Submission No 18

SUPPORT FOR DROUGHT AFFECTED COMMUNITIES IN NEW SOUTH WALES

Organisation: Central NSW Joint Organisation

Date Received: 26 November 2019

Inquiry into support for drought affected communities

29 November 2019



Cowra Shire, Forbes Shire, Lachlan Shire, Oberon, Orange City, Parkes Shire and Weddin Shire.

Associate members are Central Tablelands Water, Department of Premier and Cabinet (DPC) and

Regional Development Australia, Central West.

www.centraljo.nsw.gov.au



Central NSW Joint Organisation

PO Box 333

Forbes NSW 2871

Phone: Email:

Chairman: Cr John Medcalf, OAM, Mayor, Lachlan Shire Council

Reference mm:jb 191129 Enquiries: Ms J Bennett:

29 November 2019

Parliament of NSW Legislative Assembly Committee on Investment, Industry and Regional Development

Dear Sir/Madam,

Re: Inquiry into the impacts of drought on regional NSW

Thank you for the opportunity to provide input to the NSW Legislative Assembly Committee on Investment, Industry and Regional Development inquiry into support for drought affected communities in NSW.

About the Central NSW Joint Organisation

On 11 May the NSW Governor General the Hon David Hurley, proclaimed the Local Government Regional Joint Organisations (JOs) under the Local Government Act 1993. The Central NSW Joint Organisation (CNSWJO) represents over 200,000 people covering an area of more than 50,000sq kms comprising the Local Government Areas of Bathurst, Blayney, Cabonne, Cowra, Forbes, Lachlan, Oberon, Orange, Parkes, Weddin, and Central Tablelands Water.

Tasked with intergovernmental cooperation, leadership and prioritisation, JOs have consulted with their stakeholders to identify key strategic regional priorities. The CNSWJO Strategic Plan can be found here:

For more information on the Strategic Plan go to:

https://docs.wixstatic.com/ugd/51b46b 31886650ecf546bc916f15e99a733b3e.pdf

The region's vision is to be a vibrant, prosperous and welcoming place of seasonal landscapes that is recognised in the nation for it agricultural heart. Central NSW Councils aim is for their region to be one of the 7 top contributors to National Gross Regional Product, where agriculture is identified as the primary economic driver.

With the enabling of JOs there is an opportunity for regional NSW to do business differently with the State and Federal Governments. This involves both continuing what is working well to grow productivity while removing barriers to growth. While early days, this region sees great opportunity through having a more formalised role under the Local Government Act.

¹ Infrastructure Australia, Australian Infrastructure Plan 2015 cited in the Central NSW JO Strategic Plan page 9

CNSWJO Response to the Terms of Reference

We understand the Committee will inquire into and report on, the impacts of drought on regional NSW and identify potential government action with particular reference to regional businesses, economies and communities.

The CNSWJO has developed an issues paper to assist inform governments and other stakeholders of the impact of the drought on the Central NSW region.

Adopted by the CNSWJO Board, the Western Research Institute commissioned Drought Issues Paper provides a comprehensive review and analysis of the far-reaching impacts of the drought on communities in Central NSW and makes recommendations from a whole of community basis to recognise the impact changes in the agricultural sector has across other sections of regional communities.

A copy of the Western Research Institute Drought Issues Paper is provided here: https://www.centroc.com.au/wp-content/uploads/Centroc-drought-issues-paper-FINAL-1.pdf

See also the Fact Sheet provided as an attachment that highlights both short and longer-term actions needed to assist those impacted by drought.

The CNSWJO Board has formed a Drought Sub-committee and CNSWJO members and staff are participating in a number of forums including the Central West Orana and Central Tablelands Drought Task Group initiated by the Central West Orana Regional Leadership Executive (RLE) and the DPIE Water, WaterNSW Critical Water Advisory Panel Meetings.

The CNSWJO Board acknowledge that responding to the compounding effects of the drought is a difficult task and appreciate commitment by the NSW Government of more than \$1.8 billion in drought support for regional communities, businesses and workers experiencing the flow-on effects of the drought through its regional economic stimulus package.

We also welcome the announcement of the Federal Government's Drought Communities Programme Extension and additional funding for road infrastructure through the Extension of the Roads to Recovery funding. While there has been some feedback from the farming community about escalating debts and the value to farmers of taking on concessional loans, providing economic stimulus in drought affected communities to Councils for infrastructure projects is supported as it will provide employment opportunities and also stimulate our local economies. Similarly, water and fodder carting in many of our communities is causing significant damage to our regional roads. Funding for road infrastructure will likewise provide additional economic stimulus.

