AGENDA
INFRASTRUCTURE AND LIVEABILITY COMMITTEE
14 APRIL 2020

MEMBERSHIP: Councillors J Diffey, V Etheridge, D Grant, D Gumley, A Jones, S Lawrence, G Mohr, K Parker, J Ryan and B Shields

The meeting is scheduled to commence at .

Report of the Infrastructure and Liveability Committee - meeting 9 March 2020

AUTHOR: Manager Governance Operations
REPORT DATE: 12 March 2020

The Committee had before it the report of the Infrastructure and Liveability Committee meeting held 9 March 2020.

RECOMMENDATION

That the report of the Infrastructure and Liveability Committee meeting held on 9 March 2020, be noted.

REPORT
INFRASTRUCTURE AND LIVEABILITY COMMITTEE
9 MARCH 2020

PRESENT: Councillors J Diffey, D Gumley, A Jones, S Lawrence, G Mohr and J Ryan.

ALSO IN ATTENDANCE:
The Chief Executive Officer, the Executive Manager Governance and Internal Control, the Manager Governance Operations, the Community Support Officer, the Communications Partner, the Director Organisational Performance, the Director Culture and Economy, the Director Infrastructure, the Director Development and Environment, the Director Liveability, the Manager Community Services and the Sister City Officer.

Councillor G Mohr assumed chairmanship of the meeting.

The proceedings of the meeting commenced at 5:40 pm.

ILC20/5 REPORT OF THE INFASTRUCTURE AND LIVEABILITY COMMITTEE - MEETING 10 FEBRUARY 2020 (ID20/147)

The Committee had before it the report of the Infrastructure and Liveability Committee meeting held 10 February 2020.

Moved by Councillor S Lawrence and seconded by Councillor D Gumley

MOTION
That the report of the Infrastructure and Liveability Committee meeting held on 10 February 2020, be noted.

CARRIED

ILC20/6 2019 SISTER CITY STUDENT EXCHANGE VISITS BY DUBBO STUDENTS TO MINOKAMO AND WUJIANG (ID20/93)

The Committee had before it the report dated 17 February 2020 from the Sister Cities Officer regarding 2019 Sister City Student Exchange visits by Dubbo Students to Minokamo and Wujiang. The Committee was addressed by Sam Hagan (Student) and Ben Palmer (Chaperone) representating the Minokamo Student Exchange and Felicity Newton (Chaperone) representing the Wujiang Student Exchange regarding this matter.

Moved by Councillor A Jones and seconded by Councillor D Gumley.

MOTION
That the report from the Sister Cities Officer dated 17 February 2020, be noted.

CARRIED

ILC20/7 NEIGHBOURHOOD SHOPPING PRECINCT CCTV GRANT FUNDING TO INCLUDE WELLINGTON (ID20/56)

The Committee had before it the report dated 29 January 2020 from the Social Justice Coordinator regarding Neighbourhood Shopping Precinct CCTV Grant Funding to include Wellington.

Moved by Councillor J Ryan and seconded by Councillor D Gumley

MOTION
1. That the report of the Social Justice Coordinator dated 29 January 2020, be noted.
2. That Council consider expanding the Neighbourhood Shopping Precinct CCTV Grant Funding program to include businesses outside of the area covered by the Council CCTV system in the recognised shopping precinct in Wellington (the Mitchell Hwy from Goolma Road to the Roundabout on the Corner of Maughan and Arthur Streets with the inclusion of Swift Street).

Moved by Councillor S Lawrence and seconded by Councillor D Gumley

AMENDMENT
That the report of the Social Justice Coordinator dated 29 January 2020 be deferred to the next Ordinary meeting of Council, scheduled for 23 March 2020.

The amendment on being put to the meeting was carried. CARRIED

The amendment then became the motion and on being put to the meeting was carried.

CARRIED

ILC20/8 2020 ANZAC DAY CEREMONIES - DUBBO REGIONAL COUNCIL AREA (ID20/143)

The Committee had before it the report dated 2 March 2020 from the Senior Traffic Engineer regarding 2020 Anzac Day Ceremonies - Dubbo Regional Council Area.

Moved by Councillor A Jones and seconded by Councillor J Diffey

MOTION

That Council approval be granted to the Returned and Services League Sub-branch in Dubbo and Wellington and the Stuart Town Advancement Association to undertake their respective Anzac Day Marches on Saturday 25 April 2020, and implement road closures and detours as conditioned by Transport for NSW, NSW Police and Council's following conditions of consent:

1. **Dubbo:**
    a. **For the Dawn Service and Anzac Day March temporary road closures are to be provided:**
        - **Dawn Service in Darling Street between Talbragar and Wingewarra Streets from 5.00 am to 6.30 am.**
        - **Anzac Day March in Brisbane Street between Wingewarra and Serisier streets and Wingewarra Street between Darling and Brisbane streets from 9.00 am to 10.45 am.**
        - **Wingewarra Street from Brisbane to Macquarie streets and Macquarie Street from Wingewarra to Talbragar streets from 10.15 am to 11.00 am.**
        - **Talbragar Street from Macquarie Street to Memorial Drive, Victoria Park, from 10.45 am to 11.15 am, Darling Street from Talbragar to Wingewarra streets from 10.15 am.**
        - **Wingewarra Street between Darling and Brisbane streets as directed by the NSW Police at the conclusion of the Cenotaph service at approximately 12.00 noon to 12.30 pm.**
        - **Council's Traffic Control Plan TM7084 (attached as Appendix 5) is to be used for the event.**
        - **Submission of a Traffic Management Plan and Traffic Control Plan to Council for approval with the Traffic Control Plan submitted a minimum three weeks prior to the event. All traffic control measures contained in the Plan are to be in accordance with Australian Standard AS1742.3 and the RMS 'Traffic Control at Worksites Manual' prepared by an accredited person.**
    b. **Traffic controllers and/or trained Marshalls are to be provided at all road closure points, and other locations as identified in the Event and Traffic Management Plans (attached as Appendices 1 and 2).**
    c. **Council's Manager Governance and Internal Control must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo Regional Council and NSW Police are specifically noted to be indemnified against any action resulting from the event.**
    d. **The applicant is responsible for the provision of all traffic controls required for the event (ie Marshalls, traffic barriers and signs).**

e. A public notification is required for the Anzac Day March a minimum of seven days prior to the event.

f. The applicant is to forward a letter to Council with all the required documentation accepting the above conditions before final approval will be granted.

2. Wellington:

a. For the Anzac Day March a temporary road closure is to be provided on the Mitchell Highway, between Nanima Crescent and Lee Street and between Maughan and Whiteley streets from 10.45 am to 11.00 am, with the detour via Arthur, Warne, Percy and Whiteley streets. Council's Traffic Control Plan Wellington Anzac Detour is to be used for this event (Appendix 2).

b. The applicant is to gain consent from Transport for NSW for the closure and detour of the Mitchell Highway and Road Occupancy Licence with evidence provided to Council of such approval and conditions as warranted.

c. Submission of a Traffic Management Plan and Traffic Control Plan to Council for approval, with the Traffic Control Plan submitted a minimum three weeks prior to the event. All traffic control measures contained in the Plan are to be in accordance with Australian Standard AS1742.3 and the RMS 'Traffic Control at Worksites Manual' prepared by an accredited person.

d. Traffic controllers and/or trained Marshalls are to be provided at all road closure points, and other locations as identified in the Event and Traffic Management Plans.

e. Council's Manager Governance and Internal Control must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo Regional Council, Transport for NSW and NSW Police are specifically noted to be indemnified against any action resulting from the event.

f. The applicant is responsible for the provision of all traffic controls required for the event (ie Marshalls, traffic barriers and signs).

g. A public notification is required for the Anzac Day March a minimum of seven days prior to the event.

h. The applicant is to forward a letter to Council with all the required documentation accepting the above conditions before final approval will be granted.

3. Stuart Town:

a. For the Anzac Day Ceremony a temporary road closure is to be provided in Molong Street, between the Burrendong Way (Alexander Street) and Bell Street from 8.00 am to 2.30 pm, with a detour of Molong Street via Burrendong Way and Bell Street. Council's Traffic Control Plan TM 7175 (Appendix 3) is to be used for the event.

b. Consent is required from the Transport for NSW for the event to utilise part of Burrendong Way between Molong and Bell streets as a detour with advice provided to Council.

c. Submission of a Traffic Management Plan and Traffic Control Plan to Council for approval with the Traffic Control Plan to be submitted a minimum of three weeks prior to the event. All traffic control measures contained in the Plan are to be in accordance with Australian Standard AS1742.3 and the RMS 'Traffic Control at Worksites Manual' prepared by an accredited person.

d. Traffic controllers and/or trained Marshalls are to be provided at all road closure points, and other locations, as identified in the Event and Traffic Management Plans (Appendix 4).

e. Council's Manager Governance and Internal Control must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo Regional Council, Transport for NSW and NSW Police are specifically noted to be indemnified against any action resulting from the event.

f. The applicant is responsible for the provision of all traffic controls required for the event (ie Marshalls, traffic barriers and signs).

g. A public notification is required for the Anzac Day March a minimum of seven days prior to the event, with notification letters to be delivered to the affected residents within the road closure areas in the village.

h. The applicant is to forward a letter to Council with all the required documentation accepting the above conditions before final approval will be granted.

CARRIED

ILC20/9 2020 DUBBO MOTOR BIKE RALLY (ID20/144)

The Committee had before it the report dated 2 March 2020 from the Senior Traffic Engineer regarding 2020 Dubbo Motor Bike Rally.

Moved by Councillor J Diffey and seconded by Councillor D Gumley

MOTION

That approval be granted to Dubbo Motor Bike Rally Incorporated to undertake the 2020 Dubbo Motor Bike Rally on Saturday 2 May 2020 between 6.00am and 6.00pm in accordance with the Event and Traffic Management Plans and Councils following conditions of consent:

1. **That a temporary road closure be implemented in Talbragar Street between Macquarie Street and Darling Street with partial closures of Carrington Avenue and Brisbane Street between 6.00am and 6.00pm in accordance with the approved Traffic Management Plan and Traffic Control Plan – Dubbo, Talbragar Street, Road Closed 061219.**
2. **That a temporary bus zone of 28m long be implemented on Friday 1 May 2020 and removed on Monday 4 May 2020 in Macquarie Street at the existing Bus Service J pole adjacent the Visitor Information Centre in accordance with Councils Plan TM 7347.**
3. **That approval be granted for the occupation of the Talbragar Street Railway Corridor and Darling Street public carparks.**
4. **Submission of a Traffic Management Plan and Traffic Control Plan to Council for approval with the Traffic Control Plan submitted a minimum three (3) weeks prior to the event. All traffic control measures contained in the Plan are to be in accordance with Australian Standard AS1742.3 and the RMS' 'Traffic Control at Worksites Manual' prepared by an accredited person.**
5. **Traffic controllers and/or trained Marshalls are to be provided at all road closure points, and other locations as identified in the Event and Traffic Management Plans.**

6. **The applicant is responsible for the provision of all traffic controls required for the event (ie Marshalls, traffic barriers and signs).**
7. **A public notification is required for the temporary road closures a minimum of seven (7) days prior to the event.**
8. **Council's Manager Governance and Internal Control must sight a copy of the Public Liability Insurance Policy for a minimum amount of $20 million on which Dubbo Regional Council and NSW Police are specifically noted to be indemnified against any action resulting from the event.**
9. **The applicant is to forward a letter to Council with all the required documentation accepting the above conditions before final approval will be granted.**

CARRIED

ILC20/10 LEAVE OF ABSENCE

Requests for leave of absence were received from Councillors V Etheridge, D Grant, K Parker and B Shields who are absent on due to personal reasons.

Moved by Councillor A Jones and seconded by Councillor J Ryan

MOTION

That such requests for leave of absence be accepted and Councillors V Etheridge, D Grant, K Parker and B Shields be granted leave of absence from this meeting

CARRIED

The meeting closed at 5:52pm.

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CHAIRMAN

REPORT: Proposed Closure of Road Corridors - Dubbo City Regional Airport

AUTHOR: Road Services Engineer
REPORT DATE: 26 March 2020
TRIM REFERENCE: ID20/246

EXECUTIVE SUMMARY

Council has undertaken a review of road corridors located within Dubbo Regional Airport that are not used nor intended to be used as public roads. These road corridors currently occupy land that have a higher beneficial use to the airport if closed, maximise the use of this land and better define the boundaries of the Airport. The proposed road closures are Lots 1, 2, 3 and 4 are indicated in **Appendix 1**.

Council's Infrastructure Strategy and Design Branch is planning the upgrade of services including underground power, telecommunications and pressure sewer, all of which run through this area. Upon closure, the closed road (Lots 1, 2, 3 and 4) will be consolidated into the Airport lot (refer to **Appendix 2**).

The road corridors will vest in the Council upon closure, and the closed road corridors (Lots 1, 2, 3 and 4) will be consolidated into the Airport lot. Council will bear the expenditures for such closures as per Part 4 Division 3 Roads Act 1993 - Closing of Council Public Roads by Councils.

FINANCIAL IMPLICATIONS

There will be a nett cost to Council arising from this consent, with such cost including plan registration and survey plans etc.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

1. **That Council Consent to the closure of the road corridors at the Dubbo City Regional Airport.**
2. **That Council proceed with Part 4 Division 3 Roads Act 1993 - Closing of Council Public Roads by Councils.**
3. **That Council report results of the processes back to Council for final decision to execute the road closure.**
4. **That the relevant documents be executed under Power of Attorney.**

Mano Manokaran
Road Services Engineer

BACKGROUND

Council has undertaken a review of road corridors located within Dubbo Regional Airport that are not used nor intended to be used as public roads. These road corridors currently occupy land that have a higher beneficial use to the Airport if closed, maximise the use of this land and better define the boundaries of the Airport. The proposed road closures are Lots 1, 2, 3 and 4, and are indicated in **Appendix 1**.

REPORT

The Infrastructure Strategy and Design Branch is planning the upgrade of services including underground power, telecommunications and pressure sewer, all of which run through this area. Upon closure the closed road (Lots 1, 2, 3 and 4) will be consolidated into the Airport lot (refer **Appendix 2**).

The road corridors are formed, however have been rarely maintained by Council. This action will enable the road corridors to be vested in Council upon closure and allow Council to consolidate the lots into the Airport lot.

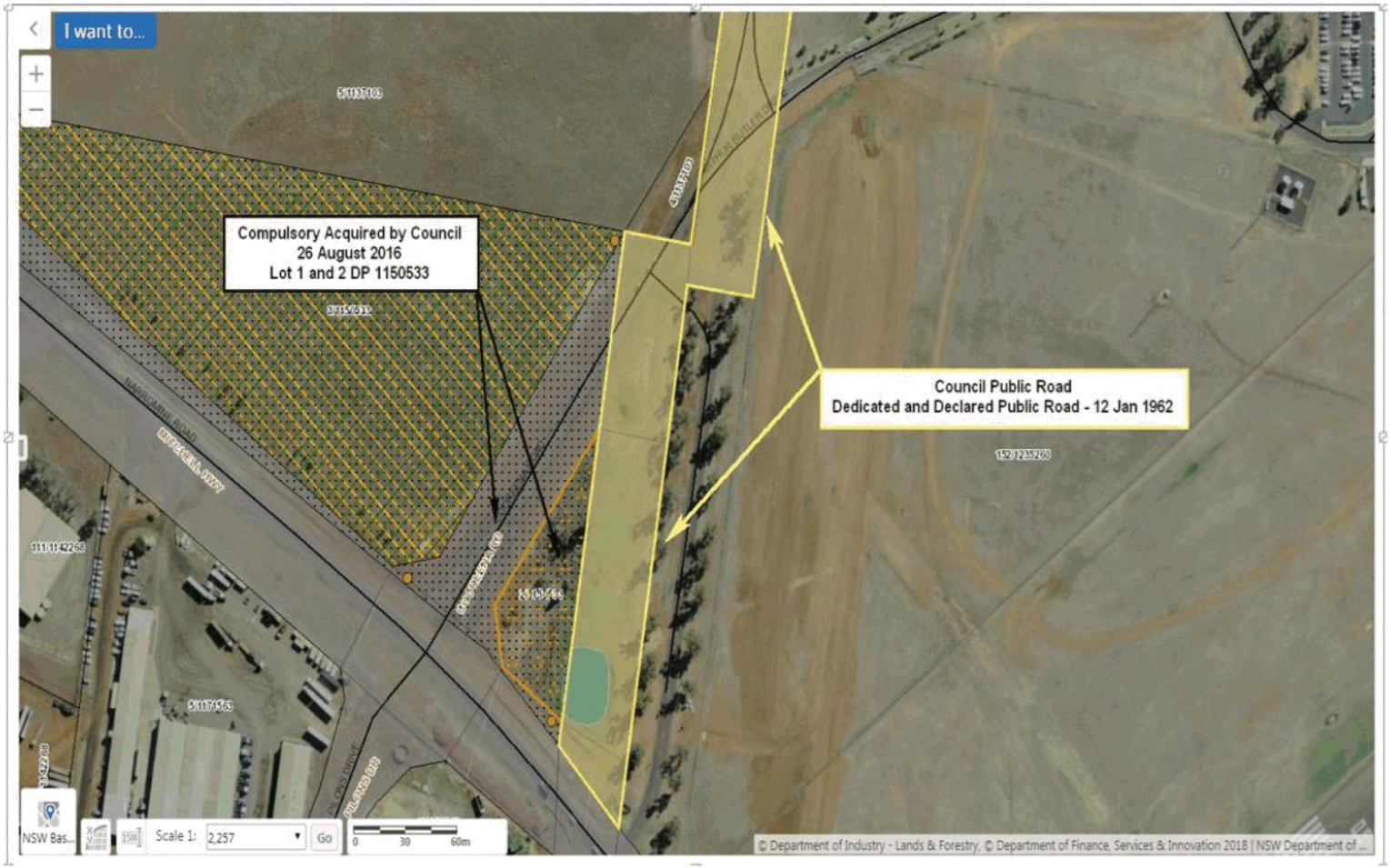
SUMMARY

It is recommended that Council support the closing of the road corridors for the purpose of consolidating the Airport lot upon closure.

