in more detail later.

Information Request:

- *What are the key areas of water planning where further progress is required to achieve the objectives and outcomes of the NWI?*
- *Is there scope to streamline water planning processes to reduce unnecessary costs on planners and participants?*

Centroc response:

There is considerable scope to streamline water planning process to reduce unnecessary cost on planners and participants in regional NSW.

- *Currently the strategic framework for Regional Water Planning requires a major re-think with Local Government at the decision making table to ensure local knowledge is not removed from the process.*
- *Centroc sees value in centralised regional water planning taking into consideration water supply and demand options for the LWU's across the catchment as a whole and most importantly seeing alignment between Local, State and Regional planning processes.*
- *The process for Plan development and the Plan itself needs to be co-designed with the State through a true partnership approach to ensure alignment of Local, State and Regional priorities and to ensure plan ownership.*
- *Consideration must be given to the role of the IWCMs as a significant component of Councils planning processes.*

2. Dynamic and Responsive Planning Arrangements

As detailed above, Centroc has sought greater opportunities for engagement with Local Government in regional water planning.

It is noted that the NSW Department of Primary Industries (water) have now developed a *Delivering Water Resource Plans for New South Wales Roadmap 2016-2019* (October 2016) which sets out the way forward in developing the 22 water resource plans (WRPs) required for NSW by 2019.

The *Roadmap* outlines the NSW Government's key principles for water resource plans in line with the Intergovernmental Agreement on Implementing Water Reform in the Murray –Darling Basin, the National Water Initiative and the Water Management Act 2000 the foundational principles of which include that:

- WRPs will be based on extensive consultation with stakeholders and the community
- WRPs will balance social, economic and environmental needs of the community and catchments.
- Stakeholder Advisory Panels will guide the development of the surface water WRPs.

It is disappointing that despite inter-governmental collaboration being one of the three core activities the State Government has determined for Joint Organisations, Local Government in the Central NSW region has not as yet been included in targeted consultations that, according to the Roadmap and DPI Water website, have already occurred in relation to Water Sharing Plans for the inland plans.

Further to this, Local Government is not represented on the Stakeholder Advisory Panels (SAPs) established in either the Lachlan or Macquarie-Castlereagh surface water areas for water resource planning.

The elected representatives that comprise the Centroc Board are the voice of local communities in this region and well placed to ensure their communities' needs are considered in any review of water resource planning as it impacts on the Central NSW region. Also, given that Councils in the Lachlan catchment are water licence holders, lack of Local Government representation on the SAP would seem an oversight.

Centroc has a history of working collaboratively with key stakeholders across the catchment to ensure an appropriate balance is struck between the needs of towns, industry, agriculture and the environment re-affirming its shared position on water resource management through a communique with Lachlan Valley Water and the Belubula Landholders Association in November 2016.



Meeting of Centroc, Lachlan Valley Water and the Belubula Landholders Association-November 2016

Advocacy continues with the NSW DPI Water for a targeted stakeholder session with Centroc representatives on the review of the Water Sharing Plans as they impact on the Lachlan and Macquarie catchments. It is understood that Local Government NSW has also made representations to the Minister regarding the inclusion of Local Government in water resource planning.

Response from DPI Water is that it will offer stakeholders a number of opportunities to engage in the planning process by calling for public submissions on specific issues including through the request for submissions to the Status and Issues papers for the Water Resource Plans for the Lachlan and Macquarie Castlereagh catchments.

While Centroc welcomes this opportunity, to date it is unclear from the Status and Issues papers what the opportunities for engagement are given that for the majority of issues included in the papers, options and modelling either have been, or are being, discussed with the Stakeholder Advisory Panels with no details provided on what these are. Other issues are marked as resolved, not to be investigated further or subject to other reports and Plans being drafted, for example the NSW Policy Pre-requisite Implementation Plan, Long Term Watering Plan and Risk Assessment for the Lachlan Surface Water Resources.

Centroc has sought copies of separate technical assessments referred to in the Status and issues papers specifically the Risk Assessment for the Lachlan Surface Water Resources and has been advised that these have not yet been completed and/or approved for release with no indication as to when they will be ready (email DPI Water- 15 December).

This raises the question - is this a consultation or an opportunity to tell us what is happening? How, for instance, are stakeholders going to be informed of the options being considered by the Strategic Advisory Panel?

While there has been communication about the process to review Water Resource Plans, this has not translated to meaningful on-the-ground engagement with Local Government in the region.

In line with Centroc Board resolve and building on this region's extensive work in water security, Centroc member Councils are keen to influence outcomes in support of their communities and would like an opportunity to do so. We have reiterated our request for representation on the SAPs and for targeted consultation with Councils impacted by the Lachlan and Macquarie – Castlereagh Water Resource Plans.

The Murray-Darling Basin Authority has openly acknowledged that the biggest issue encountered in Basin Planning previously was the lack of engagement with stakeholders representing urban water and the balance with economic and environmental needs.

While urban water needs are of the highest priority for Centroc and it is understood that demand for water is subject to an access regime, which sets priorities for various types of demand (i.e. environmental water, town water, high security and general purpose licences), Local Government in this region is interested in ensuring an appropriate balance of socio-economic and environmental water needs has broad based acceptance.

As the NSW Government Roadmap proposes a triple-bottom-line approach to the Murray Darling Basin Plan which puts local communities first – we're keen to understand how DPI Water plan to engage with communities in our region to ensure this balance is achieved.

A copy of Centroc’s response to the Lachlan Water Resource Plan (Surface Water) - Status and Issues Paper is provided as attachment 2.

Ideally Centroc propose a co-designed fit-for-purpose process for the review of water plans with Local Government engaged early. At the least it would be good if NSW DPI followed their own guidelines to help manage perceptions in regional NSW of over promise and under delivery and the productivity and political implications of this.

Information Request:

- *Are processes for reviewing water plans sufficiently robust, transparent, open, and timely?*

Centroc response:

Currently processes for reviewing water plans are not sufficiently robust, transparent, open, or timely.

- *More meaningful engagement is needed with Local Government to meet the triple –bottom-line approach to the Murray Darling Basin Plan which puts local communities first.*

There is a need for:

- *More realistic consultation timeframes and opportunity for meaningful engagement in water resource planning;*
- *Representation by Local Government on the Strategic Advisory Panels;*
- *Targeted consultation with Councils impacted by Water Resource Plans.*
- *A co-designed fit-for-purpose process is recommended with Local Government engaged early.*

3. Accounting for Climate Change and extreme events

The 2009 Centroc Water Security Study (CWSS) identified a range of potential measures to improve urban water security including the need for additional storage.

The study had two components:

- 1: An audit of existing infrastructure for bulk water supply; and
- 2: An options paper for improving water supply security.