The Central NSW JO Board has committed to work with Local Government NSW to support their advocacy efforts with regard to the impact of the drought on regional communities. These reflect the views of our Board and include:

- 1. A whole of government approach to provide funding to assist communities to deal with the effects of drought locally.
- 2. Funding to assist communities to recover from the drought after the immediate effects have diminished.
- 3. The appointment of regional recovery coordinators through the Joint Organisations of Councils to facilitate drought recovery.
- 4. The development and implementation of integrated long-term National State Drought Policies and Plans to include:

- A commitment to provide long-term water security and elated initiatives such as fodder banks;
- Bringing forward planned water infrastructure projects and identifying new infrastructure projects that will assist in providing long-term water security;
- o Support for demand management and water saving initiatives down to the household level;
- Stronger support for emergency responses such as water carting.
- 5. A review of Water Sharing Plans, particularly in relation to need for optimisation of the management of environmental flows.
- 6. Commitment to actively engage councils in the development of all policies and plans.
- 7. Provision of funding for local government drought coordinators.
- 8. Explicit recognition by the State and Federal Governments that they have a community service obligation to subsidise water and sewerage infrastructure and services in small rural and regional communities.

It is our Board's position that Government's need to work together to ensure that our local communities retain ownership and management of their local water utilities through Local Government.

9. Increased provision of financial and mental health support for communities impacted by drought (supported by roadshows to make people aware of available assistance).

In addition to advice provided in the Drought Issues Paper, we provide the following commentary regarding items c and h of the Terms of Reference.

c) Direct and indirect impacts of drought on businesses and industries

It is understood that the Department of Premier and Cabinet have undertaken an analysis of the impact of the drought on businesses and industries for both Orange and Bathurst. Where the reports have not been made available, Bathurst Regional Council (BRC) have undertaken their own assessment through the Western Research Institute.

The BRC Water Supply supports the critical human needs of nearly 40,000 people, but on top of this it enables the operation of the local economy and a very large number of jobs where there are significant impacts when extreme restrictions are put in place or if the system fails as outlined in the table below.

Key findings of the economic impact analysis detailing the effects of level 5 and 6 water restrictions and a supply failure on the whole of the Bathurst economy are detailed in the table below.

	Contribution to		Employment (FTE)
Water restriction level	economy - Output	Household Income	
Unrestricted	\$1,709,940,000	\$723,810,000	9769
Level 5 (25% reduction)	\$1,526,330,000	\$660,870,000	8957
Level 6 (50% reduction)	\$1,057,120,000	\$454,570,000	5882
100% reduction	\$130,630,000	\$66,780,000	901

Source. Western Research Institute 2019.

As can be seen the result (productivity) per megalitre (for around 7000ML/a) is quantums greater than some other water uses. Similarly, some higher order non-urban business uses also achieve high productivity.

It is considered this sort of thinking towards higher productivity water uses ought to inform strategy and direction.

Several Councils have well developed analysis on this approach as it has been necessary to develop such an approach to be persuasive with regards to drought funding requests for infrastructure and to justify requests for restriction of non-urban water uses.

Additionally, it has been necessary to develop the analysis to ensure against suggestions "that rural and regional areas cannot have any more growth due to a lack of water". Clearly the above impacts and productivity thinking obliterates such suggestions in showing a dynamic productivity pathway (as exists elsewhere when considering constraints, initiative and productivity), rather than a static stuck rural and regional NSW.

h) Capacity and coordination of town water supplies

The provision of town water supplies is core business for the CNSWJO member Councils.

Emergency short-term water management for towns is currently the highest priority for Councils particularly in the vulnerable Lachlan River valley and for the larger regional centres of Bathurst and Orange on the unregulated Macquarie River.

Councils continue to work individually and collectively on understanding their secure yield and how to best manage it. Members also continue to engage directly with state agencies seeking funding for infrastructure solutions and resolution of policy issues impacting on urban water supplies.

Drought contingency options proposed for the Lachlan River, including their priority and sequencing were considered at a teleconference of the Southern Critical Water Advisory Panel on 8 November. Most recent advice is that operational changes and other drought measures already ensure that supply is guaranteed until at least June 2020, even under a continuation of extreme drought, and further operational changes would extend that date to October 2020. The situation is being monitored closely and could change should conditions deteriorate significantly beyond current expectations. In line with the Extreme Events Policy the Lachlan Regulated River Valley is at stage 3 – severe water shortage.