Appendices:
1⇩ Proposed Road Corridor Closures - Dubbo City Regional Airport
2⇩ Consolidation of Lots - Dubbo City Regional Airport

Proposed Road Closure of Road Corridors that currently exist within Dubbo City Regional Airport.

1. Council Public Road standing in the name of Dubbo Regional Council.
2. Council Public Road and associated stormwater drainage. It is proposed to expand the existing dam into this location as a dry retarding basin.
3. Council Public Road standing in the name of Dubbo Regional Council.
4. Council Public Road standing in the name of Dubbo Regional Council.


I want to...
Compulsory Acquired by Council
26 August 2016
Lot 1 and 2 DP 1150533
Council Public Road
Dedicated and Declared Public Road - 12 Jan 1962
Scale 1: 2,257
Go
0 30 60m
© Department of Industry - Lands & Forestry, © Department of Finance, Services & Innovation 2018 | NSW Department of ...

REPORT: Proposed Walkway Closures - East and West Dubbo

AUTHOR: Manager Infrastructure Delivery
REPORT DATE: 30 March 2020
TRIM REFERENCE: ID20/278

EXECUTIVE SUMMARY

Council received requests from property owners adjacent to multiple walkways, to close the walkway due to anti-social activity and possible criminal activity in West Dubbo and East Dubbo. The walkways in question are listed in the table below.

Council undertook community consultation for the proposed closure of the walkways in February 2020 and a total of 209 submissions were received via email, letter and an online survey form. A summary of responses is included as **Appendix 1** and a copy of all comments received is attached to the report. In general, the comments focussed on two key issues:

- **Crime and anti-social behaviour**: The main reason cited in many submissions in favour of the closures. Many of the submissions claim that the walkways increase and encourage criminal behaviour and leave them feeling unsafe.
- **Access:** The main reason for opposing the closure. Several submissions argue that they use the walkways to access school bus routes or walk their dogs, and would be inconvenienced by taking alternative routes.

West Dubbo

Walkway	# of responses	In favour of closure	Against closure
Gumtree Avenue to Horizon Place	131	86.3%	13.7%
Horizon Place to Meadowbank Drive	134	85.1%	14.9%
Meadowbank Drive to Springfield Way	138	83.3%	16.7%
MacKay Drive to public reserve	120	82.5%	17.5%
Meurer Court to public reserve	121	81.0%	19.0%
Rivergum Place to public reserve	126	82.5%	17.5%

East Dubbo

Walkway	# of responses	In favour of closure	Against closure
Lancaster Park Place to Carisbrook Park	115	78.3%	21.7%
Twickenham Drive to public reserve	112	83.0%	17.0%
Erica Close to St Georges Terrace	114	78.9%	21.1%

Council previously undertook community consultation for the closure of the walkway from Clews Street to the public reserve in West Dubbo in May 2019. Six responses were received, three in favour of closing and three against the closure. During the recent consultation many respondents raised that the Clews Street walkway should also be closed. The significantly higher response rate from the recent consultation is believed to better capture the community's sentiment towards this walkway.

All walkways are proposed to be closed and where possible the land sold to adjacent landowners and boundary fences adjusted. Where there are technical reasons that the land cannot be sold to an adjacent landowner, such as in cases where there is an operational need to retain the land as a stormwater overland flow path or utility easement, the walkway will be physically closed with the erection of a security fence.

It is noted that the closure would result in reduced accessibility within the neighbourhoods and this will adversely impact some residents. There is also the risk that walkways physically closed by the erection of a fence will be a long term maintenance burden for Council.

FINANCIAL IMPLICATIONS

There is no current budget allocation for the closure of walkways by the erection of security fences. Works would need to be funded by a reduction of service to footpath maintenance and reconstruction projects.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

1. **That Council consent to the closure of the walkway between Gumtree Avenue and Horizon Place, Dubbo, and applications be made to sell the property to an adjacent landowner. If the land cannot be sold, the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
2. **That Council consent to the closure of the walkway between Horizon Place and Meadowbank Drive, Dubbo, and the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
3. **That Council consent to the closure of the walkway between Meadowbank Drive and Springfield Way, Dubbo, and applications be made to sell the property to an adjacent landowner. If the land cannot be sold the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**

4. **That Council consent to the closure of the walkway between McKay Drive and public reserve, Dubbo, and applications be made to sell the property to an adjacent landowner. If the land cannot be sold the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
5. **That Council consent to the closure of the walkway between Meurer Court and public reserve, Dubbo, and the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
6. **That Council consent to the closure of the walkway between Rivergum Place and public reserve, Dubbo, and the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
7. **That Council consent to the closure of the walkway between Lancaster Park Place and Carisbrook Place, Dubbo, and applications be made to sell the property to an adjacent landowner. If the land cannot be sold the walkway is physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
8. **That Council consent to the closure of the walkway between Twickenham Drive and public reserve, between 78 and 80 Twickenham Drive Dubbo, and the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
9. **That Council consent to the closure of the walkway between Erica Close and St Georges Terrace, Dubbo, and the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
10. **That Council consent to the closure of the walkway between Clews Street and public reserve, Dubbo, and the walkway be physically closed with the installation of black 'Diplomat' security fence at each end of the walkway following a 28 day public exhibition period.**
11. **That the Chief Executive Officer be authorised to complete any necessary documentation under delegated Power of Attorney.**

Matthew Lewis
Manager Infrastructure Delivery

BACKGROUND

Council received requests from property owners adjacent to multiple walkways to close the walkway due to anti-social activity and possible criminal activity in West Dubbo and East Dubbo. The walkways in question are listed below:

West Dubbo
- Gumtree Avenue to Horizon Place
- Horizon Place to Meadowbank Drive
- Meadowbank Drive to Springfield Way
- Mackay Drive to public reserve
- Meurer Court to public reserve
- Rivergum Place to public reserve
- Clews Street to public reserve

East Dubbo
- Lancaster Park Place to Carisbrook Park
- Twickenham Drive to public reserve
- Erica Close to public reserve

Maps showing the location of each walkway is included in the report (**Appendix 2** (East Dubbo) and **Appendix 3** (West Dubbo)).

REPORT

Council undertook community consultation for the proposed closure of walkways in West and East Dubbo. The consultation period ran from 10 February to 28 February 2020 with a total of 209 submissions received via email, letter and an online survey form. A number of people lodged more than one submission, for example, completed the online form and also sent an email. Where this was identified, the multiple submissions have been combined under one record. A summary of results are shown in the table below:

West Dubbo

Walkway	# of responses	In favour of closure	Against closure
Gumtree Avenue to Horizon Place	131	86.3%	13.7%
Horizon Place to Meadowbank Drive	134	85.1%	14.9%
Meadowbank Drive to Springfield Way	138	83.3%	16.7%
MacKay Drive to public reserve	120	82.5%	17.5%
Meurer Court to public reserve	121	81.0%	19.0%
Rivergum Place to public reserve	126	82.5%	17.5%

East Dubbo

Walkway	# of responses	In favour of closure	Against closure
Lancaster Park Place to Carisbrook Park	115	78.3%	21.7%
Twickenham Drive to public reserve	112	83.0%	17.0%
Erica Close to St Georges Terrace	114	78.9%	21.1%

Attached as **Appendix 1** is a copy of the comments received, comments are copied exactly as submitted. In general, the comments focussed on two key issues:

- **Crime and anti-social behaviour**: The main reason cited in many submissions in favour of the closures. Many of the submissions claim that the walkways increase and encourage criminal behaviour and leave them feeling unsafe.
- **Access:** The main reason for opposing the closure. Several submissions argue that they use the walkways to access school bus routes or walk their dogs, and would be inconvenienced by taking alternative routes.

Other comments and suggestions for Council included:

- Increasing security measures, such as CCTV and additional lighting to deter anti-social behaviour, rather than closing the walkways.
- Maintenance and mowing in walkway areas that are closed but retained by Council.

No responses were received directly from schools in the area of the walkways. Details of Council's community consultation process were included in school newsletters. A representative of the local NSW Police was contacted and advised that police would be more than happy for the walkways to be closed.

Council previously undertook community consultation for the closure of the walkway from Clews Street to public reserve in West Dubbo in May 2019. Six responses were received, three in favour of closing and three against the closure. As there was not majority in favour of the closure a report to Council was not provided at the time. During the recent consultation many respondents raised that the Clews Street walkway should also be closed. The significantly higher response rate from the recent consultation due to improved community engagement is believed to better capture the community's sentiment towards this walkway.

Initial investigations have identified technical reasons why the land for the walkways listed below cannot be sold to an adjacent landowner. This is primarily due to there being an operational need to retain the land as a stormwater overland flow path or utility easement. The walkways listed below will be physically closed with the erection of a security fence. For all other walkways Council would investigate selling the land to adjacent landowners with boundary fences adjusted. If Council is unable to sell the land the walkways would be physically closed by erection of a security fence.

Walkways where land cannot be sold:

- Horizon Place to Meadowbank Drive
- Meurer Court to public reserve
- Rivergum Place to public reserve
- Clews Street to public reserve
- Twickenham Drive to public reserve
- Erica Close to public reserve

Although the majority of respondents are in favour of the closure of all walkways, it is noted that the closure of walkways due to anti-social behaviour may get short term results, however in the long term the local community may suffer. Accessibility within the neighbourhood will be reduced and opportunities for recreational walking and other health pursuits will be impacted by the loss of public amenity.

Physical closure of walkways by the erection of a security fence also has potential to create a maintenance burden for Council with the risk of damage to fences, or adjoining boundary fences, to maintain access to the walkway. There is also the risk of the walkways being accessed via adjacent boundary fences and being used as protected areas for anti-social behaviour or for illegal dumping of waste.

SUMMARY

Based on approximately 80% of respondents being in favour of the closure of each walkway, it is recommended all walkways are closed by either selling the land to the adjacent landowner or physically closing the walkway by erection of a security fence.

Appendices:

1⇩ Proposed Walkway Closures - East and West Dubbo - Summary of Responses
2⇩ Proposed Walkway Closures - East Dubbo - Location Plan
3⇩ Proposed Walkway Closures - West Dubbo - Location Plan

Appendix 1 – Comments Received from Community Consultation

I live in st georges tce on this laneway, lots of 'mischief' happens in here. Could it be gated and locked at certain times as school kids from erica etc walk through the laneway to access scholl buses, I am available to chat if needed. My name is Jenny Hazell & live on the laneway at 29 St Georges Tce that goes through to Erica Close. 1. Just wondering how much to purchase the land? 2. We use this laneway to access our backyard, we have gates installed on the fenceline if you want to google & have a look. 3. Would it be an option to just fence the Erica Cl end? We have been here for 12 yrs now & not really had a problem as such, our fence has been graffitied in the last few months, we do find random stuff in the laneway, bikes, a big bag of personal papers, a gopro, all which were reported to police for collection, but nothing actually directed at us. I am aware that Erica Cl residents are less fortunate as they have breakins etc. We also have cameras installed just as a deterrant mainly. 4. Also, if it is closed off, who is going to maintain the grassed areas, as it grows quite high & very quickly, we have on numerous occasions mowed it ourselves. This is a big attraction for snakes, as we have had more snakes than vandals in our time here. So, I am just wondering if an option, to close/fence off Erica end, concrete the whole area, or put gates at our end so we could have a key to still access our backyard and the grass could still be maintained.
I use this walk way a lot. I would not be happy if it is closed. I am not aware of a lot of anti-social behavior in this street. I don't feel closing this walkway would be beneficial.
Keep them open!
We use to live 2 doors up from the meadowbank drive and Springfield way walkway. The amount of notice and disruption it caused was unbelievable. They all need to be closed straight away. They cause nothing but drama and issues
Erica Close to St George's Terrace is a great walk way and links the estate walkways crazy to close it! I use the other connection I gotta walkways in Eastridge too! If we want people to be active walking bikes running closing walkways is not the way to do that!!
all these in east dubbo are good walkways for local residents
I have worked hard all my life to purchase a house for my young family in wise close, in less 8 months since I purchased I have had my sons wallet stolen out of his car and other items stolen from my front yard, these walkways only get used to bring drunks and people on their way to purchase drugs, NOTE: Also emailed the Mayor
The antisocial and unlawful use of these laneways far outweighs any use for designed and intended purpose. Close them
This walkway provides access for young children, including my 2 grandchildren to access Lancaster Park Place and walk home from the school bus. Closure would mean walking an extra 1.5ks
These walkways are supporting crime and vandalism. I applaud councils review and hopefully closure of these walkways
Kids bus route home to Lancaster park place
I live in Lancaster and there are constantly un registered motor bikes going up and down the street and then through the lane

Kids use these to drive motorbikes through, no helmets
After son's motor bike got stolen last week, and these scumbags used the lanes to escape I believe ALL wlkway off Twickenham Drive should be permanently closed - It might upset some people but more will be happy for them all to shut
What will happen to the closed off land? Is this a few citizens being able to privatize public land? This is not a solution, do something about the anti social behaviour? Our current mayor has previously run on Law and order and the out come of that would rank with most of his other achievements
This area is not as bad as the ways around west but not great sadly kids can not enjoy them due to been harassed
Yes I think they should all be closed, I live near Erica close and the amount of attempted break ins I have witnessed is a lot, they come down Ingrid place and head towards Erica close and leave via the walk way to St. George's. Also have a number of teens on unregistered motorbikes comin through to
We would welcome the closure of the walkways adjacent to our property at 19 Erica Close due to the reasons cited in your letter. Additionally, properties located adjacent to such a walkway can attract a higher premium from some insurance providers. Also, walkways are not viewed as a positive feature for some prospective home buyers, which can affect resale opportunities. We would be open to the opportunity to purchase walkway land adjacent to our property, should Council pursue this plan
We agree to the changes.
as said above, crime not a valid reason, happens anywhere
We lived next to a 'bad' walkway connecting Barracks close to Dubbo South Public School. It had anti social behaviour (see the graffiti of a penis in the photo below). Also people damaged and dinted the fence. In 2006 my family organised a working bee over several weeks and replaced the weeds with bark chip and then planted some plants along there. Immediately the behaviour improved and there has been no graffiti since.
My lived experience and observation is that both of these walkways contribute to a large amount of non-resident foot traffic and anti-social behaviour in our street; I note that many individuals use these walkways as a thoroughfare between Apollo Estate and East Dubbo at all hours of the day and night, thus exposing my young family to the 'unsavoury' behaviour of such passers-by and heightening our risk of opportunistic crime. Furthermore, these walkways are used by unregistered motorbikes who use the alleys as shortcuts. They 'hoon' through our street with little regard for the safety of children, pedestrians or motorists and are an 'accident waiting to happen'
Re linkway no 7in wets dubbo it would be greatly appreciated to have solid paving and solar lighting.

We have been at 37 st Georges Terrance now for around 4 years , Other than a few "rough" eg loud houses in the street , it been a Nice place to live, with 90% being great people. (farmers , shearers, Doctors etc) Over the last 8-12 months , it has defiantly got worse, Motorbikes (with kids riding no helmets and defiantly stolen, making noise and kids wondering the street late at night. Not very much thankfully but never happen before. We Knew the "bad " area was west of us , and they never seemed to come up (east) so far . but for what ever reason (other than one house in our street has ""new people moved into mums house" that came from wellington and defiantly has got a lot worst since than) they seem to walk up and down our street. I since had to add more security cameras and upgrade around the house make it more difficult for any one wanting to break-in. We have had just month ago shoes stolen from our veranda(the night the young kids where street walking) On your Closures- Total agree with B should have been closed years ago , Cant believe its still open actually . (had people I know years ago right next to "B" say people use that , the ones you don't want around! And of course property stolen) "A" most likely yes for that one to (don't know that one well but cutting people (troublemakers) off from that park sounds like a great idea "C" just up the road from us , well I have walked that before seems ok , Don't know if the trouble makers would go east up to Erica close for a reason , seems to far , but if there is a house up there that attracts them???? I would like to see A and B closed first , and sooner - than later!!!! But if you have information to say they(trouble makers) are using C than I support the idea.
I live next to one of the walkways in question and I feel this is a great idea and a long time coming, since moving to Dubbo two years ago to this address we have had multiple break in attempts with our vehicles with the walkway being used as a quick get away, we have also after only being here for three days had police come to the property where two suspects they where perusing threw over our fence some property they had just stolen while trying to evade the police. We have had a group of kids throw a broken glass bottle at our car missing my two young children and in total had police called three times in the two years. Other incidences that occur is glass shards, rocks and other items being thrown into our yard and at the house, once while my husband was sitting out the back and it hit our table missing him, vandalism of the fences, fires being lit and drugs being taken and syringes being left in the walkway. I feel that the closure of these walkways will help lower the crime and give residence back some of their sense of surety

My husband and I currently own 9 Horizon Place, Dubbo which we believe has Walkway 1, proposed to be closed, at the side of it. We would like to be kept informed of what the council decides to do with the adjacent walkway. Specifically if the land will be fenced off (and how this would/could be done) or if it may be offered as one lot or a shared lot with the opposite walkway landowner and therefore divided down the middle. We had to erect additional fencing at the front of the property to stop walkway users cutting across our front yard diagonally to utilise the walkway.
I strongly object to the proposal to close these walkways. As a local resident I use them regularly, particularly when walking my dog. I use the Lancaster Park Place walkway on a daily basis. These walkways are also important in cul de sacs as an exit for residents in the event of fire or other hazard blocking the road, and should be maintained.
Twickenham Dr, behind #54 need to be closed off or at least concrete barriers installed. There will be a major injury from the youths on dirt bikes that come through this way. The timber one that was there has been kicked down on the weekend. Our family have been homeowners at 56 Twickenham Dr for a bit over a year now. Our house backs onto the big paddock behind Buninyong school and we have definitely had enough of the motor bikes riding dangerously in this area. These youths are riding 2 and 3 up on the back of dirt bikes, spinning wheels at your fence and creating a massive dust cloud if you say anything. They are also hooning around the streets on unregistered bikes with no helmets on. We try and call the local police but they never do anything about it. (If you need any evidence please feel free to contact local police and ask.) When we received the letter on the closures we were happy and believe that they should be closed and remain that way, however, the "main" one that needs to be closed (and seems to be over looked) is the one on Twickenham Dr behind our house. This either needs closing permanently or at least have concrete barriers place in a way in which you cannot get a motorbike through or over for that matter. The flimsy timber barrier that was currently in place, has been smashed down by 3 youths on the weekend just past, allowing bikes free reign from off the road and into the paddock. I don't know any solution that will end the chaos that us rate payers have to endure on an almost daily basis, but I am sure that closing this end off would be a great start to a more enjoyable, peaceful neighbourhood
Both My Neighbours and I have seriously had enough of anti-social behaviour that goes on in the causeway behind our house at all hours of the day! People riding their unregistered/possibly stolen dirt bikes in causeway and then out on to the st is really starting to annoy me!