Notably, Centroc’s urban water security work has typically been “outside” the State Water system where feedback from State Water at the time was that it did not want the State’s Water Sharing Plans, which had taken some time to negotiate, to be impacted.

The CWSS resulted in alarming findings that 29 communities in the Central NSW region were at risk and required substantial improvements to their water security. It recommended the development of key infrastructure in the region including pipelines to Lake Cargelligo and Orange, which have since been completed, with more detailed investigation, survey and design focussed on smaller areas of the region where specific problems have been identified underway.

In particular the CWSS found that security of water supply could not be achieved in the Lachlan catchment through demand management initiatives alone but requires an integrated program of

water conservation and demand management measures, coupled with new and upgraded water supply and storage infrastructure particularly high in the catchment for the Lachlan valley. For further advice on the Centroc Water Security Study:

<http://www.centroc.com.au/publications/water-infrastructure/>



Lake Cargelligo in the grip of the Millennium Drought

Since its inception in 2009, the Centroc Water Utilities Alliance (CWUA) has continued to build on the work of the CWSS completing regional Demand, Drought and Integrated Water Cycle Management Plans.

While Centroc member Councils continue to implement demand management strategies both locally and regionally, the modelling undertaken through the CWSS and the Regional Demand Management Plan both highlight the lack of security of supply in the Central NSW region.

Centroc has long advocated to the State Government for a review of the Centroc Water Security Study with DPI Water, WaterNSW and other key stakeholders at the table. This is seen as essential as changes in model outputs in recent years attempt to accurately reflect the impacts of climate change on catchment yields which could result in significantly less secure water supplies than the original report.

Through recent consultations with the State Government over a proposed new storage site for the Lachlan catchment Centroc has advocated for a review of the CWSS with urban water security as the key focus included in any scoping or feasibility studies.

Key to a review of the CWSS and the development of Integrated Water Cycle Management Plans required under DPI Water's Best Practice Management Framework for Water and Sewer is the modelling to determine secure yield-based on how the climate change impacts have affected secure yield assessments.

DPI Water has been working in this regard for some time and it is understood that draft *Guidelines on Assuring Future Urban Water Security* are available for use but have not yet been formally adopted.

Most recent advice on hydrological modelling by the State Government has come from WaterNSW who are using the eWater Source model adopted under the COAG's National Hydrological Modelling Strategy in May 2012 to undertake a hydrological assessment of the Lachlan valley as part of the NSW Government's Lachlan Valley Water Security Investigation. While it is understood that this modelling looks at all water sources across the valley it does not differentiate between critical urban water needs and other water uses or the impact of climate change scenarios on urban water security.

For more detail on the Lachlan Valley Water Security Project and eWater Source see links below:

<http://www.waternsw.com.au/projects/belubula>

<http://ewater.org.au/products/ewater-source/>

With a strong track record in implementing complex regional projects and maturity in water security planning Centroc has offered to work with the State government jointly to deliver an updated water security study gifted to the State as a pilot for other regions. It is envisaged that this would pilot both urban water security modelling and a strategic approach to regional water planning in NSW.

Response has been that there is no funding available for this.

Our concern is that not having NSW Government investment in a review of the CWSS will again lead them to walk away from the findings of the study. Almost a decade on from the completion of the CWSS, the State is again looking at a long list of water security options for the region. As detailed above, options were reviewed in 2008-2009 and security of supply is *still* of the highest priority for the region.

Information Request:

- *Is there scope to improve how water plans deal with long term shifts in climate affecting resource availability? Are there recent examples of leading practice?*

Centroc response:

There is scope to improve how water plans deal with long-term shifts in climate affecting resource availability.

- *In NSW there appears to be no clarity around climate change modelling and its impacts on secure yield particularly for urban water needs.*
- *In response to this Centroc has offered to work with the State government to deliver an updated water security study gifted to the State as a pilot for other regions. It is envisaged that this would pilot both urban water security modelling and a strategic approach to regional water planning in NSW.*

4. Ensuring water planning and entitlement frameworks support new infrastructure investment

As detailed above water security has historically been a significant issue in the Lachlan Valley with drought having major impacts on both urban and rural communities of the region over the past century.

The Millennium Drought exposed the lack of water security in the whole Lachlan Valley with many of the region's cities and towns forced to impose severe restrictions on domestic, commercial and industrial uses. Water dependent agricultural and mining businesses were also significantly impacted. Trends in the temporary trade in the water market suggest that it is unlikely that this part of the regional economy will recover without a significant improvement in water security for high value agricultural investments.¹

As detailed in the *Water Security for Regions: Belubula and Lachlan River Dam Investigation Report* - December 2014, the security for water supply is a function of the available water resources and the timing and volume of demand for water. Demand for water is also subject to an access regime, which sets priorities for various types of demand (i.e. environmental water, town water, high security and general purpose licences).

Of particular concern to Centroc is that while urban water represents only 2% of overall usage and could easily be overlooked, this 2% is essential to meet community needs and underpin confidence for continued investment and growth in the region. Given this, Centroc has long advocated for a need to quarantine town water supplies to ensure that, as was the case in the grip of the millennium drought, communities do not find themselves faced with the prospect of hospital closure or the need to cart water to supply the needs of an entire township at an exorbitant cost. Prior to the June rains, Boorowa was weeks away from the prospect of water carting.

<http://www.abc.net.au/news/2016-03-01/water-may-have-to-be-carted-as-boorowa-faces-severe-shortage/7209476>

As there is no market for town water supplies, it is not a simple exercise to determine the economic value of improving water security to towns. However, investments in ensuring water security for towns that have been made in the Central NSW region over the past 5 years have varied from \$850/ML security improvement to \$11,000/ML of security improvement. Costs are for capital and operation, discounted over time.²

Where the funding framework is skewed towards population and the economy, the reality is that quality and secure water is a simple and basic human need.

In the communique developed in November 2014 and re-affirmed in November 2016, Centroc, Lachlan Valley Water and the Belubula Landholders Association agree that lack of water security for both current and planned future consumptive users sourcing water from the Lachlan Valley is limiting economic growth. Market information and stakeholder feedback provided in *Belubula and Lachlan River Dam Investigation Report* provides the following evidence of the issue:

- Severe restrictions have been in place on town water use during the drought;
- History of long periods of low or no general security agricultural water availability and high security water has been restricted;
- Depression of agricultural economy of the region as evidenced in the trading of licences and lack of investment;

¹ Water NSW Water Security for Regions: Belubula and Lachlan River Dam Investigation Report December 2014

² Water NSW Water Security for Regions: Belubula and Lachlan River Dam Investigation Report December 2014

- Limitations on the potential of mining industry in the region;
- Consumptive extraction licences have been purchased to protect water for the environment, reducing the water available for consumptive water users.³

WaterNSW is responsible for delivering and operating infrastructure to provide for the State's bulk water supply needs. As part of a broader commitment to improve water security for regions, the NSW Government has committed to investing in the water supply for the Lachlan region through the Lachlan Valley Water Security Project. See details below.