In addition is a program of long-term water planning underway through the NSW Government with the development of valley-based Regional Water Strategies, a State Water Strategy and of course, the review of the Water Resource Plans for the Lachlan and Macquarie catchments due for completion in 2019. Central NSW Councils have long advocated for town water to be integrated into the state's long-term water planning framework and have welcomed an increased level of engagement with Councils in the development of these long-term strategies.

The challenge currently is that the focus on business-as-usual and longer-term planning processes, is at times not responsive to the pace of the current drought emergency and a distraction from more pressing priorities.

Where the NSW Parliament has recently passed a Water Supply (Critical Needs) Bill 2019 that specifically identifies the Macquarie River to Orange Pipeline as a declared water supply development and the Wyangala Dam wall raising project as a critical state significant dam-related development, advocacy is ongoing with the NSW Government around the need for policy settings in the ongoing water management framework to facilitate the delivery of water supplies, including policies around triggers for environmental flows and to enable the operation of critical infrastructure.

Meanwhile, Councils continue to monitor their individual situations in terms of imposing water restrictions on their communities. Orange imposed level 5 water restrictions from 6 October and Bathurst moved to extreme water restrictions from 14 October. For towns on the Lachlan River, water restrictions are implemented in line with advice from WaterNSW regarding changes to allocations and triggers in Council's Drought Management Plans.

Communities in Central NSW are good at conserving water – we learnt a lot from the last drought. Communities like Orange at the top of the Macquarie catchment are doing amazing work using only 130 litres per person per day while their Sydney counterparts use 210. See Orange City Council Case Study provided as an attachment.

Councils in this region seek to work with all levels of government in water security and have provided advice to the State government on its priorities for emergency infrastructure and water sharing plans.

An overriding issue of increasing concern for our region is the implications of the business as usual approach by the State Government to emergency town water security infrastructure management for the long-term ownership and management of local water utilities by Local Government in regional NSW. Key concerns are summarised as follows:

- The focus on business-as-usual processes by DPIE Water with respect to the funding of water infrastructure solutions through the Safe and Secure Water Program streams 1 & 2 is not responsive to the pace of the current drought emergency.
 - Feedback from CNSWJO members and including from the NSW Water Directorate is that there is significant frustration across regional LWUs with the delay and lack of value added by some of these processes. This includes where DPIE Water are using a LWUs Integrated Water Cycle Management Plan as the core source of information for a risk assessment to inform their infrastructure prioritisation framework for the funding of projects.
- Media coverage that seeks to blame and shame Councils for town water security woes.
- Where the current drought is highlighting issues from the lack of integration of town supplies in the
 planning framework in the past, feedback to the state government is rather than "fast tracking"
 Regional Water Strategies let's take the time to get it right. It is critical that town water security needs
 are not over looked and that large-scale infrastructure projects such as the raising of the Wyangala Dam
 wall are optimised in the longer-term planning processes.

Key messages from CNSWJO Board are:

- Councils are responsible and experienced water utilities.
- Advice from the State, which is regularly updated, informs communities on when they need to trigger water restrictions. More steps will be put in place if and when they are needed.
- o Town water use of State dams is tiny in comparison to other users. Only 2% of total storage.
- Regional communities, for the most part, are good at conserving water we learnt a lot from the last drought. Communities like Orange in the Macquarie catchment are doing amazing work using only 130 litres per person per day. Sydney-siders use 210.
- Councils in regional NSW seek to work with all levels of government in water security and have provided advice to the State government on priorities for emergency infrastructure and water sharing plans.

- Many local solutions including pipelines, bores, recycling and storm water harvesting schemes have been implemented by our Councils, but we still need shovels in the ground for the big-ticket items to drought proof towns is large parts of inland NSW into the future. These extend well beyond an individual Council's remit
- The issue isn't just about infrastructure spend it's also about getting the state government's policy settings right to facilitate the delivery of water supplies including policies around triggers for environmental flows and to enable the operation of critical infrastructure. We need these triggers to be part of the ongoing framework so we can call on them as required and not be needing legislation, such as a Critical Water Bill to turn the taps
- There is a great opportunity for all levels of Government to work collectively on the solutions
- No one has anticipated the severity of the current conditions or the challenges facing not only inland towns but also Sydney. What is needed is less blame and a more collaborative approach to solutions.
- It is proposed that a post mortem on lessons learnt from the drought on water management and emergency response to be held within one year and that the CNSWJO and member Councils have a seat at the table.