As a resident Home owner who lives on the walkway adjacent, I would like to see the walkway closed. The anti-social behaviour that occurs because of this walkway effects all the residents in this part of East Dubbo. I would be interested in purchasing a part of this walkway adjacent to my block if it was for sale after closure.
Fairview st walkway between south school
We live in Lancaster Park Place. We recently had someone attempt to break into both of our vehicles when parked in our garage. We believe the perpetrators ran off through the walkway. To prevent this sort of opportunistic criminal activity we would appreciate the walkway to be closed. Thank you. I am writing in support of the closure of the walkway near Lancaster Park Place. We live in Lancaster Park Place and recently had an attempted break in to both of our vehicles while parked in our garage. We believe the perpetrators ran off through the walkway. We are also aware of several of our neighbours who have been victims of opportunistic crime, largely as a result of people using our street as a thoroughfare. For these reasons we would like to see the closure of the walkway.
I am a resident of Provan Place, living parallel to Carisbrook Park. There are 2 walkways linking Ken McMullen Place & Lancaster Park Place to Arthur Summons Street via the park. I would be highly in favour of both these walkways being closed to the public. The noise, rubbish & antisocial behaviour my family & I witness on a daily basis is terribly frustrating & at times frightening. The illegal use of the walkways for motorcyclists is also a significant concern. My family & I enjoy the park space, walking dogs & playing ball games on a regular basis. The frequent misuse of the park by these motorcyclists is resulting in the Park being destroyed, with ruts & bike tracks ripping up the grassed area; not to mention the huge amount of noise & dust. Contacting authorities is pointless as they are able to move seamlessly between the streets, creating physical barriers between them & the police that cannot be overcome. I understand that the walkway linking the park & Ken McMullen Place is not one of the proposed closures, but I would request that this space also be considered. Great work council! It's fantastic to see some proactive work occurring in the community. I hope this project moves forward & a safer environment is promoted where I live.
Twickenham Drive to Chrisbrook Park needed to be closed 5 years ago when eastridge was having a lot of break ins and car thefts. Still is some issues with unregistered motorbikes using it as a thorofair
Lane next to 32 Twickenham Dr Dubbo

I would like to submit the Laneway that is beside my residence as a priority to be sealed. The Laneway in question is between my residence. 35 Victoria St and 33 Victoria St in West Dubbo. And runs from Victoria St, through to Alam St. And then on to Alfred St. This location is frequently used by hoons and motorised dirtbikes. As well as by people in 4x4's and people avoiding the line of traffic leading to the roundabout in the morning. Although we had an extra ordinary summer. The dust that is caused by the Laneway gets into everything. My home. Over my vehicles and my shed. I have attempted to mitigate the dust via shadecloth. I am confident that I speak on behalf of all the residents that reside along the Laneway and would like to see it Sealed and Signs placed that say Local Traffic Only. I would have suggested closure. However it is used as rear access to my property and others along its length.
why are these the only walkways to be closed?The walkway between hamilton and wise close has always been a trouble. cars and houses in hamilton and nelson have long targetted with robberys and vandalism. It has not been on the radar because the police cant be bothere d to attend. Asubmission was g
Clews Street West Dubbo walkway closure. Why isn't this on the list as this is a huge problem for Delroy Campus and the residents of Clews Street.
The paddock behind John Glenn place buningyong school. Needs to be fully fenced off
I have studied the information flyer regarding the proposed walkway revisions; they appear to address issues as described. My own concern is the ongoing absence of the vehicle barrier at Javea Close which if reinstated, would help resolve itinerant vehicle through traffic and deny access for stolen vehicle dumping events.
In the area in east we find that theses walkways are a thoroughfare for people / kids to get away after criminal activities . The waterway ?? On Twickenham diagonally opposite the Jacqueline Drive is also often used by young kids riding noisey motorbikes without helmets at all hours - police are cal
We live in eumung st and there is a walkway that connects Margaret crescent to our street we are desperate for it to close our neighbors and myself have had numerous break ins and dodgy people in our street because of the walkway I hope ours is considered. Upon reading the potential closures we are saddened our walkway on our street is not on the list eumung st south The amount of criminal activity from houses being broken into to things going missing is because of our walkway connecting to Margaret crescent in south and our neighbors are scared and sick of worrying about potential criminals I can petition this I would be happy to get all our neighbors to sign it and I can tell you right now after speaking to them constantly they would be 100% happy to have it closed My details are to contact me further regarding this

I live close to Erica Close/St Georges Terrace walkway and to not see reason to close this walkway. 1, It connects with Erica Close to Bell Avenue and both walkways are very wide and open, so if you close one section you need to close it all. 2. Although there are odd incidents at night it gets a lot of use during the day with school kids using the walkway from Erica Close to the school bus stop at St Georges Terrace. 3, Lots of people including myself walk these walkways day and night with our dogs for our daily exercise and yes we would change our route and yes an inconvenience for a lot of people because of a few incidents. I would not like to see Erica Close to St Georges Terrace walkway closed.
I am writing to express my opposition to the closure of the walkway from Lancaster Park Place through to Carisbrook Park. I use this walkway frequently and I am not aware of ongoing or continuous anti-social behavior that would warrant the closure of this walkway. I have lived in this street for nearly seven years and have not found that having the walkway has caused any issues in the street. As I previously stated I use this walkway frequently and would find it very inconvenient to have it closed off.
Stip wasting council money on these crap decisions
I'm a local and don't even use the walk way it is a nuisance and attracts the wrong attention
What a great idea. Just wondering how we can get the walkway closed between Wise Close and Nelson Place . Sick of motor bikes and cars driving through it as well as the graffiti on display

According to the NSW Bureau of Crime Statistics and Research Dubbo's theft has gone from 2568 incidents per 100,000 people in 2018 (October 2017 – September 2018) to 2778 in 2019 (October 2018 – September 2019) which if you compare to the NSW averages in the table below is almost double for the duration of two years. Living in Erica Close since 2017 we have had multiple incidents that not only include theft but other anti-social behaviour which has made us implement different preventative measures to increase our home security. Being first home owners and starting a family we would strongly support the decision of a walkway closure between St Georges Terrace and Erica Close to discourage the anti-social behaviours and theft in the area.

On multiple occasions, we have had break ins and other anti-social behaviours including vandalism earlier this year. Our latest major incident includes the vandalism of our neighbour's fence and cars with pink spray paint which they still haven't been able to afford to be professionally cleaned or replaced. Both sides of the laneway often report broken windows of either their cars or houses and we now have security cameras in place and bars on the windows to try and prevent this from happening more frequently. We have reported stolen motorcycles that we often hear driving down the laneway and have even caught someone chasing down a thief in their car down the laneway. The laneway is also very popular of a night time and we quiet often have our front hose cut to be used recreationally or find people making themselves comfortable under the trees or our letterbox, which can be intimidating when you're a young girl home buy yourself.

Although, my neighbours and I would be pleased to see the laneway closed, we would much prefer to purchase and maintain the land ourselves and increase the value of not only our own properties but the estate as a whole. This would mean that the council would not have to pay to maintain the walkway area or install close off fences in the first place. Due to a lack of accessibility and an increase in neighbourhood cohesion I determine that the crimes including vandalism and theft would decrease dramatically which would benefit not only our streets but all Eastridge Estate.

I would like to thank Dubbo Regional Council for taking the time to consider closing these laneways and reading my email in regards to the trouble we constantly have with these being accessible. If I can be of any further assistance please do not hesitate to contact me on my mobile 0498 772 724 or via return email sarah.seeliger@outlook.com.

I have the custody of 4 of my grandchildren and they use this walkway to access the closest bus stop every school day. closing this walkway will stop them from accessing a bus stop safely. I would like to express my grave concerns in regards to the closure of the walkway between Erica Close and St George's Tce. in East Dubbo. I have custody of 4 of my young grandchildren and three of them use this walkway every day to access the closest and safest bus stop for school. Next year the youngest of these children will begin school and this walkway allows safe and visible access for him for the bus. Why take this access away? It doesn't make sense. I have lived in this area for the past 9 years and have never heard or seen any inappropriate activity in this area. If there is any concern in the walkway then it would be only at night and could easily be corrected by suitably placed lighting.
Keep everyone safe
These walkways are a community asset as they enable residents to walk without going on our increasingly busy roads especially as many of the footpaths are in poor condition.
Both walkways need closing from the reserve that lead through to Twickenham Drive. Closing one will only lead to more people going though the other one. And then if you close both Walkways, they will all walk through the water causeway through to the reserve from Twickenham Drive. The best solution in Twickenham Drive would be to close both Walkways and the water causeway.This will stop people accessing Twickenham Drive and hopefully stop problems from people with bad behavior.
Twickenham /Jacqueline Dr is a safe thoroughfare for unregistered motor bikes from Apollo to Eastrige. These often carry 2 pilions all with no helmets
Also consider areas that will be targeted with undesirable behaviour if walkways are closed. Defer to people living adjacent to walkways to have final say. Please remove trees in walkways that are causing damage to underground pipes and guttering in properties near walkways. Thanks.

I am writing to express my objection on behalf of our household to the closure plan for the walkway that links Erica Cl to St George's Terrace. This provides a practical thoroughfare to and from our cul-de-sac. We don't know of any crimes that have been reported as a result of the situation of this walkway. It tends to be used by the residents of Erica Cl, Ingrid Cl, Narran Pl. and Bell Ave. Three of the four children in our home (all Primary school age) walk down the lane to catch the bus to school each day. This is quick and convenient and, if the lane access was taken away, they would have to walk down Ingrid and around to St George's terrace and cross that road to catch the bus. Two of the children are in Infants classes and one has a diagnosis of ADHD. We dread what could happen if the safety of the walkway was not an option. We also have another younger child who will be starting in Kinder next year. If there is activity at night that we are unaware of then couldn't the walkway be lit in some non-intrusive fashion? We hope you will consider our perspective when considering the closure of this particular walkway and decide against it.
My children catch school buses and this pathway is their only route home without walking the highway. My youngest is in kindergarten and this is just too unsafe
Kids walk these paths to get home from school. No other appropriate bus stops are available.
The access way between delroy and dunheved circle needs to be kept open for our children that have to walk home to minore rd, Joira rd and grangewood areas
The end of Clews St is needed just as much as these
As a resident of Meadowbank Drive I believe this would stop a lot of antisocial behaviour and people walking up and down the streets at all hours.
The walkways in Churchill Gardens are precisely why I bought my house in Greenway Place. I wanted safe walkways for my sons to use instead of walking along main roads. I have chosen to send my son to Delroy Campus so he can walk to school. I do feel secure knowing that my son Nicholas is walking to Delroy Campus through the walkways and not on a busy road.
Surely there is a better solution than children and adults walking a long way to get where they need to go! What other strategies were tried first?
Springfield way lane has kids doing drugs in the lanr and leaving the plastoc bottles behind as well as damaging the fences
I live in Mackay Drive and use these walk ways all the time, usually walking my baby and dog. I think it would be nice to do them up a bit with new paths and maybe some cameras. Rivergum Place is the issue!!!
Keep them open!

I am a resident of Clews street West Dubbo the walkway at the end of our cul-de-sac is a haven for crime and antisocial behaviour, there is daily drug buying and selling going on.
I believe these walkways did serve a purpose when they were built but not now they are just a crime hotspot.
Realistically the argument regarding children use the walkways to get to school I have CCTV footage at my residence and have looked at to see actually how many students actually use the walkways its really interesting to find that less than 10 children use the walkway on a daily basis hardly a reason to keep it open.
The fences are all graffitied and it looks quiet disgusting, hardly a place you would want your child walking through each day anyway.
I know the Delroy School has problems with the walkways they find students use these walkways to hide and abscond from school etc.
Any plans to close these walkways off would be greatly appreciated.

We have been asking for years to have them closed off all the excuses from DCC and DRC have been amazing from "its a stormwater drain" "kids need it open to access school" " one proposal was that we should pay for it ourselves" as you can see each time there have been a different reason given none of them a real reason actually focusing on the needs of the residents of this area.
I know there has been thousands of dollars spent putting up fences along the Regand Park Walkway simply because the residents there were very vocal on the issue.

Just close the walkways!!

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Just close the walkways!!

The walkways don't cause the anti-social behaviour. There needs to be better solutions than closing walkways
Clews street lane way needs tobe closed aswell
I've been trying for years , they are unkept and a hazard and that's with the drug paraphernalia that is left behind not to mention the break ins in the areas , and you need a a form ?? It's a no brainer , and we pay rates for this crap that rate payers have to put up with ??? Really
Crazy amount of trouble and easy get away for all the people doing the wrong thing's
My opinion and reason as a resident for 29 years, is, that, living in the Rivergum Place Cul-de-sac, it is extremely convenient to ride my bicycle or walk to the nearby eating places, recreational facilities, park, etc....I don't see a problem with unlawful activities especially in the walkway area!
If the walkways are not needed close them, but do not blame bad behaviour. 2. If there is bad behaviour fix the walkways to encourage good behaviour. (Lighting and attractive gardens. Turn them into nice garden spaces and connect them with cycle paths especially the ones that lead on to parks.
These walkways were a good idea at the time, but they are more trouble than they are worth. They attract trouble day and night. the sooner they are gone,the better
I agree re antisocial behaviour and criminal activity
The residents of 12 Silkwood Close Dubbo wish to register our strong support for the proposal to close walkways in West Dubbo, especially those marked 1, 2 and 3 on the map that the DRC has produced. The walkways marked 4, 5 and 6 do not affect us directly but we have no objection to their closure as well. Thank you for considering this action
i walk this way every morning and afternoon to her bus stop (crn of clews street) . this would add an extra 15 minutes to my 5 minute simple walk. i do not support the closure of this walkway. these are meant to make it easier for everday activities when you are making it harder!
I would like to express my opinion in saying that the walkways benefit the children walking to school in the timberi drive area, my son being included. Whilst I believe it may deter some of the recent rise in crime, I would like you to consider implementing other measures such as CCTV cameras to cover the areas, including the park at delroy woolworths and surrounds.
I've had rocks throw at my cars, house and dogs from kids using these walkways as have neighbours. Witnessed fist fights in the streets from teenagers that have used these walkways. Attempts of people breaking into my house and cars. I have 2 young kids aged 3 and 6. Closingbtjese walkways must happ
Please close off these walkways. We have lived in the silkwood/horizon/meadowbank area for the last 15 years & have never seen it as bad as it is now. We constantly have rocks thrown at our houses, cars & pets. Kids are roaming through the streets causing havoc where ever they go.
Always drama kids smoking dugs in walk way ice and pot
All lane ways should be closed

I have lived in Rivergum Place for almost 30 years, overall it is a very quiet and peaceful area, but as we know it is very hard to please everyone and some residents may feel otherwise or don't care. I believe the benefits of easy access to many public spaces, eateries, schools, etc....far outweigh the inconveniences of the extra mile around to get there! I can only imagine that the short stretch of 5 - 7 m of walkway connecting with East Street and all the Schools there would also be a great convenience to students in the area! I cannot understand what "Community complaints about anti-social behaviour" could possibly have been raised!? As Senior Citizen living here so many years, I appeal to your authority to leave the walkway open!
I just felt like I would share my opinion on the proposal of the walkways being closed. I support the idea. I've been walking to work from Delroy park through the side of Delroy highschool and towards Mackay drive. I still feel the extra 5 minutes it would take me to walk would be better then dealing with the criminal acts committed by people I have seen running from homes through these very alley ways. Closing these off would make me feel a lot safer for myself and my family as well as potential risks to my home and possessions.
We live at in Bellbird Way and we have a walkway directly behind our property which runs between Timberi Dr and Baird Drive and we notice that this walkway is not on the list of closures or to be left open as a reserve could we please be advise as to what will happen with this walkway as we have undesirables down there particularly of a night causing issues. Please also note that this walkway is closed from Baird Drive to Meadowbank drive.
As a resident of Clews Street I am very concerned that these proposed closure will significantly increase pedestrian traffic along Clews Street. Therefore I strongly recommend the closure at the end of Clews Street as well, if the other closures go ahead.
We have been living in our house in Rivergum Place since 1991 and the walkway to East Street is very convince for us, our children when still at school age walked through to schools and still today, I watch our neighbourhood children walk through to schools. We walk through to Delroy campus on the election day and take leisurely walks down to the river,,, We have heard sometime family arguments or loud music on this street but I am not aware of the criminal activity as mentioned on your letter. If there is, it must be kept amongst the people who were involved in the activity, I never felt fear living this areas. It is sad to close the walkway, hope you can keep the walkway open