Lachlan Valley Water Security Project

Phase 1 of the Lachlan Valley Water Security project was undertaken by WaterNSW in 2014. This first phase identified a range of different options for improving regional water security including the construction of a new dam at various sites and the upgrade of existing dams.

Key recommendations from this phase included:

- Progress with field investigations for a new dam in the area near Cranky Rock. Investigations should focus on potential foundation and storage integrity risks.
- Undertake a cost-benefit analysis to determine the economic value of the investments in water security improvement in the region.

In late 2016, WaterNSW announced that it had engaged GHD as its strategic partner to assist in delivering Phase 2 of the Lachlan Valley Water Security Project. Phase 2 of the project includes the following activities:

- Consulting with stakeholders and the community.
- Establishing the need, service levels, and reviewing various build and non-build options including those from Phase 1, to develop a shortlist of options for further assessment.
- Carrying out field investigations at sites near Cranky Rock to assess major risks.
- Preparing a preliminary business case including a detailed cost-benefit analysis.

If approved to proceed, a final business case will then be prepared to seek funding for the preferred option.

Phase 2 currently underway will involve an assessment of a range of issues including social, economic and environmental factors, in order to determine the preferred option for inclusion in the final business case. Consultation with the community and key stakeholders will be a key focus to help WaterNSW assess the feasibility of options.

While Centroc, Lachlan Valley Water and the Belubula Landholders have welcomed investigations of options that will offer improvements for both urban water security and agricultural water security, there has been widespread concern that the planning process has been lacking to date.

Consultation by Water NSW with the community around dam site selection was very well received in Phase 1. Centroc requested that this level of consultation with key stakeholders be continued through the Phase 2 assessment of the Cranky Rock site and in decision making processes relating to storage investments in the region going forward. This is particularly significant given the maturity of

³ Water NSW Water Security for Regions: Belubula and Lachlan River Dam Investigation Report December 2014

the region in planning and implementing a range of priority water infrastructure projects for the region that rely on a new storage for the Lachlan catchment.

While WaterNSW have committed to the same level of consultation in Phase 2, project time constraints and lack of strategic engagement early in the consultation process has led to the process not being optimal.

Concerns have been raised by stakeholders across the region that to date the Phase 2 investigations seem to be steering away from the idea of a new storage with emphasis being placed on the Central Tablelands Water (CTW) supply system.

While the CTW system is significant in providing water services to 5,700 connections in Blayney, Weddin, and parts of Cowra and Cabonne local government areas, a population of just over 12,000, advocacy has focussed on ensuring that the Lachlan Valley Water Security Project considers the water security needs of townships in the heart of the Lachlan Catchment that are not supplied by Central Tablelands Water or Goldenfields Water:

- Boorowa
- Cowra (with an emergency supply from CTW)
- Condobolin
- Crookwell
- Forbes
- Lake Cargelligo
- Parkes

While linkages in the system are useful, access and supply regimes will need to be in place to ensure security of urban water supply. Concerns have been expressed that this may be at the expense of other users, which is why options for additional storage high in the catchment for the Lachlan valley is our preferred option.

While other options to address the water security needs of Lachlan valley communities may well be under consideration, the communication protocol for this project where stakeholders attending the Community Reference Group are unable to go back and seek feedback from our members is not conducive to us being able to provide informed responses.

Given the priority of water security for the region, the Centroc Board has re-iterated its offer to engage as early as possible in ensure an optimal, fit-for-purpose process.

Whether its water security for the central NSW region or Broken Hill it is challenging for communities to negotiate the *NSW Infrastructure-Investor Assurance (Gateway) Framework* process through to Cabinet approval. The provision of quality secure water should be outside the Gateway process- it is, after all a basic human right.

Having said that, water constrained communities will not grow with perceptions of a drought parched landscape a significant disincentive to encouraging relocation to regional communities.

Navigating the current planning framework poses significant challenges for major investment particularly where the need for water requires investors to look at broader options. For example, in the case of the potential Kings Plains Mine, detailed below, diverting water from east to west would

be seen as more strategic, but the question remains- how is the NSW Government going to assist this mine navigate the planning framework?

Potential Springvale to Kings Plain Pipeline

While there may be a number of options to provide water needed to support the development of a new mine in the region at Kings Plain near Blayney, one of the options that has been suggested is a pipeline from the Lithgow LGA.

An opportunity is currently under investigation to transfer water from Centennial Coal mines in the Lithgow LGA to Kings Plains in the Blayney LGA to, in the first instance, provide the water needed for development of a new mine. This project could also provide the opportunity to construct a pipeline between Wallerawang and Kings Plains with the potential for 27 mega litres of water for agricultural use.

In affect this pipeline would see the diversion of east flowing water west with the benefits detailed below.

It is estimated that the Kings Plain Mine will generate approximately \$875 million spend in the local region over the 10 year construction and operational phases with the potential for an estimated \$90 million in royalties to be paid to the NSW Government over 10 years (based on current gold price of \$1,770/oz). In addition it would generate 150 direct jobs and 400 indirect jobs during the ten years of operation.

If a transfer pipeline is constructed it could create unprecedented Agriculture opportunities for Blayney, Bathurst electorate, Central West of NSW and all of NSW.

An Intensive Agricultural Precinct at Kings Plains could include; livestock feedlots, irrigated cropping, hydroponics etc.) as having a guaranteed source of water that would be available for agricultural production means the business model is not reliant on rainfall and/or impacted by climate change.

Blayney is already a key strategic Agricultural precinct, however installation of this pipeline securing a guaranteed source of water could be an Agricultural revolution for; Blayney, Bathurst electorate, entire Central West region and NSW as a whole.

Unprecedented economic opportunities and job creation would result and complement existing infrastructure already in place including; the Central Tablelands Livestock Exchange, Sealink freezer facilities, two rail sidings and intermodal facilities, close proximity to Hume Highway, close proximity to Sydney Ports (particularly if the Blayney-Demondrille Railway Line is reopened) and Canberra Airport (now international)

For more detail go to: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7592

Centroc/Regional Development Australia Central West Priority Regional Water Infrastructure Plan

A major advocacy platform for Centroc is seeking support for its Priority Water Infrastructure Plan investment priorities for the Central NSW region, clearly aligned to the economic imperatives of the region.