Regional Water Security Infrastructure

Funding support from the State and Federal Governments for the Wyangala Dam wall raising project presents an opportunity for a step change in water management in the Lachlan Valley that has the potential to not only solve long-term water security for urban communities but also to drive growth and prosperity in the Lachlan valley through increased reliability of supply.

Studies over the past decade including the Centroc Water Security Study and the NSW Government's Lachlan Valley Water Security Investigations have identified the need for improved water security and reliability for the highly vulnerable Lachlan river valley.

Over the last 20 years there has been increased year to year variability – in 2016/17 there were 1,495,000 ML inflows, with 900,000 ML of this released between August - November 2016. If 600,000 ML of that could have been retained, the Lachlan would not be in the situation we're currently facing, and some of the flood damage of 2016 could have been reduced.

WaterNSW estimates that the upgrade will provide an additional 21,050 ML/year for general security usage, as well as significant flood mitigation benefits. The project Fact Sheet can be found here: https://www.waternsw.com.au/__data/assets/pdf_file/0020/149051/Wyangala-Dam-Raising-Fact-Sheet-14.10.2019.pdf

Notably, additional storage is not about *more* water, it's about more *reliable* water, not just towns, but to underpin regional growth, new industries, high value-add industries, new mining developments, activation precincts etc. The reliability of water supply is a major factor in having the confidence to plan ahead, invest and run a profitable business.

The Wyangala Dam wall project together with the announcement of Parkes as the first Special Activation Precinct (SAP) in NSW presents a real opportunity for a Government-led strategy for sustainable agriculture similar to the Dutch national commitment to produce twice as much food using half as many resources. See Case Study attached.

Special Activation Precincts are dedicated areas in regional NSW that have been identified by the NSW Government as places where businesses in many sectors will thrive. These precincts will create jobs, attract businesses and investors, and fuel economic development in regional NSW to ensure regions are well

placed to grow and meet future economic needs. All Special Activation Precincts will be delivered as part of the \$4.2 billion Snowy Hydro Legacy Fund.

The two principal investment opportunities that have been identified for the Parkes SAP is Freight and Logistics and High-Value Agriculture. A 5,600-ha area just west of Parkes has been identified as the principal region to locate the activities of the SAP and a master plan is being developed.

To ensure the additional water security created by the Wyangala Dam upgrade project is optimised, it is suggested that modelling needs to be done of the impact of converting a portion of General Security to High Security. If the modelling supports High Security conversion, a component of the water security improvement could be attributed to increasing High Security and town water. This has the potential to catalyse a range of high value industries, creating jobs and wealth for the Lachlan region. If the improved security is apportioned to existing users, there will be only a modicum of change.

In addition, there is a need to ensure policy and water management settings are right. There needs to be more storage and a change in how the Murray Darling Basin Plan is administered to sustain growth, particularly in the context of drought.

The Wyangala Dam upgrade, Parkes SAP and review of the Water Sharing Plan presents the opportunity to potentially address long-term water needs for Lachlan Valley towns and communities while delivering an economic driver through increased high security water.

Other opportunities for town water security include the Lake Rowlands to Carcoar Pipeline project. From briefings provided by WaterNSW to Board representatives it is apparent that town water security has not been identified as a primary purpose of the pipeline but rather a beneficial outcome.

The CNSWJO Board seeks to ensure that while towns only use around 2% of the water stored in dams in NSW, it is critical to the sustainability of the region's towns that it is not overlooked in both the Wyangala Dam wall raising and Lake Rowlands to Carcoar pipeline projects and that these projects are optimised in the longer-term planning processes.

These projects present the opportunity for a review of higher order issues around water management including:

- o High security raw water networking
- o Water sharing and water use productivity
- o Managed Aquifer Recharge
- o Groundwater modelling.

From the extensive work by the region in water security the view of the Board is that with the right storage and pipe network there is plenty of water for town water supplies for Central NSW communities and to enable substantive growth in high value agriculture- it's just a matter of getting it to the right place, at the right time and for the right price.

By tackling these challenges from the position of having a deep knowledge informed from Councils/Local Water Utilities through the core functions of advocacy, intergovernmental cooperation and regional strategic planning, there is a profound opportunity for Joint Organisations to support their member Councils and through them their communities in the delivery of quality secure water supplies to sustain and grow communities in regional NSW.