What about the walkway at the end of Clews? Drug deals happen there all the time. Drains full of needles. Will closing other walkways make this a hub for deals. Why not close all walkways into residential areas. Whilst I believe there needs to be closure of certain walkways I do hold concerns that if all walkways into residential areas are not closed this will encourage more issues in places like the end of Clews, which is where I live. In my 10 years of being a home owner in this street I have witnessed drug deals, police chases, large gatherings with fires etc at the end of the Clews st cul de sac. Police were always notified. Why not close them all? I no longet walk down in that area as it is not safe and often littered with rubbish and used needles. I know others in the street feel the same. I am happy to discuss further and hope that others from my street take the time to give you feedback on the same area. Access to the high school through the hockey ovals is not that far so the argument of blocking school kids is not sufficient as far as I am concerned.
They are an unnessacary breeding ground of crime
I don't think it should be closed, provides nice access to the land backing onto Loane Place & people walk their pets through the street onto the nature reserve. Better focus would be to target the kids on motorbikes from 7 Loane Place who ride the streets. Including racing up Murrayfield drive, all underage, all with no helmets. Darting out in front of cars. Someone will be killed & they'll wonder why. Called police before but useless unless they are in the area. These same kids swear at neighbours & film street fights. Again police are called but all too late when & if they arrive. Move the residents I say, don't close the lane way, why should residents have to put up with these families. Last residents renting this house where drug dealers so all sorts of undesirables in the street.
On 26/11/2011 I presented a petition to council requesting this very same subject, which was subsequently rejected on the grounds it interfered with council pedestrian movement . I ask why, the change in thought ,but it dose not change my thoughts on the matter ,I would be pleased to see the closure of the said walkways ,it would remove unwanted foot traffic from rivergum Pl
definatly will stop thre night time dwellers

As the occupant of 3 Javea Close, Dubbo, I am responding to your notification of 11 Feb 2020 regarding the proposed walkway closures in West Dubbo. I am completely in favour of the proposed closures. I support the premise that closing Walkways numbered 1 – 6 as per your attached map will likely reduce the occurrence of antisocial behaviour by persons who in the past have used them to assist in criminal activity. However, I believe that they do not go far enough. I strongly urge you to consider the closure of Walkway #7, Javea Close to Meurer Ct, or at least the section from Javea Close to East Street. There is a lot of through foot traffic along this walkway on a daily basis and a considerable amount at all hours of the evening, night and early morning. I know numerous houses in Javea Close that have been broken into and the residents burgled and at least one that has suffered this fate on more than one occasion. I also am aware or at least three vehicles that have had windows smashed with rocks and broken into and another that was stollen from around the entrance to Javea Close. The walkway is not only open to foot traffic but currently completely open to vehicle access. It is not uncommon for vehicles ranging from trail bikes to four wheel drive to roar up and down the walkway adjacent to my home. I have had my house pelted with rocks and have been subject to verbal abuse on numerous occasions by passers-by in the roughly five years that I have live here but thankfully, up to this point, I have not been broken into or robbed. Anything that can be done to reduce pedestrian and/or vehicle traffic through this walkway would be greatly appreciated. Failing the closure of the Javea Close to East Street to Meurer Ct walkway, or sections thereof, I would strongly propose the installation of surveillance cameras along the sections of this passageway that remain open. This would at least allow the monitoring of those people using this thoroughfare and the potential to identify and, where appropriate, prosecute those that use it for antisocial or illegal purposes. I also urge you to consider the installation of lighting along this route. I have seen some very effective, recently install, solar powered, sensor lights along the Tracker Riley pathway down to the Macquarie River that would be perfect for this location. I would also recommend that these be installed along the Timberi Drive to East Street Walkway if it were to remain open.
These walkways create criminal activity
Why isn't the Clews Street walkway included in the propsal? This walkway is where the students of Dubbo College Delroy Campus often truant school to and cause the residents many issues.
The meurer ct and McKay Dr walkways have a lot of people feom the bad area come through looking for trouble
used by school children daily and walkers
Closing the walkways in West Dubbo is the most productive thing that has been done. They are filthy overgrown with weeds broken glass etc. It is not very helpful to the neighbours they would be getting rubbish being thrown over their fences. We had the opportunity to buy the walkway beside us. Two out of the four agreed to buy it which made it very easy. Most of the people involved in this lot of properties would be renting walkways 1, 2, 3. I really don't know but I am assuming. The quicker they are closed the better.
Writing in regard to interest in purchase of land where walkway may be closed. I am the owner of 50 Meadowbank Drive.
Just don't increase the Council Rates. Already paying higher quarterly rates in Dubbo on my investment property than my house in Sydney.

Clews St, to public reserve YES
We at 31 Meadowbank Drive live right next door to a bad lane way. We have cameras installed and have had nothing but trouble with lane way due to anti social behaviour. They come over our fence from lane way and steal bikes etc from out yard
The Rivergum Pl to public
I am writing to express my disappointment with Council's decision to keep the walkway between Javea Cl – East St – Meurer Ct fully open. As a resident of Javea Close, I know first-hand the antisocial and criminal behaviour that occurs as a result of these laneways. Family members, along with many others in our street have made formal complaints and requests to Council to close/restrict access to this laneway as a result of such behaviour. Besides being used by school children to access Delroy High School, the walkway behind Javea Cl is not frequented all that often during the day; however night time is a different story. From the back bedroom of our property, there are consistently voices and noises coming from the lane during the night, from people walking between East St/Mackay Drive and into Dalbeattie Crescent. I myself have lived in Javea Close for 3 months and have never walked up this walkway, as I am terrified to use it due to the antisocial behaviour we have witnessed occurring in and around the area. While we understand that it is important to have this walkway as access to Delroy Campus for school children, we feel that it is not necessary to have this walkway fully accessible to the public 24/7. This laneway did, at some stage in the past (before I became a resident of Javea Cl) have a rather flimsy barrier arm gate erected across the laneway in an attempt to curve the amount of stolen cars that were being driven up the laneway and burnt out behind the houses in Javea Cl. Over time, this barrier too was vandalised, and now only the bollards of the gate remain. Nothing has ever done by Council to make any sort of replacement, and so the antisocial and criminal behaviour that comes along with living near a West Dubbo laneway continues. I understand that there are some more complex issues with closing down the Javea Cl walkway compared to others in the West and East Dubbo areas, but that doesn't discount the fact that we also have the same issues affecting us as every other resident who lives on a walkway that is proposed to be closed down. My personal fear is that by closing the walkways outlined in Council's plans, this will cause an increase in the amount of antisocial and criminal behaviour we experience in Javea Cl, and the surrounding streets. My proposal for Council to consider, is to put a high lockable gate on each end of this laneway. This would allow access to the lane between the hours of 7am and 7pm, and then be locked by security in the evening, and opened by security in the morning (similar to the system used with the gates at the New Dubbo Cemetery). This would allow for school children and residents to use the laneway during the day, but limit the amount of antisocial and criminal behaviour in the area that occurs as a result of undesirables having free access to this laneway during the night. I hope that Council understands why residents living along walkways and laneways are fervently perusing the closure of these – constant fear of what senseless damage, theft or antisocial behaviour you're going to wake up to every day is not how any resident of Dubbo wants to live. I do hope that you consider my recommendation above as a serious alternative for the residents of Javea Close, if Council do not intend to permanently close down this walkway.

We have had nothing but issues in Meadowbank drive as we live next to the walkway and we have seen criminal behaviour.
I lived in a house adjacent to walkway in Erica close East Dubbo for three years, they are a criminal thorough fare, we had a cars broken into several times, lost scooters, push bikes shoes etc, whoever is against closing these walkways should live next to one for a while!!!
I live in Mackay Drive and use Meurer (No 5) Street to take our dogs for a walk as the area marked in green is handy as it is quite and few people use area. Can axcess this area through East Street so it is not to inconvenient to do so. I am not shore that closing these areas will solve the problem, as other areas will allow people in. School children will be inconvienced by these closures in this are.

Map showing proposed walkway closures – East Dubbo:

Map showing proposed walkway closures – West Dubbo:

REPORT: Drought Contingency and Water Emergency Response Plan 2020

AUTHOR: Plans of Management Officer
REPORT DATE: 18 March 2020
TRIM REFERENCE: ID20/226

EXECUTIVE SUMMARY

The Drought Contingency and Water Emergency Response Plan 2020 (DCWERP) has been prepared to replace previous plans issued for both former Dubbo City and Wellington Councils. The previous plans were due for review by June 2020. The new plan will be a consolidated Dubbo Regional Council plan.

The DCWERP is based on the NSW Best Practice Guidelines for Drought Management Plan (DMP) development. It follows the structure specified in the NSW guidelines and expands on aspects that were introduced during the plan development that are specific to Dubbo Regional Council. These include:

- Clear protocols to assist Council in its decision making and governance processes during drought events.
- Emergency management processes and the appropriate high level responses.
- Incorporation of NSW State Government Audit feedback from the Drought Management Plan 2015.
- Integration of concerns identified in the NSW Advisory Integrated Water Cycle Management Issues Paper 2019.

The plan that is presented is an adaptive management approach. It allows Council to monitor the operation of restrictions, prioritise community needs through structured principles and effect water security requirements during drought events.

Consultation during development of the Plan included meetings with Council's Infrastructure Team and NSW Government representatives from the Department of Planning, Industry and Environment (DPIE) and WaterNSW. Target triggers shown in the operation of the plan have been discussed and represent an agreed approach. The approach agreed departs from previous DMP documents as it removes sole reliance on surface water levels at Burrendong Dam to dictate water restrictions. The plan presented provides a series of decision making tools of which surface water trigger information is a part.

FINANCIAL IMPLICATIONS

Future recommendations within the plan allow for funding to be sourced through grants processes to continue to develop water and sewer infrastructure, Council facilities and monitoring technology during drought recovery periods.

Any infrastructure projects listed in the plan are subject to separate detailed consideration by Council and are strategic in nature.

POLICY IMPLICATIONS

The delivery of the Drought Contingency and Water Emergency Response Plan 2020 will require public exhibition and will become policy for the next five years, once formally adopted.

Exhibition is anticipated to be extended to 40 days to allow detailed community consultation and further consideration with other Government agencies.

RECOMMENDATION

1. **That the Drought Contingency and Water Emergency Response Plan be noted.**
2. **That the Drought Contingency and Water Emergency Response Plan be placed on public exhibition for 40 days.**
3. **That a further report at the conclusion of the exhibition period be provided to Council for adoption of the Plan.**

Belinda Rollason
Plans of Management Officer

BACKGROUND

Background references for NSW Best practice, DCC Drought Management Plan and relevant legislation are within the DCWERP.

REPORT

The Drought Contingency and Water Emergency Management Plan is attached as **Appendix 1**. An overview of the preparation of the plan is below.

Setting the Context

The introduction to the plan covers the process taken to develop the plan across the Local Government Area, covering current context plan, major issues, objectives, planning and strategies for water supply. The document plan structure follows underlying principles of water management during drought to:

- Set a framework for delivery of drought specific actions.
- Ensure human health needs are met.
- Community and business needs can be met to operate for as long as possible.
- Give certainty to business operators.
- Provide deliverable actions for Council.
- Sustain liveability and sense of place.
- Increase data accuracy and efficiency.

Operation of the DCWERP

The 2017/2020 drought conditions resulted in a deeper understanding of the social and financial impacts that restrictions cause within the community. Data availability to support the introduction of drought measures within the plan are a result of the conditions and impacts of the drought. As a result, Dubbo Regional Council has resolved an improved Council position to assess and support its decision making. A two staged approach has been developed to implement the plan. It breaks down governance and roles based on the restriction levels:

- Stage 1: Restrictions levels 1-3 minimal financial and social impact with a focus on preparation and behavioural change.
- Stage 2: Restrictions levels 4-6 Financial and social impact due to lower water resources.

From Level 4, water restrictions may affect the economic sustainability of the Region. Negotiation with NSW State Government is recommended to support a secure allocation of water to the Dubbo Regional Council Region from surface water, and on-going delivery of water strategy works to secure additional supplies. Council will continue liaison with WaterNSW and Department of Planning, Industry and Environment to manage the risk that Burrendong Dam levels will be reduced to a point that Level 4 restrictions would need to

come into effect, and to secure additional supplies should, in extreme circumstances, the Macquarie River cease to flow.

The Council support tools and triggers are discussed in detail.

Recommendations of the Plan

The plan recommends undertaking the actions based on drought and water emergency conditions to improve:

- Dubbo effluent reuse and maximise the potential of this supply.
- Add new bore connections to WTPs in Wellington, Geurie and Dubbo.
- Community education and water demand reduction for both residential and commercial.
- Improved Council facility and parkland water efficiency.
- Scope and delivery of the regional pipelines.

Additional future recovery recommendations are discussed to seek greater long term water security for the Region.

Natural Systems and the Operating Environment.

The NSW Best Practice Guidance specifies that the drought contingency planning include details on the current status of both the natural systems and operating environment of the plan.

Environmental aspects are discussed across the Region. This includes a discussion on current climate conditions, location of the LGA, the Murray Darling Basin, Macquarie - Bogan Catchment, surface and ground water sources, Dubbo Regional Council city and villages and locality.

Modelling of the current climate and future conditions include the rainfall information and decline of rainfall over the past five years leading into the current drought.

The operating environment includes the population demographics of the LGA and predictions for future growth. It also covers the legislative environment in which water supply and sewer operations are determined. The sharing plans for the Macquarie Bogan catchment are discussed at high level to support the contextual information requirements of the plan.

Governance covers Council's operation of the plan. The 2016/2020 drought conditions have resulted in a specialised whole of Council team being formed (the Drought Coordinated Response Team) that was highly effective. The plan covers the governance structures, roles and responsibilities of Council as a requirement of NSW best practice.

Water Supply and Demand Management

This section covers the water supply systems across the LGA. The DCWERP covers the supply system including all communities covered by reticulated systems, those with localised supply and water cartage options for drought. This document covers plans and all water supply schemes in the service areas. Surface water allocation is covered including water supply locations and licensing. Burrendong Dam levels are graphed for information regarding inflow data. Surface water at Burrendong Dam and Windamere Dam volume data is detailed as part of the water supply information for Council.

Groundwater analysis is across the LGA covering Dubbo, Wellington, Geurie and Mumbil. Bore names and licences are detailed. Council's water treatment processes are included as well as the sewage and stormwater system. This inclusion is based on developments within Council to consider, scope and further develop opportunities for water recycling. Currently some water from John Gilbert WTP is reused for irrigation of parks. Monitoring of Council facilities has resulted in improvements, to date, of water efficiency.

The water supply section defines large water users and improvements to deliver an appropriate water-saving regime across all Dubbo city parks.

The DCWERP covers four elements of water demand; monitoring, forecasting, planning and implementation. Historic demand data has indicated that Council residents use an average of 357.4 kL which is more than the state wide average of 271.8 kL. Forecast extraction needs for future supply have been considered in the DCWERP. Further information from data collected throughout the 2017/2019 drought indicate that education with the restrictions has had impact on water use efficiency. During the 2017/2020 drought Council has progressively implemented tighter water restrictions.

Emergency Response Planning

Due to consideration of the Business Continuity Plan in context of drought management, a water emergency response plan has been included. Management and minimisation of risks are considered at a high level.

SUMMARY

It is recommended that the Drought Contingency and Water Emergency Response Plan be placed on public exhibition for 40 days, followed by a report to Council for adoption of the Plan.

Appendices:
1⇩ Drought Contingency and Water Emergency Management Plan

DUBBO REGIONAL COUNCIL

DROUGHT CONTINGENCY & WATER EMERGENCY RESPONSE PLAN 2020

DUBBO REGIONAL COUNCIL
DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN

Version 4: 25 March 2020

AUTHORS	EDITORS	ISSUE	VERSION
Belinda Rollason	Ian McAlister	30 October 2019	1
Belinda Rollason & Owen Johns	Stephen Carter & Julian Geddes	3 March 2020	2
Belinda Rollason & Owen Johns	Stephen Carter & Julian Geddes	19 March 2020	3
Belinda Rollason & Owen Johns	Stephen Carter & Julian Geddes	25 March 2020	4

MESSAGE

Drought is an inevitable part of Australian life. It is a tough experience to endure yet our community is resilient. This is evidenced by the awareness, understanding and appreciation our community has of the enormous task of delivering effective responses to the drought. Our community has already shown its willingness to pull together during this drought season and we should be proud of who we are.

Effective drought responses require planning, preparation and delivery. This plan introduces solutions that are timely, well considered and seek long term innovative solutions to securing water. It considers where we are now as well as future planning and preparation.

This plan seeks a proactive yet systematic approach to managing the drought. It is an important step in defining the strategic directives that underpin decision making processes. This document also clarifies governance for feedback with stakeholders in our community.

It is our aim to set course for long term sustainability of our vibrant community and its businesses.

I would like to thank all those involved in the development of the strategies and actions.