The State Government's investment in regional water security infrastructure has prompted the Centroc Board in partnership with Regional Development Australia- Central West (RDACW) to develop a decision-making matrix based on State and Federal infrastructure assessment criteria to

provide a systematic analysis of each Council's infrastructure needs to clearly demonstrate regional priorities across infrastructure tranches including water.

The Priority Water Infrastructure Plan has been specifically developed to incorporate Cost-Benefit Analysis to confirm real economic and social advantages of key regional projects. It reflects the priority for the region of large transformative water security projects including a new storage in Central NSW as well as other distribution solutions clearly aligned to the economic imperatives of the region. The Plan further consolidates the region's maturity in regional water planning. Please request the most up-to-date version currently nearing completion.

Prioritisation of infrastructure needs is increasingly important as government's at all three levels face tighter budgets and increasing service demands. A considered view of regional priorities in advance of funding programs will lead to improved outcomes for each of the levels of government investing in infrastructure and the delivery of the higher priority, economically enabling, projects for the region. It will also enable the region to proactively participate in the broader State and Federal infrastructure planning and funding processes in a strategic and targeted manner.

The region is investment ready with considerable understanding of its priority infrastructure needs and of where Governments can achieve the greatest return on investment.

Information Request:

- *Are current water entitlement and planning frameworks conducive to investor confidence, facilitating investment in major new infrastructure (such as in northern Australia), while managing risks to the supply security of existing water users?*

Centroc response:

Current water entitlement and planning frameworks are not conducive to investor confidence, facilitating investment in major new infrastructure while managing risks to the supply security of existing water users.

- *Lack of water security for both current and planned future consumptive users sourcing water from the Lachlan Valley is limiting economic growth.*
- *The need for additional storage in the Lachlan Valley was identified in the Centroc Water Security Study and subsequent Regional Demand and Drought Studies.*
- *Current Infrastructure NSW Infrastructure Investor Assurance Framework requires infrastructure to meet the NSW Gateway for funding of projects-this a costly and bureaucratic process not aligned to the strategic priorities of the region. For example the user pays study does not take into account induced demand for water by industry that would invest in the region if there was security of supply.*
- *The provision of quality secure water should be outside the Gateway process- it is, after all a basic human right.*

5. Water Quality

Currently there is a discussion at the National level about the introduction of Health Based Targets at a catchment level.

Ten Centroc member Councils including those in the Lachlan Water Resource Plan area- Blayney, Parkes, Cabonne, Cowra, Forbes, Lachlan are members of the Central West Councils Environment & Waterways Alliance.

The Alliance exists to improve environmental outcomes across the region including water quality issues that impact on the general health of the waterways and rivers including Coxes, Fish, Macquarie, Castlereagh, Bogan, Lachlan, Cudgegong Rivers and their many tributaries.

<http://www.cwcewa.com.au/about-us/>

In its submission to the National Health and Medical Research Council on health based targets in the Australian Drinking Water Guidelines, Centroc provided the following advice:

With drinking water quality for communities of Central NSW of the highest priority for the Centroc Board, at the October 2016 meeting, Centroc General Manager's resolved support for this region to work in collaboration with appropriate agencies to pilot a more informed approach to the proposed implementation by the National Health and Medical Research Council of the Health Based Target framework, in the Australian Drinking Water Guidelines including:

1. *Examples of more remote and smaller water supply systems;*
2. *Examples of larger more high technology systems;*

And in each case:

- *what operational improvements can be made through training and optimised focus on issues with minimal capital improvement;*
- *what smaller cost capital improvements can be made that provide significant improvement;*
- *what larger capital and operational expenditure may be justified?*

The draft HBT Framework proposes a process for drinking water suppliers to meet the microbial HBT including sanitary surveys of catchments to identify the sources of microbial risk. This information is then used to inform a vulnerability assessment.

The HBT framework describes a water safety continuum, where the utility can plan improvements to its operation in order to work towards the goal of safer water and best practice.

Centroc welcomes engagement with the NSW DPI Water on risk mitigation and reduction of water quality degradation.

A copy of Centroc's Submission to the National Health and Medical Research Council is provided as attachment 3.

Information Request:

- *What steps have been taken — or should be taken — to integrate water quality objectives into water planning arrangements?*

Centroc response:

Steps that should be taken to integrate water quality objectives into water planning arrangements include:

- *Centroc Water Utilities Alliance pilot of a more informed approach to the proposed implementation by the National Health and Medical Research Council of the Health Based Target framework, in the Australian Drinking Water Guidelines.*

6. Environmental Management

Centroc works in close collaboration with the Lachlan Valley Water Association who has submitted separately on the complex areas of Environmental Management and Rural Water services as they impact on the Lachlan Valley.

Information Request:

- *What are the guiding principles for 'best practice' management of environmental water? Are the institutional and governance arrangements for held environmental water working well?*

Centroc response:

Centroc supports the view of Lachlan Valley Water that in relation to environmental management:

- *Periodic review and transparent public reporting of environmental outcomes is critical*
- *One of guiding principles for best practice management should be a requirement that monitoring and evaluation programs clearly identify the additional environmental outcomes achieved as a result of the use of held environmental water, over and above the outcomes that occurred as a result of planned environmental water available due to the state-based water sharing plans and legislative frameworks.*
- *Where there has been an over-recovery of water under the Basin Plan, as has occurred in the Lachlan, Macquarie and Gwydir valleys, water trading provides an avenue to correct the over-recovery, generate funds for environmental purposes and reduce the social and economic impacts of water buyback on communities.*

With regard to environmental water Centroc continues to have concerns regarding the following:

- *The impact on the environment of buy-backs where there is evidence to suggest that it is not leading to the environmental outcomes anticipated.*
- *Knock on effect of Swiss cheesing- when holes are left in irrigation districts when some irrigators decide to terminate their irrigation delivery rights.*

Urban Water Services

1. Policy and Institutional Arrangements

Firstly it must be stated that Centroc supports Local Government as the agency of choice delivering water utilities management in regional NSW.

Centroc advocates that through Local Government management of water in regional NSW - service delivery is well priced, responsive to community, delivered in an integrated manner with storm water, sewer and water supply services provided in close consultation with planning and other Council functions as well as Catchment Management Authorities.

In many instances lower prices in LWUs reflect greater efficiency of operation due to economies of scope achieved within the local government environment. Efficiencies of scope and community resilience, however, rely on the retention of services at the local level with control over utilities such as water is critical.

Economies of scope for Council operations are afforded by managing water supply and sewerage services. This, and the value communities place on having their say where it is heard best at the politically responsive local level, suggests that the way forward is to better resource local government, not restructure it into either larger entities or worse some type of State owned corporations taking out a dividend from our regional economies with a view to on-selling to the private sector.