Central NSW Councils continue to advocate for early engagement in the development of the business case in the hope of optimising the project's outcomes for town supplies and high value uses. We would welcome the opportunity to brief the Committee on these opportunities.

i) Any other related matter

Other messages from the CNSWJO Board in relation to the drought response, not covered elsewhere are as follows:

- o The criteria for the Federally funded \$1M for drought relief provided to Councils is too limiting. Councils request greater flexibility where they accept the money on the basis of the criteria and acquit the funding against that criteria. Councils are responsible managers of public funding and greater flexibility will enable funding to get to where it is most needed when it is needed.
- o Regional communities need communication that continues to encourage visitation to drought impacted areas rather than negative, ill-informed commentary on lack of water and bad farming practices which only adds pressure in already highly stressful situations.
- Better understanding of triggers that would signal when we need to instigate drought management actions and case by case/place-based management approaches to enable the minimisation of worsening conditions of untreated impacts is needed. Local Government can work with State and Federal Governments to improve current approaches.

In conclusion, the impacts of drought are long-term and require a whole of government approach to drought assistance and recovery packages for primary producers, their families plus the business communities in regional areas.

Local Government is a solid conduit for improving the understanding of local drought conditions and how to apply drought support to regional communities. This connectedness with our communities is the most efficient basis for monitoring the impacts of the drought and the success of drought assistance packages provided in collaboration with other tiers of government, the business sector and other stakeholders.

Local Government is well placed to assist and improve the substantial efforts being implemented to support drought affected areas. However, better coordination is required to ensure the right people are getting the right sort of assistance and barriers to accessing the assistance are reduced.

Where the region's policy position is that we need to do things differently if we are to get a different result and there is already activity in region moving in that direction, the CNSWJO would welcome alignment with and support from other levels of government, preferably in some type of genuine collaboration to ensure the drought response is targeted to where it is most needed and will have the biggest impact.

If the committee would like to hold a public hearing in the Central NSW region, we would be more than happy to assist in the coordination of this. For further information or clarification on comments in this submission, please do not hesitate to contact me on

Yours sincerely,

Jennifer Bennett

Executive Officer Central NSW Joint Organisation (CNSWJO)

DROUGHT IN THE CENTRAL WEST NSW

What is happening now?

The Bureau of Meteorology has reported September 2018 was the driest September on record. The Central West of NSW has had a small amount of rain in September and October 2018, but at best we are in a "green drought" with worrying concerns about future stock conditions, levels of stock and cropping production. NSW Department of Primary Industries (DPI) reported in September 2018 that 98% of the state remains in drought. Farmers have kept stock for longer this drought than previously and therefore fodder needs are heightened.

Regional towns are feeling the pinch. 93.9% of businesses in the Central West have been impacted by the drought according to the August 2018 Drought survey by the NSW Business Chamber. The Survey also identified that 87.9% of businesses in the region have experienced a decrease in sales/revenue – equating to a 33% fall in revenue raising. 44.1% of businesses identified this drought is more severe and is hurting their business more than other droughts have impacted. Only 9.4% of businesses considered they were well equipped for drought impacts – this is the fourth lowest level of preparedness in regional NSW areas.

Where is it happening?

The Central West of NSW is a major contributor to the Australian economy. The 3,903 farms in the region represent 15.2% of the NSW farmland. Infrastructure Australia's Infrastructure Plan identified the Central West region n the fastest growing areas across Australia and predicts by 2031 the region will be the 7th largest contributor to GDP in the country with an estimated \$17.4bn of production ³.

What are the future impacts of drought?

In addition to the impact on the farming sector, the sustainability of towns is at risk. Food and fibre production falls will impact every Australian. ABARES⁴ is predicting worsening conditions and forecasting downward trends in livestock and cropping production. Soil moisture levels are low and if any winter cropping occurs, production will be significantly reduced. NSW DPI indicates in the September 2018 Seasonal update that most on farm practices remain unchanged despite recent low level rainfalls.⁵

Understanding the flow on effects of drought on regional communities is critical to ensuring regional jobs are maintained and services kept. Farmers are making decisions on what bills to pay – so local businesses are impacted. Jobs are being lost. This threatens the sustainability of regional Australia. If jobs go, people move, and this threatens the livelihood of Central West business and the ability for areas to retain schools, post offices, banks and government and other services. Getting people back into regional Australia is challenging – so preventing them leaving is paramount.

When does it need to happen?

We need action now - but we also need to think long term and plan for the future.