Michael McMahon
Chief Executive Officer

CONTENT

FIGURES & TABLES

FIGURES

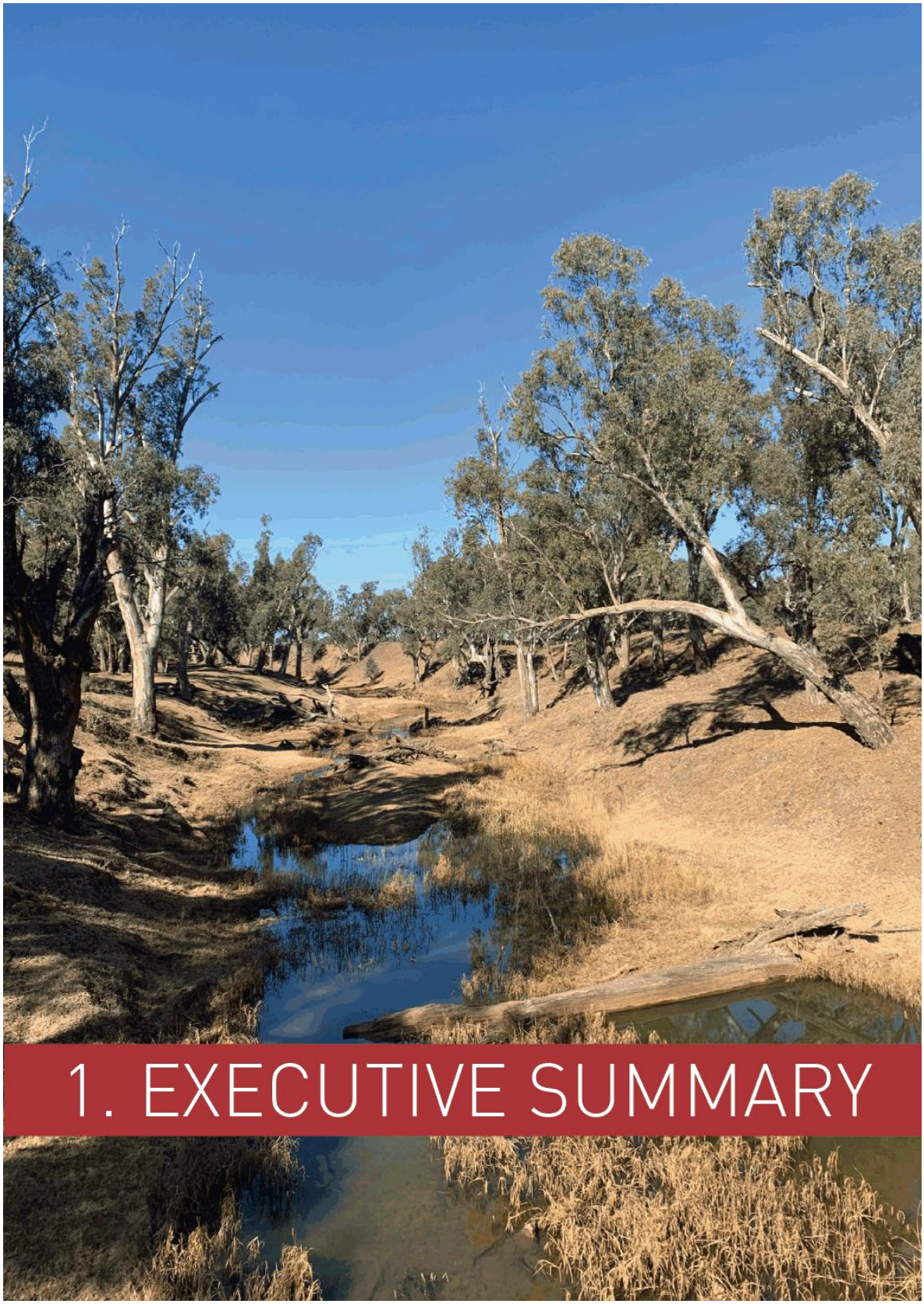
CHAPTER 1

CHAPTER 2

CHAPTER 3

CHAPTER 4

FIGURES & TABLES



1. EXECUTIVE SUMMARY

1.1 VISION

Our region is well prepared for the inevitability of periodic drought to ensure our residents and business community are sustainable for the long term

1.2 DEVELOPING THE PLAN

The Drought Contingency and Water Emergency Response Plan has been developed to make sure the people of Dubbo Regional Council have enough water to meet their needs for the medium term, including being able to withstand a drought.

The Drought Contingency and Water Emergency Response Plan (DCWERP) was developed through whole of Council consultation process to ensure that this plan meets the needs of the wider Council team who support and deliver services as well as the Infrastructure team who manage Water Supply and Sewer facilities.

Consultation for the development of the plan included:

- Executive Leadership direction
- NSW State Government advice
- Drought Coordinated Response Team
- Infrastructure Team
- Individual consultation as needed with Council officers managing operations, parks and recreation facilities, cultural and communications managers to clarify various aspects of the plan.

The DCWERP is based on the NSW Best Practice guidelines for Drought Management Plan development. It expands on the guidelines to:

- Incorporate emergency management
- Consider risk identification
- Incorporate NSW State Government Audit feedback from the Drought Management Plan 2015
- Incorporate issues from the Integrated Water Cycle Management Issues Paper 2019.

The plan continues programs already in place to improve water efficiency and recycling for facilities. These programs are an important part of the urban water cycle because they reduce demands on drinking water supplies. The plan also sets out measures that can be put into place as water storage levels fall during a drought.

This plan is an adaptive management approach to its operation that includes; monitoring the effectiveness of the plan, investigating new technologies to assist in demand management, analysing new information holistically, and monitoring surface and groundwater availability.

1.3 SUMMARY

Dubbo Regional Council has prepared this plan during 2019/2020 as drought conditions worsened and Level 4 restrictions were introduced to the community.

This is an overview of the chapters within the plan. It discusses how they fit with the; NSW Best Practice Framework 2007 [10] , see Appendix A; the IWCM Issues Paper Report 2020[12] and feedback received by NSW Government audit on the DCC DMP 2015.

Setting the context

The introduction to the plan covers the process taken to develop the plan across the LGA, shown at Figure 1-1. This sets the context of the development of the current plan as an overview of the major issues, objectives, planning, strategies and monitoring of water supplies.

Through the process of development, it discusses current drought actions in meeting our need for water. Challenges in data accuracy, water restrictions and triggers were reassessed as were implementation of business restrictions.

The purpose of the plan structure to deliver the underlying principles of water management during drought to:

- Set a framework for delivery of drought specific actions.
- Ensure human health needs are met
- Priorities for community and business needs can be met to operate for as long as is possible.
- Give certainty to business operators.
- Provide deliverable actions for Council.
- Sustain liveability and sense of place.
- Increase data accuracy and efficiency.

Operation of the DCWERP

The current drought conditions have resulted in a greater understanding of the context, social and financial impacts and data availability to support the introduction of drought measures. As a result DRC has resolved a council position to assess and support its decision making. A two staged approach has been developed to implement the plan. It breaks down governance and roles based on the restriction level.

From Level 4 restrictions affect the economic sustainability of the region. Careful negotiation with NSW State Government is crucial to the allocation of water to DRC region in support of water security from surface water. This means that DRC will maintain close relationships with WaterNSW and DPIE to manage the risk that Burrendong Dam levels will be reduced to a point that Level 4 restrictions would need to come into effect, shown at Figure 1-2.

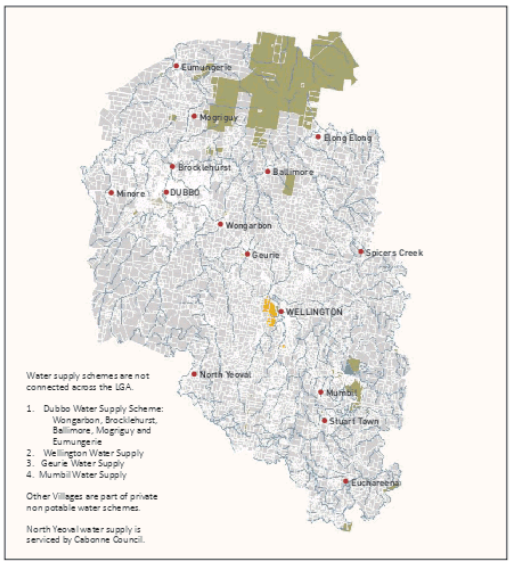


FIGURE 1-1: DRC MAP WITH WATER SUPPLY LOCATIONS

IWCM Issue, Recover and future recommendations are covered that identify current and future projects essential to support water services and reduce impacts of drought over the medium and longer term.

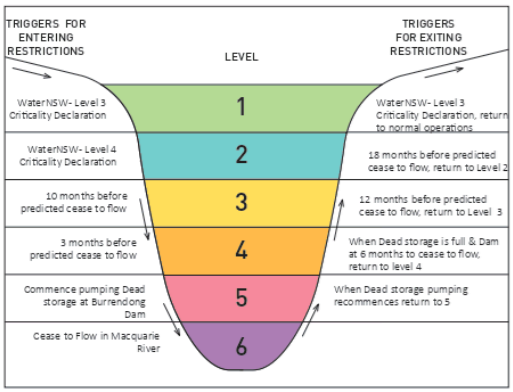


FIGURE 1-2: DRC TRIGGERS FOR WATER RESTRICTIONS

1.3 SUMMARY

Recommendations of the plan

The plans recommends undertaking the actions based on drought and water emergency conditions. These include current actions to improve:

- Dubbo Effluent Reuse
- Improved Bore connections to WTPs
- Community education and water demand reduction for both residential and commercial.
- Improved Council facility and parkland water efficiency
- Scope and delivery of the regional pipelines.

Additional future recovery recommendations seek greater long term water security for the region.

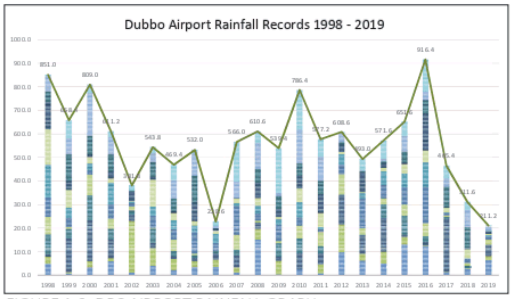


FIGURE 1-3: DRC AIRPORT RAINFALL GRAPH

Data - natural systems

Environmental aspects are discussed across the region. This includes a discussion on; the Murray Darling Basin, Macquarie- Bogan Catchment, surface and ground water sources, DRC cities and villages and locality.

Modelling of the current climate and future conditions include the rainfall information and decline of rainfall over the past 5 years leading into the current drought. Figure 1-3 shows the recent decline in rainfall averages at Dubbo Airport.

Modelling of the Macquarie-Cudgegong regulated river system shows reductions in monthly allocation of up to 50% for Local Water Utilities during severe droughts. Drought modelling of preferred water availability through allocation has been considered. This model is in context of cease to flow data, at Figure 1-4.

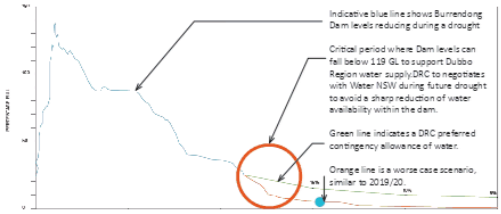


FIGURE 1-4: BURRENDONG DAM LEVELS

The operating environment includes the population demographics of the LGA, predictions for future growth. It also covers the legislative environment in which water supply and sewer operations are covered. It considers the sharing plans for the Macquarie Bogan catchment.

Governance has developed guidance around operation of the plan. Current drought conditions have resulted in a specialised whole of Council team. The twofold operation of the plan into management stages has resulted in the defining of roles and responsibilities for these stages. Stage 1 Management: Levels 1-3 is delivered through Infrastructure, shown at Figure 1-5. Stage 2 Management: Levels 4-6 is delivered through a Coordinated Response Team designed to assist in the higher level requirements across the organisation, shown at Figure 1-6.

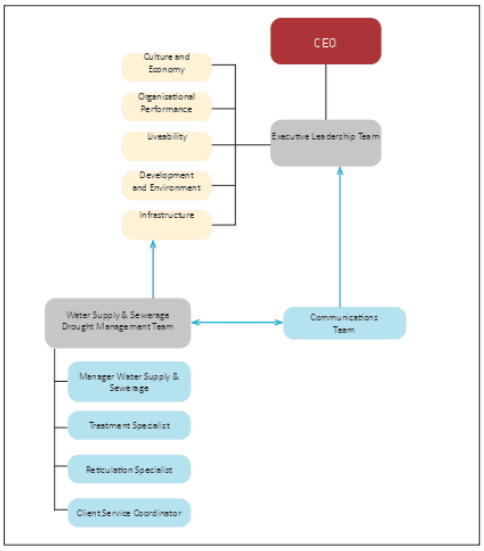


FIGURE 1-5: STAGE 1 ORGANISATION

1.3 SUMMARY

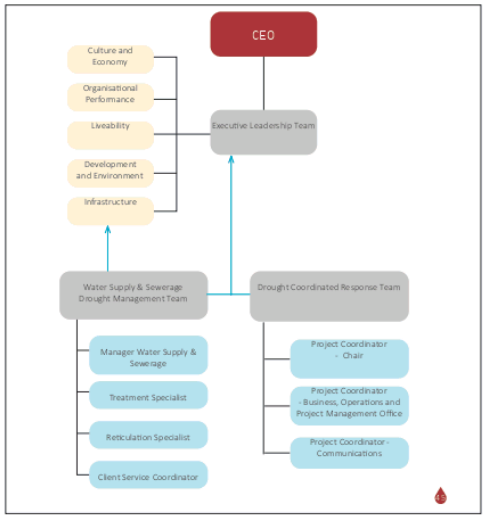


FIGURE 1-6: STAGE 2 ORGANISATION

Data supply systems

This section covers the water supply systems across the LGA. The DCWERP covers the supply system including all communities covered by reticulated systems, those with localised supply and water cartage options for drought. This document covers plans and all water supply schemes in the service areas. Figure 1-7 shows all the elements within the water supply.

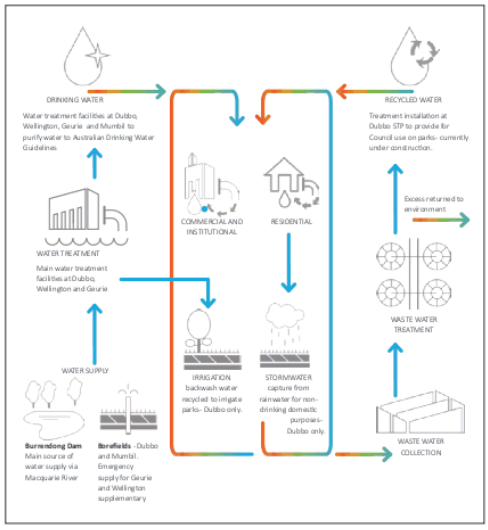


FIGURE 1-7: DRC WATER SUPPLY SCHEMES

Surface Water allocation is covered including water supply locations and licensing. Burrendong Dam levels are graphed for information regarding inflow data.

Surface water at Burrendong Dam and Windamere Dam volume data is detailed as part of the water supply information for DRC, shown at Figure 1-8.

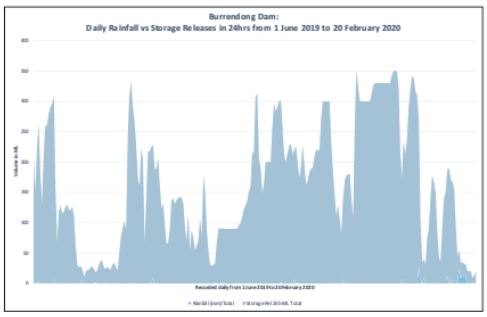


FIGURE 1-8: BURRENDONG DAM RAINFALL VS STORAGE RELEASE

Groundwater analysis is across the LGA, covering Dubbo, Wellington, Geurie and Mumbil. Bore names and licences are detailed. DRC Water treatment processes are included as well as the Sewage and Storm water system. This inclusion is based on developments within Council to consider, scope and further develop opportunities for water recycling. Currently some waste water from John Gilbert WTP is reused for irrigation of Parks. Monitoring of Council facilities has resulted in improvements to water efficiency.

The water supply section defines large water users and improvements to deliver an appropriate water-saving regime across all Dubbo city parks is being undertaken. Restrictions tables are included at Appendix B.

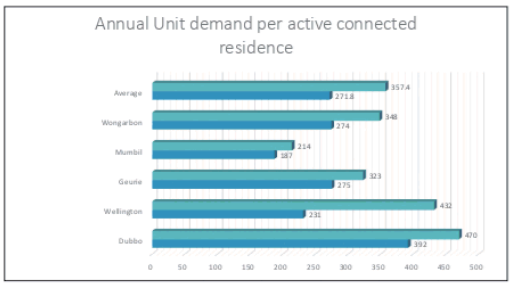


FIGURE 1-9: ANNUAL DEMAND AVERAGES (KL/YEAR)

1.3 SUMMARY

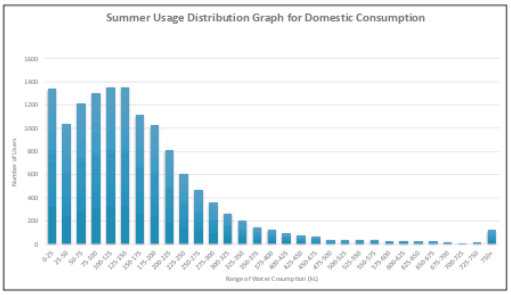


FIGURE 1-10: SUMMER USAGE DISTRIBUTION GRAPH

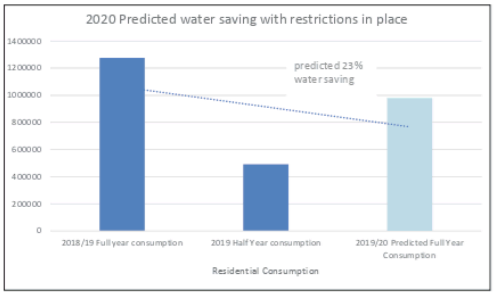


FIGURE 1-11: PREDICTED WATER SAVING

Data - water demand management

This section of the DCWERP covers four elements of water demand; monitoring, forecasting, planning and implementation. Historic demand data has indicated that DRC residents use an average of 357.4 kL which is more than the state wide average of 271.8 kL. Annual demand is shown at Figure 1-9.