Centroc Water Utilities Alliance

Local Government management of water utilities in Central NSW is being undertaken on a solid basis through the Centroc Water Utilities Alliance (CWUA) a voluntary collaborative Alliance between 14 Centroc member Councils with demonstrable cost savings and efficiencies being achieved.

The CWUA has worked successfully to explore and develop opportunities for resource and skills sharing amongst geographically closely linked water utilities.



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

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

The Centroc Water Utilities' Alliance, formed in 2009, is a voluntary collaborative Alliance between 14 Local Government Areas (LGAs), in the Central New South Wales region, including the local water utility operations of Bathurst, Blayney, Cabonne, Cowra, Forbes, Hilltops, Lachlan, Lithgow, Oberon, Orange, Parkes, Upper Lachlan, Weddin and Central Tablelands Water. The Centroc region represents over 200,000 people and covers more than 50,000 sq kms.

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

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

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

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

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

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

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

In the context of Local Government reform in NSW, the CWUA demonstrates the efficiencies of co-operative partnerships in delivering the National Water Initiative strategic agenda. Programming is innovative and focused on compliance based best practice service delivery to achieve optimal outcomes for communities.

At the 2016 National General Assembly of the Australian Local Government Association, the Association resolved to oppose recommendation 4.7 in the *Infrastructure Australia Plan- Priorities and reforms for our nation's future* released in February 2016 that recommends the transfer of council provided water and sewerage services to regional water corporation and their privatisation where commercially viable.

Infrastructure Australia has provided advice nationally that State and Territory Governments should undertake independent audits of the performance, financial viability and capacity constraints of local councils in meeting the minimum standards in drinking water in all regional communities with these audits informing pathways to consideration of council amalgamations and privatisation where commercially viable.

Recommendations to aggregate non-metropolitan LWU are unjustified and based on misinformation in previous reports to Government including the Infrastructure Australia AECOM report since discredited by the Productivity Commission.

NSW Office of Water's Performance Monitoring shows assumptions regarding the performance of non-metropolitan LWU to be unsupported by empirical evidence with regional NSW utilities performing well in terms of national standards.

The Office of Water has required NSW LWUs to prepare highly detailed Strategic Business Plans since 1993. These require LWUs to recover all costs, including those required for current and future capital costs for at least 20 years.

Water in Public Hands - Councils Collaborating to Deliver Local Water

Centroc prepared a paper titled *Water in Public Hands - Councils Collaborating to Deliver Local Water* for presentation at the Australian Water Association's OzWater'17 conference. The paper provides discussion of a range of institutional models for delivery of urban water service to communities, both large and small and is provided as attachment 4.

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

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

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

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

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

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

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

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

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

There is no “one size fits all”, however there is a strong case for the flexibility and agility provided in a Local Government owned and operated local water utility sector, built around strong collegiate Alliances.

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

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

Information Request:

- *What policy and institutional arrangements are needed in the urban water sector to improve the efficiency of service provision?*

Centroc response:

- *Centroc supports Local Government as the agency of choice delivering water utilities management in regional NSW.*
- *Centroc opposes recommendations made in previous reports to the NSW Government to aggregate non-metropolitan Local Water Utilities from 105 to around 30 authorities.*
- *Local Government management of water utilities in Central NSW is being undertaken on a solid basis through the Centroc Water Utilities Alliance (CWUA) with demonstrable cost savings and efficiencies being achieved.*
- *The CWUA demonstrates the efficiencies of co-operative partnerships in delivering the National Water Initiative strategic agenda. Programming is innovative and focused on compliance based best practice service delivery to achieve optimal outcomes for communities.*



CWUA members -Water Loss Management Workshop- March 2015

2. Price Regulation

Information Request:

What approach should be taken to price regulation in the urban water sector? Is there a need for greater consistency in price setting approaches across different jurisdictions? Do current pricing practices promote investor confidence?

Centroc Response:

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

Centroc Board policy is that Councils can determine their own rates. The bigger problem is pricing and affordability for communities to pay for services. The answer is not to have communities living with constant boil water alerts as is the case in other States but rather to carefully manage assistance to communities that need it.

3. Level of competition

Information Request:

How can the level of competition in the provision of urban water services be increased?

Centroc Response:

While competition may work to some extent within cities and larger urban communities, this is not the case in smaller regional communities.

Centroc supports Local Government as the agency of choice delivering water utilities management in regional NSW.

Centroc advocates that through Local Government management of water in regional NSW - service delivery is well priced, responsive to community and delivered in an integrated manner.

Centroc supports the collaborative Alliance model for delivery of LWU services in regional NSW. The defining principle that guides the Alliance model is that it is critical for the resilience of regional communities that ownership and control over utilities such as water remain firmly in public hands through their Local Governments. This is a non-competitive approach.

In the paper Water in Public Hands - Councils Collaborating to Deliver Local Water, the case is made for the Alliance model as an emerging trend world-wide particularly where municipalities seek to wrestle back control of their water supplies from the private sector.

4. Compliance with Public Health, Safety & Environmental Regulations

The delivery of safe, quality drinking water to the communities of Central NSW is of the highest priority for the CWUA with Centroc councils steadily working towards improvements in Drinking Water Quality Management through implementation of a program of regional initiatives.

All Centroc member Councils LWUs developed Drinking Water Management Plans in line with the requirements of the Public Health Act and Australian Drinking Water Guidelines to meet the September 2014 deadline.

Centroc member Councils are supported on an on-going basis in their management of drinking water through the CWUA with the following:

- A Drinking Water Quality Working Party acts in an advisory capacity monitoring progress to achieving regional compliance with the Public Health Act and Australian Drinking Water Guidelines (ADWG).
- Implementation of a process for monitoring and reporting progress on Drinking Water Management Systems Plan implementation and co-ordinating regional response to issues.
- Training procured on a regional basis through accredited industry specialists on Water Sampling and the ADWG for Water Operators and Managers to ensure best practice and compliance based delivery of safe, quality drinking water.
- Implementation of a bi-monthly process for communication by NSW Health at a regional level on issues regarding compliance and other State managed programming relating to drinking water quality.

- In keeping with the principles of the CWUA to encourage capacity building through shared learning, Drinking Water Management is a regular agenda item at bi-monthly CWUA meetings where members are encouraged to share advice on specific water quality issues, technologies implemented to improve water quality and tools such as templates or protocols developed for water quality management.

In 2016-2017 the CWUA has undertaken projects aimed at on-going improvements in drinking water quality management across the Alliance member Councils including:

- *Phase 1* - A one-off project to analyse regional drinking water quality data to benchmark the performance of CWUA member Councils in drinking water quality management across the region and against relevant benchmarks for a period of five years. Data analysed included 10 key parameters such as Aluminium, E-coli, Fluoride, turbidity, lead etc.