Major issues raised by locals

"This is a once in a lifetime drought that is impacting both the farming and business community"

"All droughts are different – what is needed is a suite of solutions of when to pull triggers to assist regional communities"

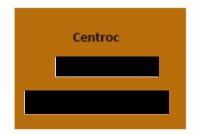
"Placed based solutions are needed to manage in times of drought"

"Action planning is needed so that when triggers are pulled in future there is a known set of actions that can be activated"

"Water infrastructure planning now for the future droughts is essential – these projects take a lot of time to happen"

"A group of us employs an agronomist. A family with 3 kids will leave town and how will we ever get another agronomist back?"

"We've planned for the future and have had grain stored underground for 14 years. So, we have been responsible, but when we sought assistance we were told our practices that have sustained us, make us ineligible for funding"



¹ NSW Department of Primary Industries (DPI), https://www.dpi.nsw.gov.au/climate-and-emergencies/droughthub/information-and-resources/seasonal-conditions/ssu/september-2018

² ABARES Central West NSW Profile, , http://www.agriculture.gov.au/abares/research-topics/aboutmvregion/nsw-central#agricultural-sector accessed Oct 2018

³ Infrastructure Australia, Australian Infrastructure Plan, 2016

⁴ Australian Bureau of Resource Economics and Sciences, agriculture.gov.au/abares Accessed Oct 2018

⁵ DPI ibid

What do we need to assist those impacted by drought?

Short term

- Review assistance packages and the complexity of processes required to apply for funding. Simplify applications were possible – the last thing a drought-stricken farmer needs is an onerous application form to complete to access funding.
- Funding of farmland rates if rates are unpaid, council
 programs to maintain roads and other infrastructure is
 compromised. Sending funding to Councils for the payment
 of farmland rates gives an equitable distribution of funding
 can make its way to the farmers and possibly regionally
 based business reliant on the primary sector could be
 included without the need to assess applications as the
 rating structure already has a comparative and fair basis
 underpinning the levels of rates charged.
- Direct funding to Councils is welcomed but needs to go to all affected communities
- All farmers are impacted by drought. Making funding available to all farmers enables those who have planned well for drought to benefit – let's reward those that offer solid farm management practices.
- Acknowledge the broader impacts of drought on the regional business sector and develop financial assistance packages for business – tax incentives, access to loans programs with limited/no repayment for 2 years etc. We need assistance for regional businesses to ensure the businesses stay local and keep employing staff.
- Establish social engagement opportunities to ensure the mental health of farmers is monitored and isolation reduced.
 Local Government is well placed to assist in facilitation of functions and has the means to contact locals and drive these mental health improving engagements.

Agricultural profile of the Central West of NSW

In 2016/17, the gross value of agricultural production in the Central West region was \$1.7 billion, which was 12 percent of the total gross value of agricultural production in NSW of \$14.5 billion. 52% of the gross value of the region was from three sectors -wheat (\$366M), cattle and calves (\$303M), and wool (\$235M). 94% of the total value of NSW's brussel sprout and 83% of the NSW cauliflowers are produced in the Region.⁶ 21% of sheep and 19% of the NSW poultry are farmed in the Region⁷. The Region contributes significantly to the state's oats, apples, pears, cherries, cabbages and sweet corn production.

The Region is a significant source of food and fibre for Australia and the agricultural health of the Central West of NSW is vital.

Longer term

- Drought preparedness is critical and governments should be planning for the future – so we are ready when the next droughts occur and implementing actions before issues are at a critical stage.
- Identify and understand what triggers for action against drought should be observed and at what time they need to be acknowledged. Design programs that will respond to the triggers. This requires a multi tier government collaboration to ensure we properly assess the impact of drought and are ready with tools in place to manage drought impacts. Finalising drought preparedness tools is critical.
- Infrastructure planning, particularly for water infrastructure, needs to be forward looking and contemplate the impacts of drought. Better capital upgrade programs that are future looking are needed. This acknowledges planning for upgrades such as the \$650M required to raise Wyangla Dam's wall by 10 meters to improve water security requires a long term commitment to capital renewal.
- Better coordination of drought management advisory services is essential. Local Government can assist in the coordination efforts and be the regional conduit for service delivery.
- Potential solutions for the delivery of better coordinated drought recovery and management solutions range from Local Government providing office accommodation for State/Federal officers to make services more accessible and advice easier to obtain for our communities through to assistance in the three tiers of government collaborating on training our communities in drought support responses while being mindful of privacy.
- Place based solutions that can operate on multiple levels and be tailored for Local Government areas are needed.
 Local Government can help to identify what differentiates regions from others when drought impact consideration is made.
- We should consider how money raised by selling water earmarked for environmental impacts can be used on projects with an environmental improvement outcome and ensure the money is spent as proposed.