Residential f orecasting analysis has shown that:

1. The majority of the population are conserving household use. 83% of the population are in the 25-350kL daily water use range, accounting for 78% of total water consumption.
2. 10% of users are super efficient using 1% of total water consumption. These users are within the 0-25 kL band.
3. The least efficient 7% use 21% of water, over 350 kL.

Forecast extraction needs for future supply have been considered in the DCWERP. Further information from data collected throughout the current drought indicate that restrictions have had impact on water use efficiency, shown at Figure 1-10.

Predictions for extraction during the 2017/2020 drought have modelled the combined totals of surface water and bore water during a normal year with no restrictions in place against the current 12 month period.

During the 2017-2020 drought Council has progressively implemented tighter water restrictions . No discernible reduction in usage was achieved during level 2 restrictions that were in place from 1st July 2019 to 30 September 2019. It can be noted that communications during this time were expanded at the operation of the Drought Coordinated Response Team in October 2019.

Emergency response planning

Due to consideration of the Business Continuity Plan in context of drought management a water emergency management plan has been included. Management and minimisation of risks are considered at a high level. The high level process is shown at Figure 1-12.

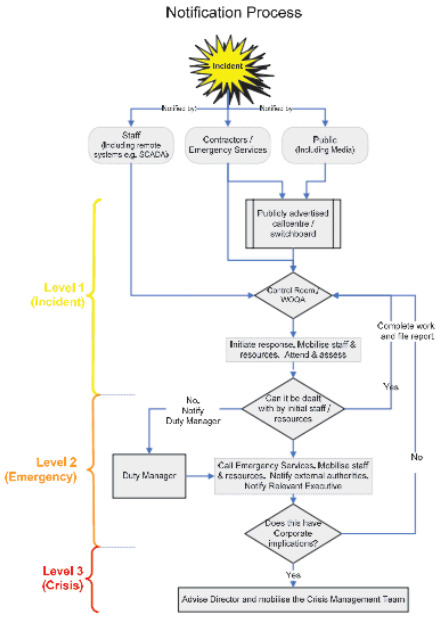
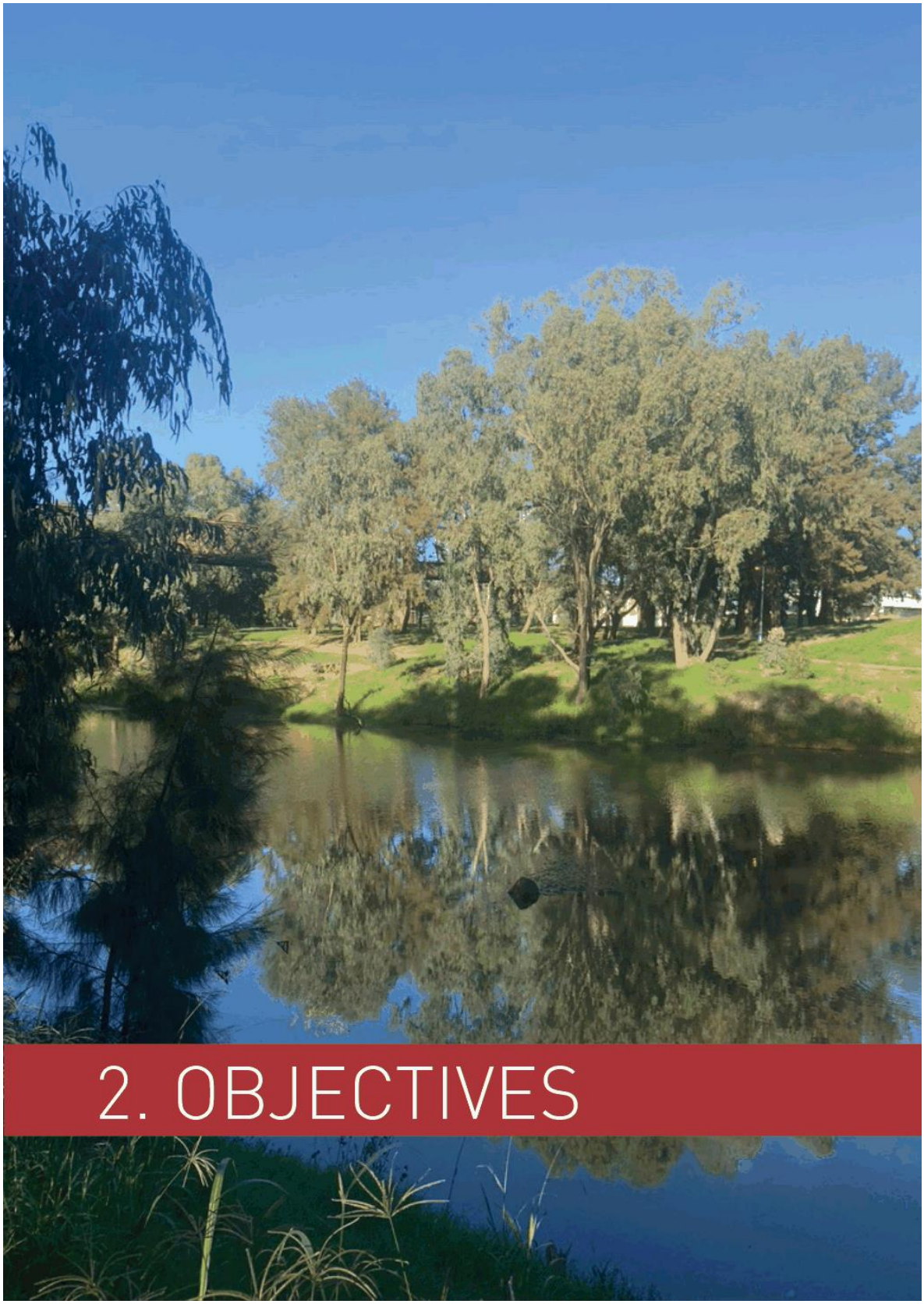


FIGURE 1-12: EMERGENCY MANAGEMENT FLOW CHART


2. OBJECTIVES

2.1 CHALLENGES

CURRENT DROUGHT ACTIONS

The strategic directions and resulting actions have been presented during a period of intense drought. The activation plan has been implemented due to climate predictions and current conditions.

Meeting our need for water

Key actions within the plan are to ensure that water supply is available to meet current water demands of the community.

The reduction of available ground water will also affect contamination of available water supply. Concentration of algae can increase and affect human and environmental health of the water during low periods.

The first requirement is that our region is able to supply the basic water needs to our community. Water availability is a necessity for maintaining health, hygiene and safety for individuals in our community, businesses and institutional uses (such as aged care and hospital facilities).

Improving our data sources and accuracy

Data is collected that monitors water supply and demand. The current systems are not accurate for the interpretation of drought triggers to cause water restriction based on the figures alone. A key initiative of the current plan is to roll out smart meters and determine accurate figures. This is an immediate term goal of the plan. This will aid modelling and engineering scenarios regarding water availability and the length of time available before a worst case cease to flow of the Macquarie River from Burrendong Dam.

Revising and updating water restriction triggers

Water restrictions have been resolved and updated to improve the rationale behind decision making. The water restrictions have the potential to greatly affect community, business and liveability of a place.

The restrictions have been aimed at avoiding the key customers, businesses and institutions whom Council does not want to see financially affected in the early part of the drought.

Lower levels of water restriction focus on general awareness and communications campaigns. These progress to higher levels of restriction that will impact the community. The key is to reduce water usage to below target levels. The levels have been based on current data for DRC that indicates community use around 440 L water per person per day unrestricted. This is regionally higher than other areas.

Implementation of Water Saving Action Plans

Guidance has been set for the highest water users in the business community. It is important for the continuity of regional areas, in particular DRC, due to its strategic importance and predicted growth, that water is available for business purposes. Many business activities have been restricted due to water shortage.

The Water Saving Action Plans allow large water users to clarify their needs. This is to inform Council of the requirements for water moving forward, to determine where these users may implement reductions and to sustain a good economy in the region for as long as is possible.

2.2 PURPOSE OF THE PLAN

Timely review to meet our current drought

This plan has been reviewed and updated due to continuing threat of drought. Current forecasts predict conditions to remain for some time. In this light the plan has been updated to adapt our approach over time.

This is an opportunity to engage the community in our process especially around decision making about water resources.

Setting strategic directions we can implement

This DCWERP sets the current strategic directions and actions that can be delivered through 2020-2024. It provides opportunities to work with water delivery agencies at the State and Commonwealth level to ensure a whole of system approach is implemented. Cooperation in essential between issuers of bulk water licences and orders and the security of town water supply. It is an opportunity to introduce and seek continual improvement to water system productivity through technology. Advances in metering, modelling and monitoring can assist now and into the future.

Key underlying principles of this plan are to:

- Set a framework for delivery of drought specific actions.
- Ensure human health needs are met
- Priority community and business needs can be met for as long as is possible.
- Give certainty to business operators.
- Provide deliverable actions for Council.
- Sustain liveability and sense of place.
- Increase data accuracy and efficiency.

Apply best practice methods

This plan has been based on the best practice methods as set out in Commonwealth and State legislation and policy guidance. The plan is also based on emergency management approaches set out by the NSW Government.

Authority to implement the plan

The plan sets out triggers that may be used as guidance by Council in declaration of future drought events. Decisions on Drought Management are guided by local conditions that may differ from neighbouring areas. This is to ensure that the community has sufficient water available to satisfy its basic needs.

Council endorsement of this document gives authority to the Chief Executive Officer, in consultation with the Mayor, in activating the drought management team and the actions within this plan.

Clarification of implementation strategies

The current actions sit within a framework of response to the drought in 2019. The strategy also covers recovery and preparation for future events.

Community awareness of drought management

The plan aims to ensure consistency of messaging and community acceptance and improve the success of drought management in the region. Communication actions are included in the strategic actions.

Water sources and quality in our region

Water quality in the Macquarie River is highly variable. Water quality is also influenced by flows in the unregulated Bell River which joins the Macquarie River downstream of Burrendong Dam.

The quality of water sourced from groundwater is considered good, although it is hard. Additional bore water is being sourced from the bore fields south of Dubbo to supplement and secure water for the town. Currently total town water extraction licences are of 12,700 ML/year, comprising; Dubbo with 8,700 ML/year in surface water extraction licences and 4,000 ML/year in groundwater extraction licences, Wellington 1800ML of surface water and 350 ML groundwater, Geurie 300ML surface water and 120ML ground and Mumbil 70ML ground water.

Ongoing careful consideration of the needs of our community is critical to our future water security.

2.3 GUIDING PRINCIPLES

DROUGHT PLANNING PRINCIPLE SETTING

Through consultation during the initial development stages of the plan the overarching needs of the DCWERP were developed.

These guiding principles are:

1. **Community wellbeing** is essential for long term resilience. The region should remain attractive to local residents and tourism and a balance with Council assets needs to be drawn to ensure DRC retains a **sense of place** and belonging.
2. **Council operations** for water systems and wastewater are appropriate and improving.
3. Having **certainty** around water availability and back up supply adds confidence to our business community.
   Liveability is influenced by various factors such as access to water. Planning and **investing in long-term infrastructure secures water for all needs.**
4. **Prevention is a key factor in future drought resistance.**
5. Clear planning **pre-drought** periods - identifying hazards, assessing threats to life and property and taking measures to reduce potential loss to life or property.
6. **Review processes** are activated post event. Arrangements for extreme events are in place. **Water quality** and salinity data is benchmarked and objectives set.
7. Water is needed to preserve the health of the river and **environment including parklands and riverside reserves.**
8. The capacity of the community is built to cope with the consequences of drought through **preparation and well communicated responses.**
9. Rules that have been set for water use are appropriate, measurable and accurate.
10. The **community is fully engaged** in the process of drought management and are proactive in response. Indigenous values are included.
11. During **recovery** individuals and communities affected by the drought need support in reconstructing physical infrastructure, reactivating environmental, emotional and economic well being of the community.

2.4 STRATEGIC DIRECTIONS

DIRECTION 1: PRIORITISE HUMAN HEALTH NEEDS

The key objectives are to:

1. Ensure human health needs for water are prioritised during periods of drought.
2. Educate and establish the long term behaviours that support water security. Communication campaigns to raise awareness and are ongoing during drought periods across community groups including community, business and Council.
3. Include for needs of community groups, such as aged, indigenous, accessibility.

DIRECTION 2: SECURE BUSINESS COMMUNITY NEEDS

The key objectives are to:

1. Drive and support a coordinated approach to delivering drought responses for the business community that is equitable yet flexible.
2. Provide certainty in ongoing drought periods that is consistent and reliable.
3. Aim for businesses to operate for as long as possible.
4. Maintain liveability for community needs and business requirements for as long as is possible.

DIRECTION 3: OPERATE EFFICIENT COUNCIL SYSTEMS DURING DROUGHT

The key objectives are to:

1. Activate best practice Council governance during drought to support efficient water systems and operational functions. Council acts with a consistent and coordinated approach to water management.
2. Fair stakeholder engagement is achieved.
3. Facilitate proactive staff commitment to deliver outcomes. Best practice governance includes clarity on *who does what*.
4. Clearly define triggers and timely warnings.

DIRECTION 4: EFFECT LONG TERM WATER SECURITY

The key objectives are to:

1. Proactively plan, fund and implement improved drought management and water security solutions.
2. Extreme events are defined from previous experience and assist in preparation for future.
3. Continually improve, eliminate or reduce the level of risk to drought events. Council is to drive and support innovation and water saving ideas.
4. Seek long term funding opportunities and improve technology for monitoring.

2.5 OPERATION OF THE DCWERP

2.5.1 COUNCIL POSITION

Council recognises the overarching strategic directions and best practice guideline in the activation and operation of the DCWERP.

The overarching strategic directions of the DCWERP aims to :

1. Prioritise human health needs to ensure water equity for all needs is available.
2. Secure business community to ensure minimal impact to the economic development of the region.
3. Operate efficient council systems that are water wise.
4. Effect long term water security

Supporting this, NSW best practice seeks the operation of the plan on the basis that DRC considers:

- Impacts on other regions and localities that are downstream, upstream or have conjunctive use.
- Effects sustainability long term.
- Acts on agreed procedures toward progressive implementation of water restrictions.

The region generally has a reliable water supply. However, the intensity of the current drought conditions has led DRC to review the past triggers linked to water restrictions coming into place. With this in mind, demand triggers are now one of the many factors that Council will consider in the activation of the plan.

Triggers for entering restrictions are twofold:

1. It recognises that surface water triggers are not a standalone guide, rather one indicator when considered with groundwater availability information.
2. The usefulness of employing Stage 1 (Restrictions levels 1-3) as an educational tool that prepares the community for Stage 2/3 restrictions. This is vital to being able to sustain extended periods of restrictions without social or economic harm.

Level 4 restrictions affect the economic sustainability of the town. It is undesirable for DRC to increase water restriction to this level of severity unless necessary.

Current issues of reliance on trigger information

There is a community and Government expectation that Council will go on water restrictions when there is serious drought.

At the same time it is evident from the current drought modelling and monitoring results that Level 4 restrictions have an impact on financial and business wellbeing of the community. A direct relationship between restrictions and river allocation is not the only tool to consider. River allocations are determined by DPIE and it is the position of Council to maintain close working relationships with NSW State Government to ensure water availability is sufficient to avoid level 4 restrictions.

Setting a staged approach to operation of the plan

This plan relates triggers for restrictions to the severity of the drought and length of time before the predicted cease to flow date in the Macquarie River, as predicted by WaterNSW ,under a zero inflow into the Burrendong Dam catchment scenario, shown at Figure 2-1.

DRC has moved away from the current triggers for restrictions, based on imposed allocations as a percentile, with implementation of this plan in two distinct stages. Stage one management does not impact on economic development of the region. Stage two has economic, social and liveability implications.

Stage 1 management: decision support tools

Council decision support tool to activate and move through staged management.

3. Council monitors catchment wide and local indicators for drought to maintain a forecast for 2 years of surface water security.
4. Catchment wide demand analysis includes monitoring of:
    - Storage levels at Burrendong and Windamere Dams consistently decrease.
    - Allocation of river water has remained at 80%.
    - Volume is below 150GL and decreasing
    - 6 month forecasts for weather, soil moisture and water inflow predictions for drought.
    - High security water allocations and licences are active and infrastructure is active.
    - Liaison with NSW Government to increase

2.5.2 OPERATION TRIGGERS

contingency allocation of surface water to maintain a minimum of 2 years supply.
- Other sources of groundwater extraction and rate of depletion of groundwater are reduced.
- Groundwater inflow, replenishment and quality of raw water is reduced.

5. Transition into water restrictions may also be based on social equity issues of the region. The decision to activate drought management may occur where there is evidence that surrounding regions are being affected by worsening conditions. It may be the case that DRC has adequate supply.
6. Restrictions levels 1 to 3 allow for preparation and community education at a gradual rate prior to severe restrictions coming in to force. These levels introduce behavioural change. Stage 1 restrictions may be triggered by WaterNSW- Level 3 Criticality Declaration.

Stage 2 management: decision support tools

1. Modelling of the cease to flow of surface water sources indicates that no surface water will be available within 6 months.
2. Allocation of high security water is reduced as well as contingency supply no longer available.
3. Ground water allocation is not available to replace surface water due to depletion or reduced availability. If testing of bores indicates that the safe yield is sufficient it may be possible to avoid introducing Level 5 and 6 restrictions regardless of surface water availability.
4. Businesses are supplied water as required with WSAPs seeking self imposed restrictions.
5. Drought conditions are unlikely to change within 6 months of moving to level 4.