Percentiles were determined for each of the systems analysed and were reported back to individual members and to the CWUA in a consolidated report for the region with Councils de-identified for confidentiality. Results were also benchmarked against the Australian Drinking Water Guidelines –health and aesthetic maximums and industry best practice.

This project will inform an annual Regional Drinking Water Management Work Plan identifying and prioritising activities aimed at achieving best practice in drinking water management.

- *Phase 2* – Building on phase 1, timelines have been developed for each system analysed focussing particularly on the following parameters - Fluoride, Free Chlorine and individual system problems where health maximums have been exceeded.

This culminated in a regional workshop with consultants held in November 2016 providing a presentation on findings and discussion of common problems. This was attended by Managers and Operators from across the region.

- *Phase 3*- Currently underway this will use the 2015 Water Research Australia publication titled “Good Practice Guide to the Operation of Drinking Water Supply Systems for the Management of Microbial Risk” (Good Practice Guide) as a tool to assess the effectiveness of activities at water treatment plants (WTP’s) across the Centroc region. The project aim is to get simple water treatment processes right. A desired outcome of the project is an increase in capacity of treatment operators and managers through participation in the process and subsequent use of an assessment tool.

Added to this is a pilot workforce development project being undertaken through the CWUA for water operators in four Councils with funding through the State Training Service. This program will see Water Operators from Orange, Parkes, Cowra and Forbes Councils among the first to be certified in NSW under the National Framework for the Certification of Operators within Drinking Water Treatment Systems with the potential for further roll-out across the region.

This program together with on-going training co-ordinated by Centroc in Water Sampling and the Australian Drinking Water Guidelines for over 65 Water Operators, not only in the Central NSW

region but beyond, shows the level of commitment the region has in delivering quality drinking water to our communities.

As detailed earlier, Centroc submitted to the National Health and Medical Research Council's Australian Drinking Water Guidelines: Draft framework on microbial health based targets in November 2016 a copy of this submission is provided as attachment 3.

5. Roles and responsibilities of NSW Health

Based on the experience of the Centroc Water Utilities Alliance members working with the Western NSW Local Health District, Public Health Unit, the State's structural arrangements under the Public Health Act to deliver the regulatory function for the management of drinking water quality is not working in this region.

As a result the Alliance has tried a number of different ways to facilitate a more collaborative approach with NSW Health culminating in attempts to develop a Memorandum of Understanding (MoU).

Despite on-going representation by Centroc this region continues to struggle with engagement with NSW Health. It is now over three years since the idea of a MoU was raised to address communication issues and still this has not been achieved.

The MoU was proposed to strategically guide collaboration between NSW Health and Central NSW Councils (Centroc) Local Water Utilities to progress best practice in drinking water quality and is in line with similar MoUs held with other NSW water utilities. The problem here has been getting NSW Health to even see the need for collaboration with the region on ways to improve delivery on mutual objectives for provision of safe, quality drinking water to Central NSW communities.

NSW Health internal communication protocols and governance continue to mystify those working on the ground in the region, something that it was anticipated the MoU would assist in addressing.

With inter-governmental collaboration the foundation stone of Centroc's Joint Organisation pilot, Centroc has hoped that with better State and Local Government alignment at the regional level we can optimise service and infrastructure delivery for the region. This is particularly the case for drinking water where the potential for collaboration was viewed as an opportunity for both Centroc and NSW Health.

As stated elsewhere, the delivery of quality drinking water to our communities is not discretionary, but a basic human need and too important to be impacted by on-going difficulties in engagement with NSW Health staff.

To address this, the Centroc Water Utilities Alliance (CWUA) is eager to run a workshop in partnership with NSW Health seeing this as integral to a more productive relationship.

Applying a strategic risk based approach; it is proposed that a suitably qualified consultant is procured to facilitate a workshop co-designed by the CWUA and NSW Health to develop a shared understanding and alignment of communication in the compliance framework. Specific considerations are incident management, boil water alerts and arrangements for private water supplies. Advice from this will inform tools and protocols to facilitate a more effective and efficient collaboration between NSW Health and Centroc members LWUs in the Central NSW region.

It is proposed that through this workshop an annual regional action plan prioritising an agreed set of actions towards achieving regional best practice in drinking water quality be developed and form an appendix to an MOU (or whatever management tool NSW Health agree) to guide its delivery. It is proposed that this will be reviewed in partnership with NSW Health annually.

In the meanwhile, as detailed above, the CWUA continues to work on a microbiological good practice program to deliver on-going improvements in drinking water management.

Information Request:

Do water and wastewater services delivered to regional and remote communities, including Indigenous communities, comply with relevant public health, safety and environmental regulations? If not, what policy remedies might improve performance?

Do the processes for determining public health, safety and environmental regulations applying to urban water providers promote cost effective and targeted regulations? Do the various policy making and regulatory bodies have clear roles and responsibilities?

Centroc response:

The delivery of safe, quality drinking water to the communities of Central NSW is of the highest priority for the CWUA with Centroc councils steadily working towards improvements in Drinking Water Quality Management through implementation of a program of regional initiatives aimed at achieving Best Practice.

The NSW Government's structural arrangements under the Public Health Act to deliver the regulatory function for the management of drinking water quality are not working well in this region.

Currently it is characterised by poor communication and lack of corporate response that, at best does not facilitate improvements in the delivery of drinking water and at worst is a risk to Local Government in delivering this essential service to its communities.

The Centroc Board has resolved that delivery of quality drinking water to our communities is not discretionary, but a basic human need and too important to be impacted by on-going difficulties in engagement with NSW Health staff.

In an attempt to improve this situation the CWUA seeks to work collaboratively with NSW Health to co-design a workshop to be attended by senior NSW Health and Centroc representatives as follows:

- Applying a strategic risk based approach; it is proposed that a suitably qualified consultant is procured to facilitate a workshop co-designed by the CWUA and NSW Health to develop a shared understanding and alignment of communication in the compliance framework. Specific considerations are incident management, boil water alerts and arrangements for private water supplies. Advice from this will inform tools and protocols to facilitate a more effective and efficient collaboration between NSW Health and Centroc members LWUs in the Central NSW region.*
- It is proposed that through this workshop an annual regional action plan prioritising an*

agreed set of actions towards achieving regional best practice in drinking water quality be developed and form an appendix to an MOU (or whatever management tool NSW Health agree) to guide its delivery. It is proposed that this will be reviewed in partnership with NSW Health annually.

6. Integrated Water Cycle Management

Integrated Water Cycle Management is a significant component of Councils planning processes. Currently the development of IWCM Plans is a requirement of NSW DPI Water's *Best Practice Framework for the Management of Water and Sewer* and one that must be met for the release of NSW Government funding for water infrastructure.