What do we need?

 To collaborate with State and Federal government for actions to address this drought and to create better drought preparedness processes across the three tiers of government for future droughts.

Prepared by



⁶ ABARES Ibid

⁷ Australian Bureau of Statistics Cat: 7121.0 Value of Agricultural Commodities Australia 2016-17



WATER CONSERVATION CASE STUDY

In 2008 as a result of the worsening millennium drought, Orange City Council launched the Watertight Program. The program included free water audits in the residential, commercial and industrial sectors. It included a shower head exchange program, leak detention on the council network and water saving devices in council facilities, rainwater tank subsidies, liaison with large water users and water restrictions. Litres per person per day figures were posted digitally and in traditional media. The centre piece of the campaign was biggest loser style community promotion.

While Watertight drove down consumption, an impressive element of the program was that when the storages returned to more normal levels consumption did not undergo a similar escalation.

While water consumption did increase it did not get close to the historic highs of the late 90s and earlier (refer graph no. 1 attached). Lower consumption has become the new normal. Despite some communities' reluctance to grasp demand management as a fundamental way to improve water security, it is the low hanging fruit.

Alongside this aspect of demand management Council also undertook significant infrastructure works including stormwater harvesting, a pipeline to a new source, groundwater and raising the dam wall on the city's main reservoir. These works represented more than \$90 million in expenditure and involved all tiers of government. These infrastructure developments also provided an opportunity for community engagement. For example, the innovative Stormwater Harvesting Scheme has proven to be a valuable raw water supplement for the city's drinking water supplies. Council staff led tours of the scheme after it was built in 2009, enabling the water conservation conversation to continue.

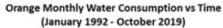
One of the challenges for cities like Orange where demand has remained in check despite improvements in supply is that this low hanging fruit is no longer available, so the focus is now on holding the pattern. This has resulted in Council re-running general actions such as water audits, shower-head exchange programs, electronic billboard notices, community forums and shopping centre displays. Greater access to social media is also an advantage for Council this time around.

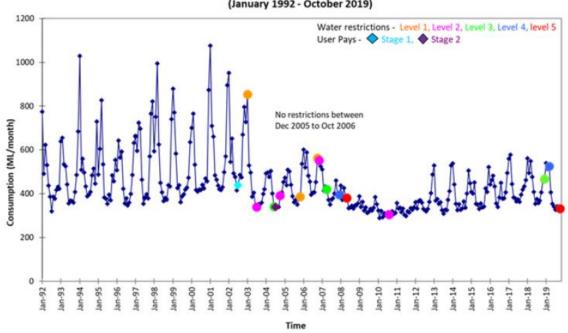
In an attempt to squeeze further, Council is also pushing harder into opportunities such as; leak detection, direct engagement with residents that use alternate sources (i.e. bores and tank-water), and engagement of the non-residential sector (e.g. water audits and Water Savings Actions Plans). Whilst the recent drought conditions have driven Council to revisit and extend upon previous engagement methods, it is rewarding to have the community respond in the manner it has – this is no better illustrated than the town water use graph (refer graph no. 2 below) under restrictions that permit residential garden watering for 1 hour on a Sunday.

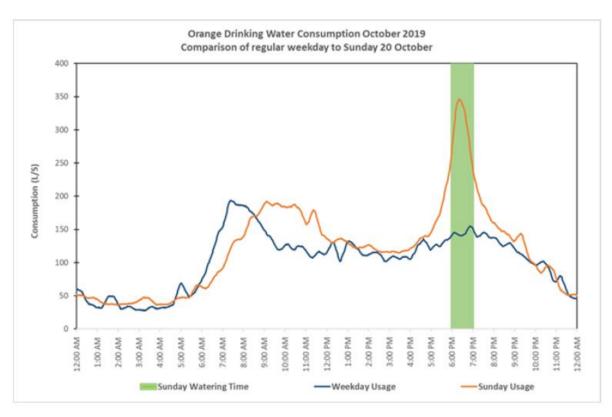
The current drought is a factor but that Orange's current consumption during Spring 2019 remains between 130-140 litres per person per day is an impressive continuation of a community that respects that value of water and its finite qualities.