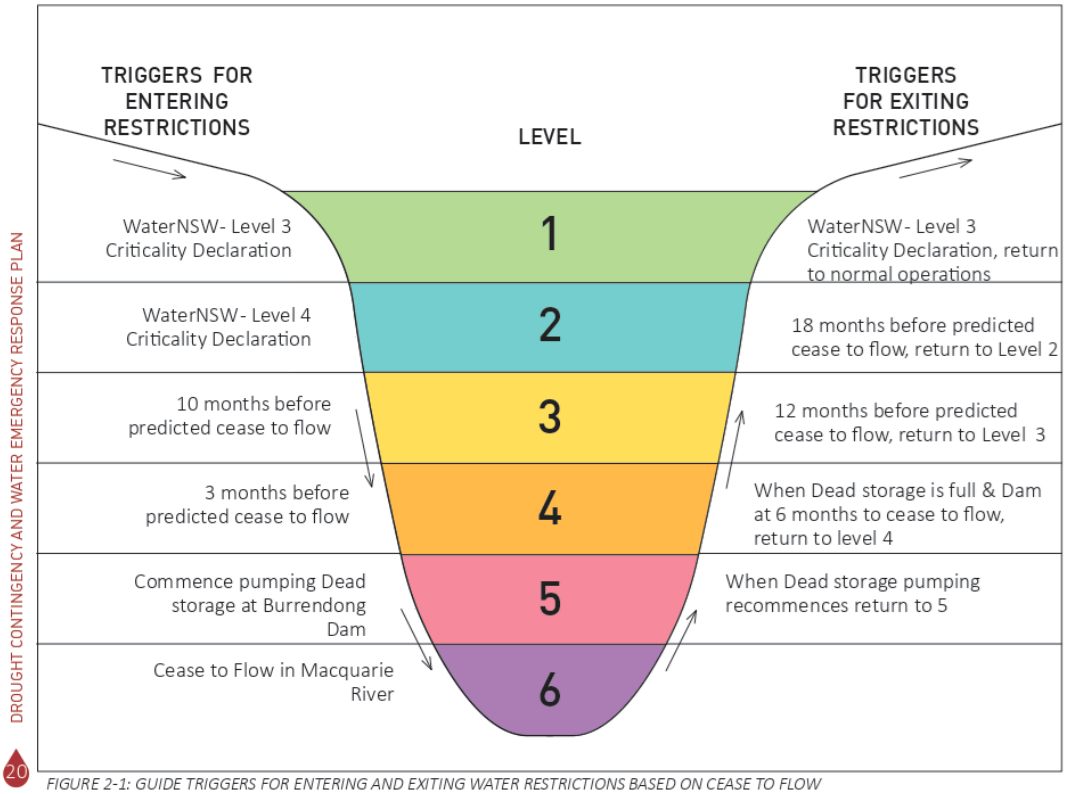


FIGURE 2-1: GUIDE TRIGGERS FOR ENTERING AND EXITING WATER RESTRICTIONS BASED ON CEASE TO FLOW

2.5.3 STAGED MANAGEMENT OF THE DCWERP

STAGE ONE MANAGEMENT

Operational at 1.5 years of water security based on the cease to flow date predicted by WaterNSW. Operation of the DCWERP governance model during moderate drought conditions

Restrictions levels 1,2 & 3 can be imposed without detriment to business as usual economic activities, Council facilities and operations. Triggers shown at Figure X are a guide to be used in conjunction with the decision support tools.

DRC Restriction Level 1 equates to WaterNSW declaration of Stage 3 Drought Criticality. The declaration for the current 2018/20 drought was approximately 13 months before the predicted cease to flow date at that time. No impact to businesses.

Level 2 restriction will not come into effect until the WaterNSW declaration of Stage 4 Drought Criticality. Ideally this would be triggered at 18 months from cease to flow. No impact to businesses.

Level 3 restriction is approximately 10 months from cease to flow.

Operation of the DCWERP will be undertaken by Infrastructure - Sewer and Water teams. Refer roles and responsibilities for further detail on activities, lines of reporting and functions.

STAGE TWO MANAGEMENT

Operational at less than 6 months of water security. Operation of the DCWERP governance model during severe drought conditions

Council activates the Drought Coordinated Response Team. Ideally the team is commenced a minimum of 1 month prior to level 4 restriction.

Restrictions levels 4,5 & 6 are incrementally imposed as necessary and Council aims to restrict internal and facility water usage in order to support local economic activity for as long as is possible.

Cease to Flow dates are agreed in cooperation with WaterNSW.

Extreme water shortage

The above decision tools are designed to extend changes to restrictions for as long as is possible.

Communication assists in delivering messages around where environmental losses of water are made on the journey of water from Burrendong Dam to DRC. The greatest impact water restrictions will have is just before the accessing of Dead storage and the impact to associated infrastructure actions.

Moving from Level 4 to Level 5 or 6 may be delayed or avoided if sufficient groundwater is available.

Level 5 restrictions will commence when the dead storage in Burrendong Dam starts to be pumped out which is about 3 months before the Cease to Flow Event and there are restrictions on groundwater supply.

However in a worse case scenario where the dead water storage is depleted at Burrendong Dam, and Council must rely on a depleted supply of ground water, Level 6 restrictions will be implemented unless further ground or surface water supplies are sourced before the next drought of record.

2.6 CURRENT ACTIONS

CURRENT DROUGHT ACTIONS

Council has received a grant of $30m from the NSW Government to assist in securing Dubbo Regional Council's water supply during severe drought events The following projects are in progress:

Dubbo - effluent reuse

An effluent reuse scheme is currently being implemented that includes a staged effluent re use treatment facility at the Dubbo Sewage Treatment Plant capable of eventually delivering up to 8ML/ day, as more treated effluent becomes available.. The effluent treatment unit will deliver water to several parks and recreation facilities in Dubbo via pipelines and a storage reservoir at Yarrandale, in north Dubbo.

Tenders for the installation of the pipelines are currently being assessed with a view to completing the pipeline installation by July 2020.

The use of treated effluent will replace some of the current irrigation bores which will in turn be connected to the water treatment plant. Negotiation with large water users for recycled water are ongoing.

Connecting irrigation bores to Dubbo Water Treatment plant

With the use of treated effluent to irrigate some of Council's Parks and Recreation Areas, dedicated irrigation bores will now be connected to the Water Treatment Plant boosting the amount of groundwater available when the quantity of surface water from the Macquarie River is restricted. It is expected up to 6Ml/ day of extra bore water will be supplied through these three bores. The pipeline connecting the bores to the Treatment Plant are expected to be completed by July 2020.

Wellington

A new bore will be installed at Montefiores in Wellington. The bore will be connected to an upgraded bore at Bicentennial oval and then to the town reticulation system in the event of surface water not being available from the Macquarie River. Water from these bores will be pumped to the water treatment plant for treatment.

Wellington Showground water recycling project has commenced to review and improve water efficiency and use of recycled water for the grounds.

Geurie

A new bore has been installed on the Macquarie River south of the township . The bore will be connected to the existing raw water rising main in the event of surface water not being available from the Macquarie River.

Water Saving Action Plans

Water saving actions plans (WSAP) were distributed to business as identified as top 100 non residential large water users during level 3 restrictions. Current actions are to monitor effectiveness of WSAP's.

The Integrated Water Cycle Management Issues Paper Report 2019 [12], presented a series of issues to be resolved through the DCWERP.

2.6 RECOMMENDATIONS

IWCM ISSUES, RECOVERY & FUTURE PROGRAMS

Recommendations for future

1. **Water security** entitlement is a longer term issue not drought specific. However Drought reliability strategies should be fully investigated. Those that are feasible should be continued including:
   - **Purchase of ground water licences:** Recommended that Council actively pursue the purchase of properties with ground water licences in the proximity of Dubbo . Council's 30 year forward works program has budgeted to purchase additional ground water licences.
   - Failing the ability to purchase suitable ground water licences in the medium term, Council could investigate installation of pipelines to the general area of existing suitable ground water aquifers as well as installing test bores on crown roads. In a worst case scenario under Section 79 of the Water Act the minister could direct that ground water in the area of the test bores be utilized only by Council.
   - **Regional pipelines:** Continue to support Government initiatives to provide regional drought security of supply by installing regional pipelines. Support the construction of the Burrendong to Dubbo pipeline in order to provide extended delivery of water from the dead water storage in Burrendong Dam in line with Critical Water Bill. This will be additional to the current $30 M grant received.
   - The Shibbles Bore can compete with Irrigators bores nearby, the reliability of this bore should be negotiated with neighbouring users to ensure water supply is available.

2. **Water quality** is highly variable and especially inconsistent during low flow periods from river sources. Rolling upgrades to WTP plants to assist with improved water quality should be considered, including upgrades to John Gilbert.

3. **Non-revenue water** for Wellington and Geurie was found to be highly variable and climate dependent. Recommend further investigation.

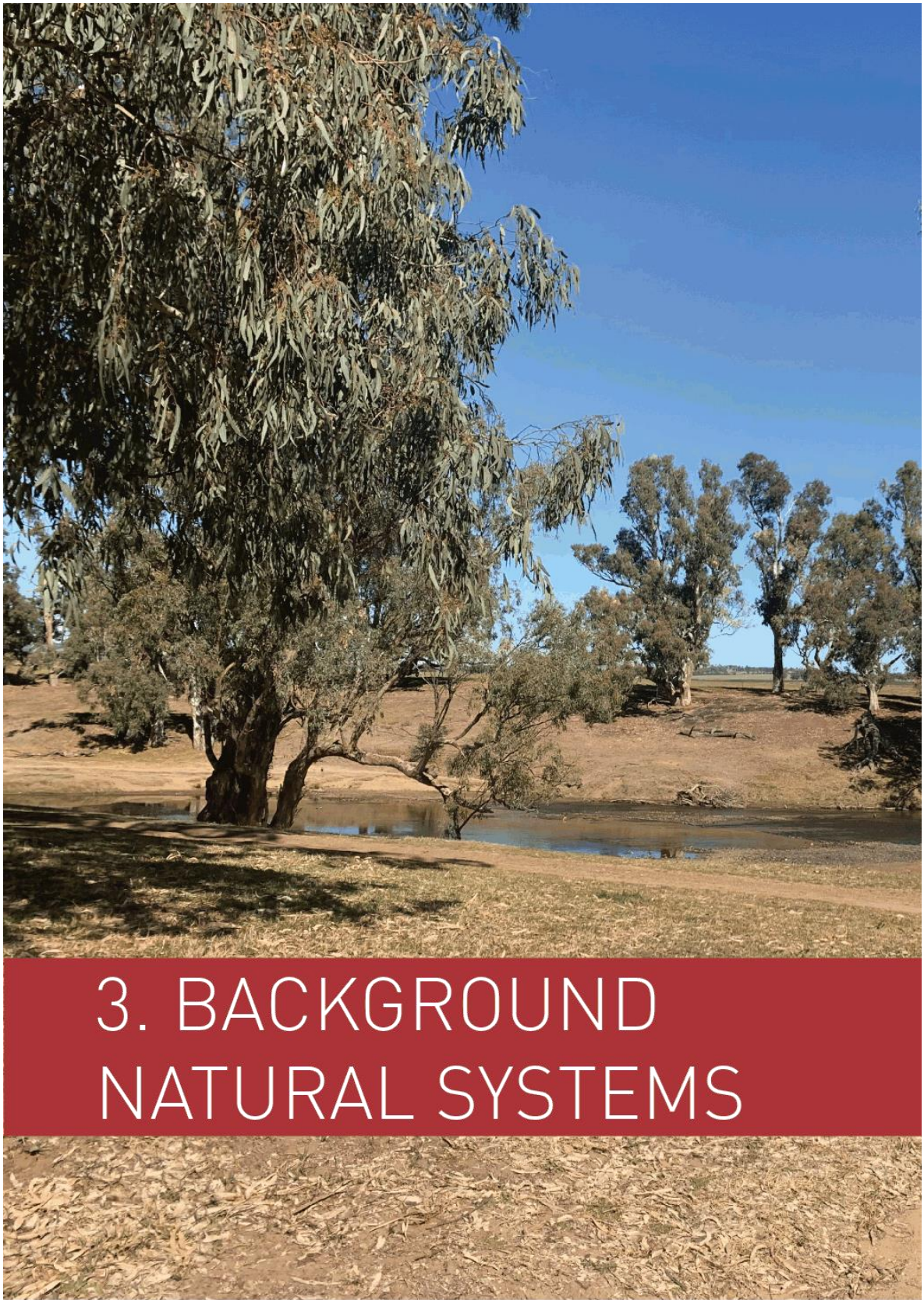
4. **Effluent reuse** is currently limited. In the event of a cease to flow event in the Macquarie River , effluent may be suitable to recharge the aquifer in the vicinity where Council is extracting ground water. Recommend that Council investigate the possibility of aquifer recharge in extreme drought conditions.

5. **Review of demand management** for water data to assist with peak demand management may assist with ongoing drought management activities. Opportunities to improve efficient water use should be sought for Parks, Salesyards, Airport, expanded smart metering and monitoring upgrades.

6. **Operation of Burrendong Dam and water allocations.** The NSW Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source (2016) states that :

   1.*The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows into this water source (based on historical flow information held by the Department when this Plan commenced).*
   2. The volumes of water set aside from assured inflows into this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages shall be adjusted as required over the course of this Plan if necessary to do so, to ensure subclause point 1, is satisfied.

   Interpretation of this clause of the Plan indicates that management of releases from Burrendong Dam will need to be adjusted to enable 100% allocations being made available in light of the current drought of record. Recommended that Council liaise closely with DPI and Water NSW in establishing revisions to annual water allocations for all users in order to ensure a more secure supply of water in the next drought of record.



3. BACKGROUND NATURAL SYSTEMS

3.1 NATURAL SYSTEMS

3.1.1 LOCATION

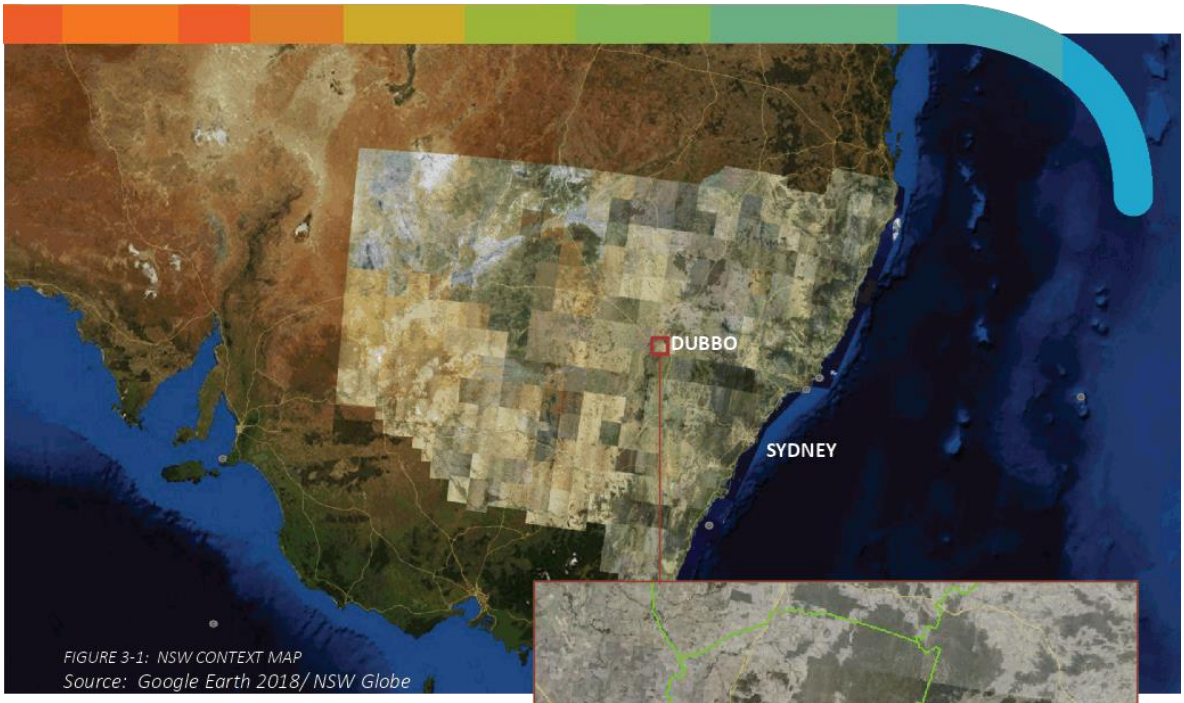


FIGURE 3-1: NSW CONTEXT MAP
Source: Google Earth 2018/ NSW Globe

DRC is part of the western plains region, approximately 350 km west of Sydney. Figure 3-1 & 3-2 illustrate the geographical location of DRC within New South Wales and DRC Administrative boundary (green line).

Dubbo and Wellington are the main urban centres. The villages include Ballimore, Elong Elong, Brocklehurst, Geurie, Wongarbon, Mumbil, Mogriguy, Stuart Town, Euchareena and North Yeoval. Geographic locations are shown at Figure 3-3. The City of Dubbo and the villages of Wongarbon, Brocklehurst, Eumungerie, Mogriguy and Ballimore are served with the Dubbo Water Supply Scheme. The town of Wellington and the villages of Geurie and Mumbil are served by separate reticulated water supply schemes. Other nearby smaller villages are connected to separate private non-potable water schemes. North Yeoval is currently served by Cabonne Council.