Navigation of this Framework by LWUs has become increasingly difficult due to what can best be described as a lack of coherency or corporate approach from DPI Water. This has seen escalating costs for Councils as they attempt to resource navigating the increasing complexity of the compliance framework for Best Practice that is not called up under any legislation.

Further to this, the region is receiving feedback from its consultants that their costs have had to increase as a result of difficulties in working to the Framework particularly where the development of IWCM Plans is involved. Members are reporting spends of up to \$300k for plan development.

While attempts have been made by NSW DPI Water to reduce the compliance burden on Local Government LWUs current verbal advice is that a full review of the compliance framework has been put out to external consultants. Centroc continues to advocate to DPI for engagement with Local Government in co-designing a fit-for-purpose compliance framework that facilitates the cost effective delivery of quality water and sewer services to communities. Currently the inability of DPI Water to administer its approvals process presents a barrier to this.

Further, while IWCMs are supposed to integrate water, as discussed earlier, currently NSW DPI Water do not accept stormwater harvesting or managed aquifer recharge as alternate sources of water. Given this, Councils such as Orange City are unlikely to get their IWCMs approved by DPI Water under the existing framework.

Centroc continues to advocate that while it is a staunch supporter of a regulatory framework, Local Government is the front line in responding to the needs of their communities. While the State certainly has a role to play in ensuring compliance based delivery of services it should, where possible, provide a "light touch" in its approach, facilitating delivery, not presenting costly, resource hungry processes that present barriers. This is certainly the case for IWCM.

In its February 2016 response to the Independent Pricing and Regulatory Tribunal's *Local Government Regulatory Burdens Review Draft Report – January 2016*, Centroc made the following comments to draft recommendation 10 that suggested that NSW DPI Water undertake a centralised water planning function that would replace water planning LWUs currently undertake individually through Integrated Water Cycle Management Strategies.

IPART Recommendation 10

The Department of Primary Industries Water (DPI Water) undertake central water planning for Local Water Utilities (LWUs) to ensure that water supply and demand options are considered in the context of catchments, replacing the water planning LWUs currently undertake individually through Integrated Water Cycle Management Strategies.

Centroc Response:

Centroc has been undertaking regional water planning for a long time having completed the CWSS, Regional Demand, Drought, IWCM and Strategic Business Planning through its regionally collaborative Water Utilities Alliance.

From this perspective Centroc sees value in a centralised regional water planning framework taking into consideration water supply and demand options for the LWU's across the catchment as a whole and most importantly seeing alignment between Local, State and Regional planning processes.

It is unclear from the report what the implications would be for operational planning required to be done by LWUs through the current IWCM Plan process or what the Regional Water Plan would actually entail.

Centroc Councils could only support this if Local Government is involved at the decision making level when the process for Plan development is determined AND is guaranteed involvement in the development of the Plan at Steering Committee level and major stakeholder level.

The process for Plan development and the Plan itself needs to be co-designed with the State through a true partnership approach to ensure alignment of Local, State and Regional priorities and to ensure plan ownership.

Currently the strategic framework for Regional Water Planning requires a major re-think with Local Government at the decision making table. As it currently stands it's incomprehensible. It is crucial that local knowledge is not removed from the decision making process.

Consideration must be given to the role of the IWCMs as a significant component of Councils planning processes.

Centralised Regional Water Planning will not replace the need for IWCM strategy at the Local level. It's not the IWCM that is the problem but the current level of prescription by DPI Water in the development and approvals of IWCMs where in our view the State is not resourced to manage its own compliance burden.

Depending on the nature of what these "IWCM's" are, separating the entity for planning activity and implementation is a recipe for the State giving Local Government more to do with little concern for the costs of implementation.

In its initial submission to this review Centroc provided evidence of the on-going issues with the

management by DPI Water of its Best Practice Framework based on the operational experience of the CWUA's 16 member Councils over the past decade. The raft of issues can be summarised down to the following:

- Changeability in the requirements for LWUs under the Best Practice Framework specifically the IWCM;
- Timeframes and resourcing for Best Practice Plan review and approvals;
- Conflicting advice with regard to the appropriate guidelines for Developer Service Plans;
- Third Party Forcing in the development of secure yield modelling; and
- Conflicting advice with regard to Dam Safety inspections.

Requirements under the new IWCM Check List (July 2014) for Water Authorities to undertake a Secure Yield Analysis utilising a consultant nominated by DPI Water where there is really only one consultant who meets the criteria with escalating costs and time frames for completion is a barrier for LWUs requiring completion of a plan to enable the release of funding.

Centroc members have tested this with other consultants used for the development of IWCMs opting to sub-contract the secure yield modelling to this consultant. Two of the best consultants in this field have now left consulting.

In summary, Centroc is of the view that rather than giving responsibility for centralised regional water planning to DPI Water, firstly there is a need for the State Government to work in partnership with Local Government to co-design the strategic framework for plan development ensuring that local knowledge is not removed from the process.

A true partnership approach will ensure alignment of Local, State and Regional priorities and plan ownership.

Secondly there is a need for cultural change in DPI Water where currently the culture of the agency overwhelms its structure. While consideration needs to be given to DPI Water's role in regional water planning, the process to review the structure and functions of DPI Water and to change its culture needs to be undertaken.

Centroc's Recommendation for change to the IPART draft recommendation 10:

Centroc disagrees with recommendation 10 as the problem is not going to be fixed by giving work to DPI Water instead there is a need for the State Government to:

- Review and co-design the strategic framework for regional water planning with LG involved at the decision making level to reflect the need for better alignment and integration on a catchment basis. Consideration then needs to be given to IWCM as a key planning document for Councils; and
- Review and restructure DPI Water taking in to account the need for cultural change.

The process for Plan development and the Plan itself needs to be co-designed with the State through a true partnership approach to ensure alignment of Local, State and Regional priorities and to ensure plan ownership.

Information Request:

What is the importance of integrated water cycle management? Are roles and responsibilities in relation to this clear?

Centroc Response:

Integrated Water Cycle Management is a significant component of Councils planning processes at the Local level.

Councils have a level of expertise at the local level needed to satisfy best practice and are best placed to determine their Drought, Demand and Integrated Water Cycle Management Plans.

The current level of prescription by DPI Water in the development and approvals of IWCMs is currently a barrier to the effective and cost efficient delivery of IWCM in regional NSW.