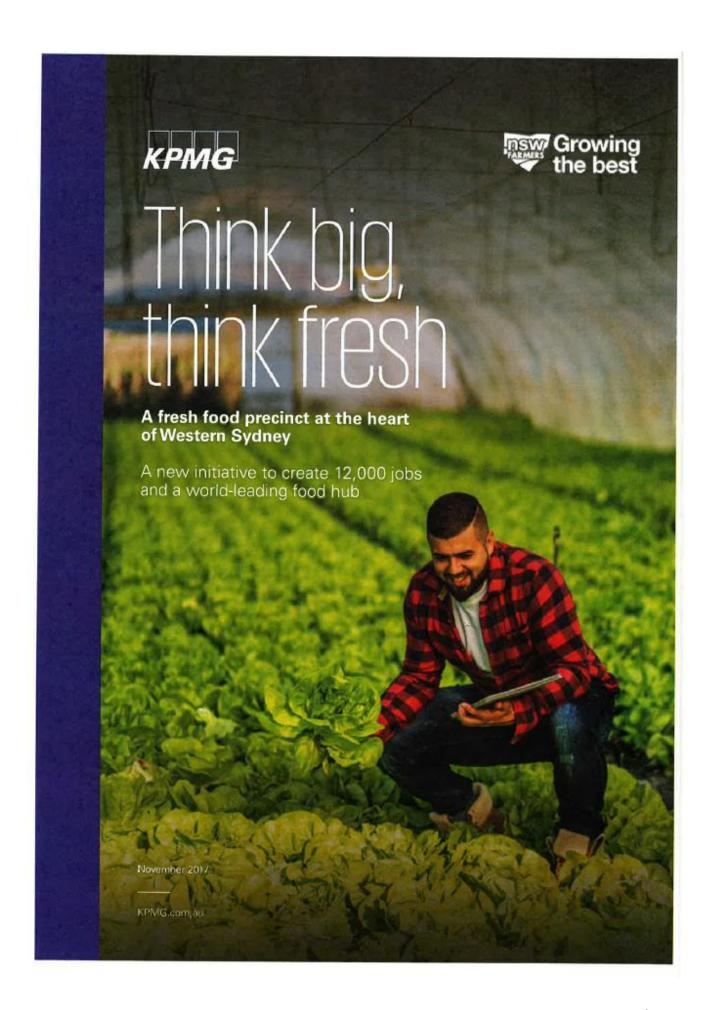
For more advice: https://www.orange.nsw.gov.au/water/	
Contact: Nick Redmond, Manager Corporate and Community Relations P:	
E:	











Case study

The Dutch way for sustainable agriculture

'Twice as much food, half as many resources'

Dealing with scarcity is something the Dutch are well accustomed to, and their agribusiness sector has developed over centuries to be the leading example of good practice. The Dutch Agribusiness and Food sector contributes 6.6 percent of global food exports. That output is made all the more remarkable considering the size and relatively small population of the country.

In comparison, The Netherlands is approximately one tenth the size of NSW, or roughly the size of the Sydney Basin, with 41,543 square km and a population of approximately 17 million (six million fewer than Australia), which equates to approximately 500 inhabitants per square km.

It is also bereft of almost every resource thought to be necessary for large-scale agriculture. Yet it is the globe's number two exporter of food as measured by value, second only to the United States, which has 270 times its landmass. So how on Earth have the Dutch done it?

Considering the constraints of limited land, expensive labour, production in high density urban environments and a high social awareness of sustainable practices, this is an example where innovation thrives when constraint is high.

Almost two decades ago, the Dutch made a national commitment to sustainable agriculture under the rallying cry, 'Twice as much food using half as many resources.' In the relatively short period of time, this has led to an innovative and a highly productive sector with a big focus on sustainability.

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Since then farmers have reduced dependence on water for key crops by as much as 90 percent. They've almost completely eliminated the use of chemical pesticides on plants in greenhouses, and since 2009 Dutch poultry and livestock producers have cut their use of antibiotics by as much as 60 percent.

Fresh fruits and vegetables are now shipped around the clock. Aside from growing their own produce, they import food from other countries. Food products are shipped in bulk to the Dutch port of Rotterdam, processed and packaged for consumers, and then moved to markets by air, rail, and sea. This is agribusiness.

The Dutch show that when farmers, businesses, government, scientists and the community work collaboratively to develop technological and social innovation to produce good, healthy and safe food that is produced sustainably, the country and the world will benefit.

Aside from food, food knowledge is now also a key export product. They actively disseminate their knowledge across the world to contribute to the sustainability of the global food ecosystem.

(Main content source: NG 2017)



² https://www.minoralgesgraphic.com/magazine/2017/03/holland-agrinulture-system-sble-familing/