Centroc advocates that:

- *Review and co-design of the strategic framework for regional water planning with LG involved at the decision making level to reflect the need for better alignment and integration on a catchment basis in needed. As part of this consideration needs to be given to IWCM as a key planning document for Councils; and*
- *Review and restructure of DPI Water is needed taking in to account the need for cultural change.*

7. Demand Management

As detailed earlier, the Centroc Water Security Study found that security of water supply could not be achieved in the Lachlan catchment through demand management initiatives alone but requires an integrated program of water conservation and demand management measures, coupled with new and upgraded water supply and storage infrastructure particularly high in the catchment for the Lachlan valley.

Through the Centroc Water Utility Alliance (CWUA), all member Councils have completed Demand Management Plans which inform a Centroc Regional Demand Management Plan.

The regional plan seeks to define the opportunities for regional collaboration to facilitate each member local water utility's efficient use of water resources. Consideration is given to opportunities to preserve community affordability through energy savings and deferral of capital investments.

The Regional Plan seeks to:

- Develop a consistent regional approach, balanced against local priorities, towards cost effective water demand management, ensuring the efficient use of regional water resources.
- Demonstrate that each participating LWU has a Best-Practice demand management plan to meet NSW Best-Practice requirements.
- Demonstrate leadership and self-management in regional water management approaches.

The objectives for regional demand management are:

- To demonstrate prudent and efficient demand and supply-side management
- To deliver affordable and customer-focussed water services
- To continue to develop collaborative partnerships and relationships for water resource management
- To continually improve local water utility business management

A regional action plan guides regional activity in demand management. As part of this action plan, all members have participated in various demand management programs over the years including through the Savewater Alliance and more recently Smart Watermark.

At the local level the majority of Central NSW towns have been subject to increasing levels of restrictions over recent years.

In response to pressures on urban water supplies many Councils have initiated projects aimed at more efficient water usage and like Orange City Council have invested in alternate sources.

Orange city, for example, has never left level 2 water restrictions introduced at the peak of the millennium drought and has undertaken cutting edge work on alternate water sources to supplement supplies including through storm water harvesting and research into managed aquifer recharge.

The downside to water restrictions is the need for Councils to manage infrastructure costs with standard charges for water. To maintain services and infrastructure particularly with ever increasing costs of energy needed to pump water requires consistent charges to be levied.

Information Request:

How can demand management approaches such as water restrictions and water-use efficiency measures best contribute to the efficiency of urban water services?

Centroc Response:

While Centroc member Council's LWUs have all completed Demand Management Plans and continue to deliver water efficiency measures, the Centroc Water Security Study found that security of water supply cannot be achieved in the Lachlan catchment through demand management initiatives alone. Rather, it requires an integrated program of water conservation and demand management measures, coupled with new and upgraded water supply and storage infrastructure particularly high in the catchment for the Lachlan valley.

Further to this Centroc advocates that Councils have a level of expertise at the local level needed to satisfy best practice and are therefore best placed to determine Drought and Demand Management Plans including the level of water restrictions that should be applied.

The role that the State Government plays in this instance and its need to be involved in determining the level of restrictions imposed must be questioned.

In conclusion, Centroc welcomes the opportunity to respond to the Productivity Commission inquiry into the reform of Australia's water resources. This submission has made comment in relation to:

Water Resource Management

1. Entitlements for alternative water sources

Water Planning

1. Streamlining Planning Requirements
2. Dynamic and Responsive Planning Arrangements
3. Accounting for Climate Change and extreme events
4. Ensuring water planning and entitlement frameworks support new infrastructure investment
5. Water Quality
6. Environmental Management

Urban Water Services

1. Policy and Institutional Arrangements
2. Price Regulation
3. Level of competition
4. Compliance with Public Health, Safety & Environmental Regulations
5. Roles and responsibilities of NSW Health
6. Integrated Water Cycle Management
7. Demand Management

It is to be noted that there is a consistent theme throughout Centroc's responses relating to the level of engagement by the NSW Government with Local Government in regulatory and planning process.

Key aspects of Centroc's response are summarised as follows:

- *The regulatory framework in NSW for Local Government Local Water Utilities needs to be reviewed with Local Government engaged early to ensure a fit-for-purpose process.*
- *The NSW Government's strategic framework for Regional Water Plan development and the Plan itself needs to be co-designed with Local Government through a true partnership approach to ensure alignment of Local, State and Regional priorities and plan ownership. It is crucial that local knowledge is not removed from the process.*
- *As part of any review of the regulatory or regional water planning framework consideration must be given to the role of the IWCMs as a significant component of Councils planning processes.*
- *More meaningful engagement is needed with Local Government to meet the triple –bottom-line approach to the Murray Darling Basin Plan which puts local communities first. A co-designed fit-for-purpose process is recommended with Local Government engaged early.*
- *There is a need in regional NSW for greater clarity around the NSW Government's approach to climate change modelling and its impacts on secure yield particularly for LWU delivery of water for urban needs.*

- *Current Infrastructure NSW Infrastructure Investor Assurance Framework requires infrastructure to meet the NSW Gateway for funding of projects-this a costly and bureaucratic process not aligned to the strategic priorities of the region. Where the funding framework is skewed towards population and the economy, the reality is that quality and secure water is a simple and basic human need.*
- *Centroc supports Local Government as the agency of choice delivering water utilities management in regional NSW.*
- *Local Government management of water utilities in Central NSW is being undertaken on a solid basis through the Centroc Water Utilities Alliance (CWUA) with demonstrable cost savings and efficiencies being achieved.*
- *The CWUA demonstrates the efficiencies of co-operative partnerships in delivering the National Water Initiative strategic agenda. Programming is innovative and focused on compliance based best practice service delivery to achieve optimal outcomes for communities.*
- *Through Local Government the performance of local water utilities in regional New South Wales compares favourably with utilities in other Australian jurisdictions, with key factors such as water pricing, water quality, sewage effluent quality and typical residential bills performing equal to or better than comparable regional areas.*
- *The delivery of safe, quality drinking water to the communities of Central NSW is of the highest priority for the CWUA with Centroc councils steadily working towards improvements in Drinking Water Quality Management through implementation of a program of regional initiatives aimed at achieving Best Practice.*

Centroc continues to advocate that Local Government is the front line in responding to the needs of their communities. While the State certainly has a role to play in strategic water planning and compliance based delivery of services it should, where possible, provide a “light touch” in its approach, facilitating delivery, not presenting costly, resource hungry processes that present barriers to achieving objectives.

While some in-roads have been made in the delivery of National Water Initiative objectives in regional NSW, more collaborative partnerships between the NSW Government and Local Government, particularly in the areas of planning, regulation and infrastructure prioritisation would better enable delivery of the strategic agenda.

If you require further information or clarification on comments in this submission please contact Ms Meredith Macpherson, Program Manager , Centroc Water Utilities Alliance

Yours sincerely,

John Medcalf
Acting Chair
 Central NSW Councils (Centroc)