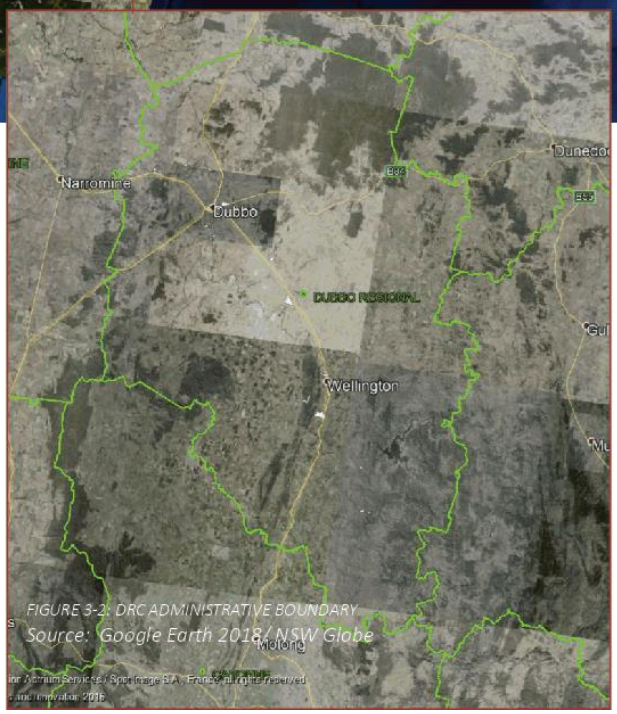


FIGURE 3-2: DRC ADMINISTRATIVE BOUNDARY
Source: Google Earth 2018/ NSW Globe

3.1.1 LOCATION
DUBBO REGIONAL COUNCIL AREA

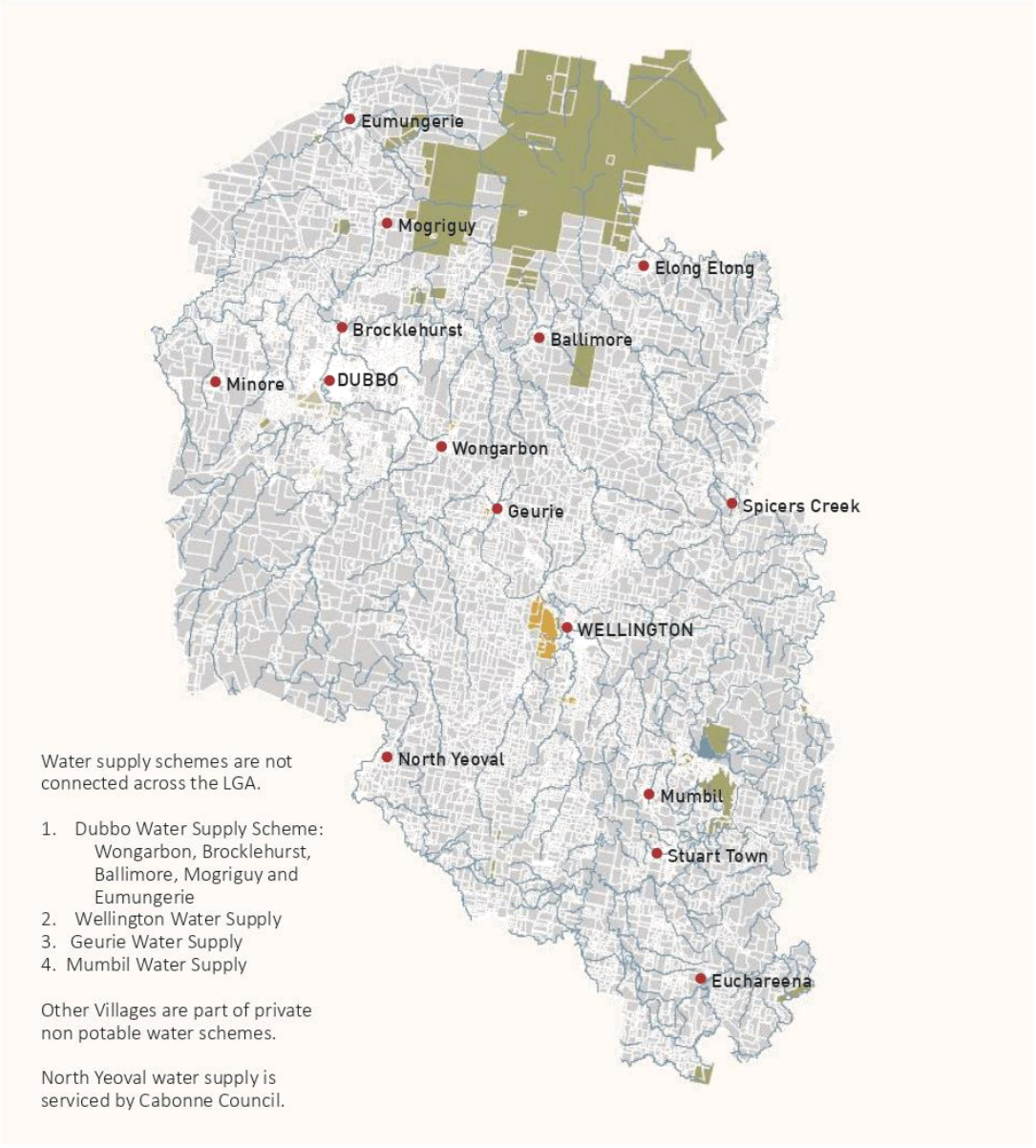


FIGURE 3-3: THE DUBBO REGION LOCAL GOVERNMENT AREA ILLUSTRATING URBAN CENTRES AND VILLAGES

3.1.1 LOCATION

THE MURRAY DARLING BASIN

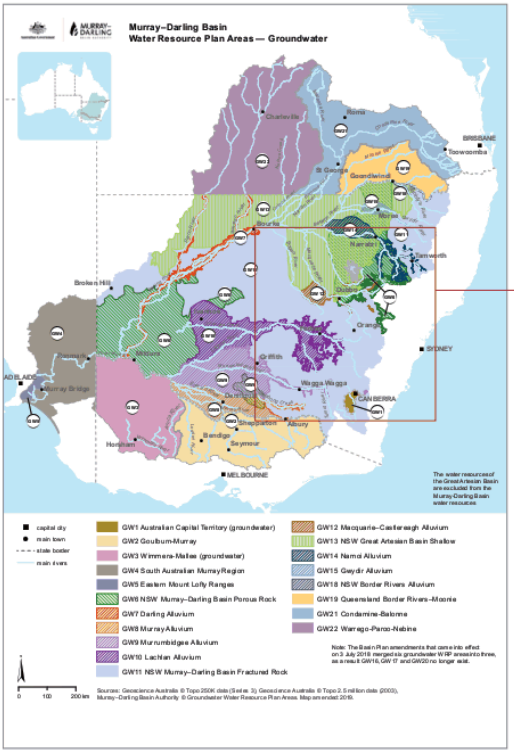


FIGURE 3-4: THE MURRAY DARLING BASIN [13]

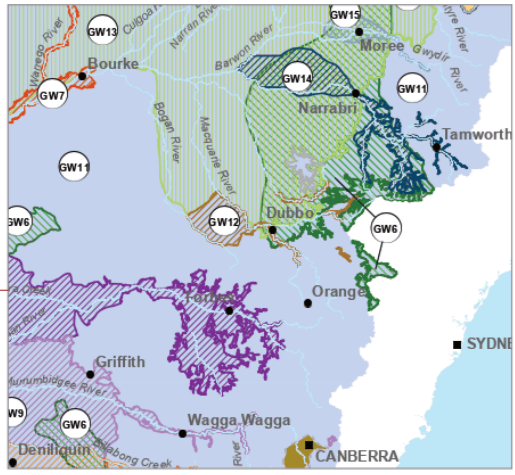


FIGURE 3-5: ENLARGED DUBBO REGION [14]

The catchment

The Murray - Darling Basin is the extended catchment for which the Macquarie- Bogan river catchment forms a part. The Murray - Darling basin spans an enormous geographical area of over 1Km.^{2} Figure 3-4, Illustrates the span of the Murray-Darling Basin across Queensland, New South Wales and Victoria. The basin is source to both surface water and groundwater.

Groundwater beneath the Murray-Darling Basin can be stored in fractured rocks, porous rocks or soils. Groundwater is complex as it supports the pressure for springs, rivers and wetland sitting above.

Bore water sources

Dubbo Region sits across three overlapping groundwater typologies, see Figure 3-5.

GW 6 NSW Murray-Darling Basin Porous Rock

The NSW MDB Porous Rock Water Resource Plan came into effect in July 2019 to establish a long term sustainable and adaptive management framework. It also give effect to international agreements, clarifies water resource outcomes and aims to improve water security across the basin. Recharging of these systems is considered to take years to decades.

GW11 NSW Murray-Darling Basin Fractured Rock

The Murray-Darling Basin Fractured Rock covers an extensive area and is generally part of the fractured basaltic , granite, meta-sediments and sandstone.

GW12 Macquarie-Castlereagh Alluvium

The Macquarie-Castlereagh Alluvium Water Resource Plan came into effect in November 2018. This plan sets out the annual extraction limit under a sustainable diversion limit for groundwater sources.

Groundwater is connected to the surface water resources and it is recognised that the

GW13 NSW Great Artesian Basin Shallow

The Resource Plan came into effect in July 2019. The Great Artesian Basin Shallow is at the lower edge of the groundwater supply access within DRC LGA.

3.1.1 LOCATION

THE MACQUARIE BOGAN CATCHMENT

Surface water

The Macquarie-Bogan catchment covers an area of more than 74,000 km2 within the Murray-Darling Basin, shown at Figure 3-6. The headwaters of the Macquarie River originate in the Great Dividing Range south of Bathurst, and the river flows in a north-westerly direction for 960 km until it joins the Barwon River near Brewarrina. The major tributaries of the upper Macquarie catchment are the Cudgegong, Talbragar, Little and Bell Rivers.

While the Bogan River maintains its own catchment, running roughly parallel to the Macquarie, the streams are hydrologically connected via several effluent channels from the Lower Macquarie which provide regulated flows to the lower Bogan River [15]. The source water supply for the DRC LGA is shown at Figure 3-7. This also indicates emergency and additional supply at Narromine and Windamere Lake.

Water storage

Water in the Macquarie River is regulated by two major storages in the upper catchment.

Burrendong Dam supplies water for irrigation, stock and domestic needs along the Macquarie River and the lower Bogan River as well as providing significant flood mitigation capability to reduce downstream flooding. It also stores water for environmental requirements in the Macquarie Marshes, an extensive wetland complex that is a significant natural feature of the lower valley.

Windamere Dam, on the Cudgegong River upstream of Burrendong Dam, provides water for the towns of Mudgee and Gulgong and water user requirements along the Cudgegong River.

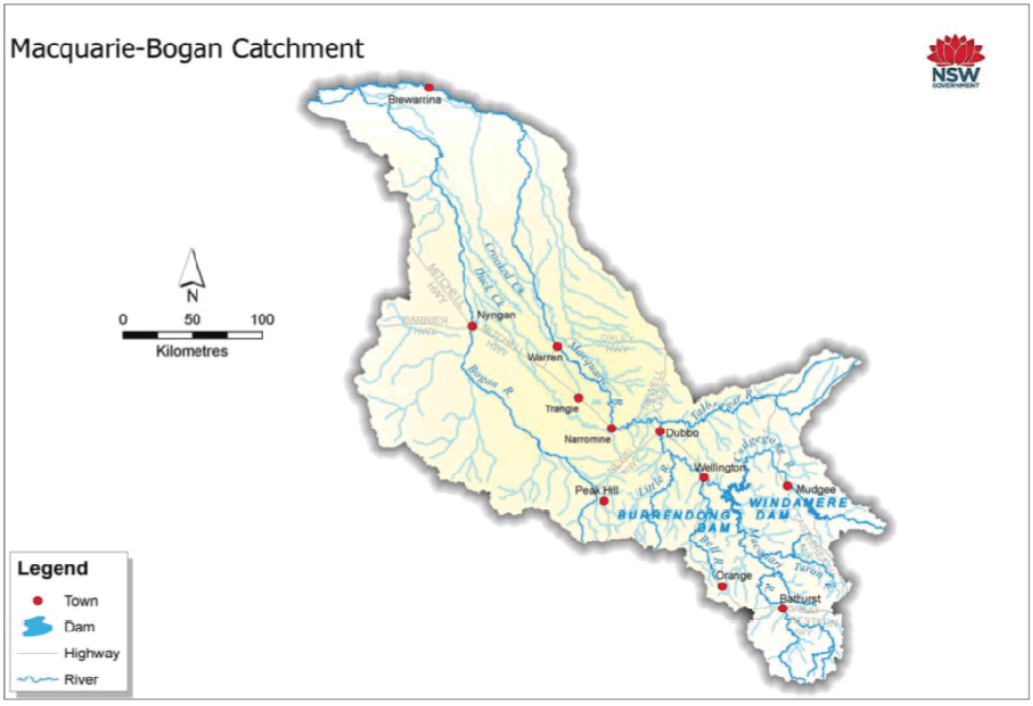
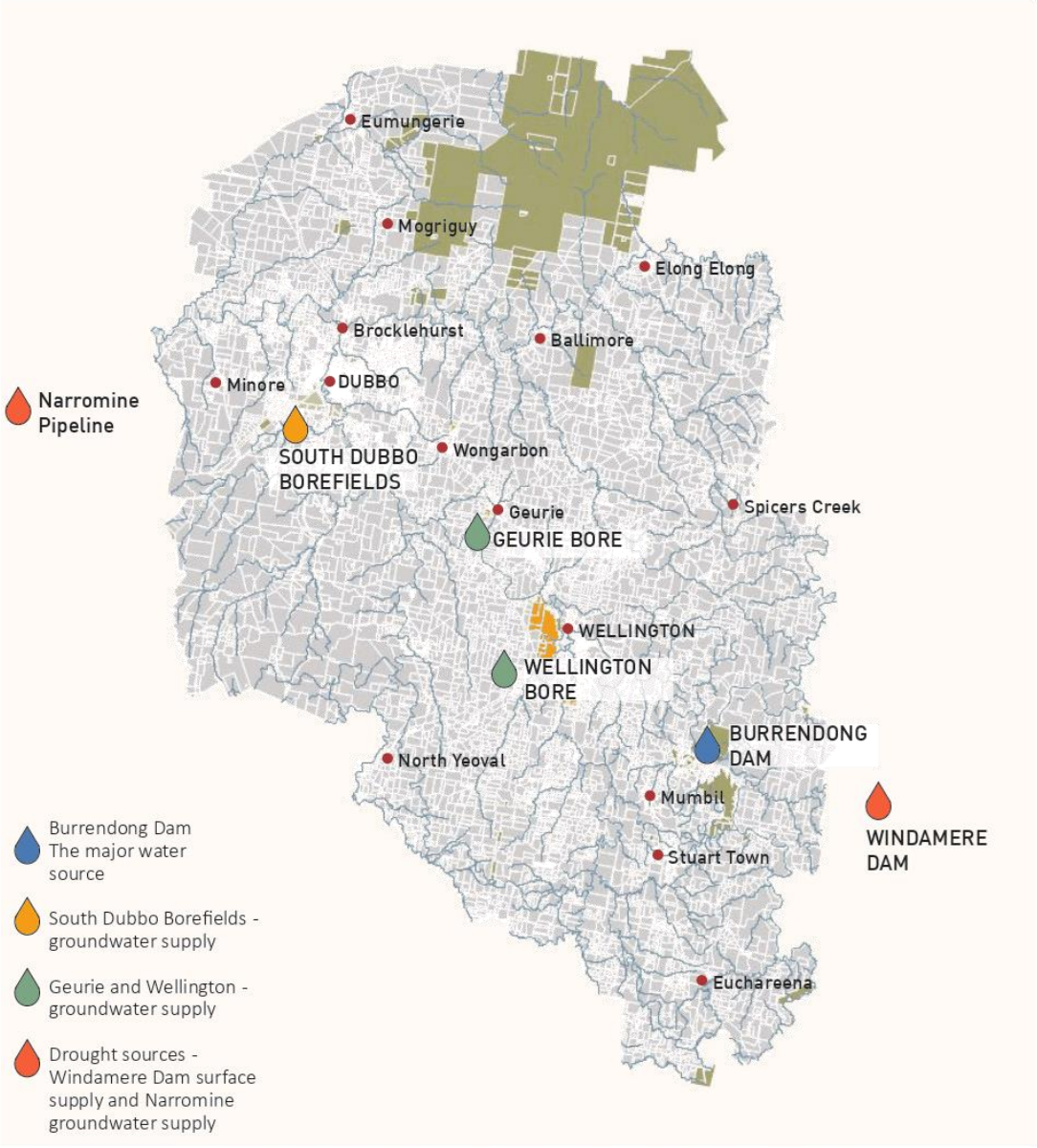


FIGURE 3-6: MACQUARIE-BOGAN CATCHMENT [15]

3.1.1 LOCATION

SOURCE WATER SUPPLY FOR DUBBO REGION



The main source of water for Dubbo Region is the Burrendong Dam, with South Dubbo Borefields the largest ground water supply point.

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FIGURE 3-7: THE DUBBO REGION LOCAL GOVERNMENT AREA SURFACE AND GROUND WATER SUPPLY

3.1.2 CLIMATE

Current climate prediction

Climate information is current as at February 2020 [16].

Rainfall

Rainfall deficiencies have affected most of the New South Wales, Queensland and South Australian parts of the Murray–Darling Basin since the start of 2017. Much of the northeast inland of New South Wales has had record low rainfall between April 2018 and September 2019. January 2020 rainfall was slightly above average for Australia as a whole due to falls in western and central Queensland and inland Western Australia. However, inflows remain limited for major water storages in the Murray-Darling Basin.

Overall rainfall has been at its lowest on record by a substantial margin breaking drought records since the Federation Drought between 1900-1902. Rainfall over 2019 was 34% lower than average[17].

The current forecasts predict that average minimum and maximum temperatures are on the increase across the Basin.

2019 cool season has been characterised by snow fall across the Basin becoming vapour rather than melting into water. This has resulted in less inflow into groundwater. Likewise the water quality has been affected and blue-green algae is continuously monitored. The Lachlan River is at red alert at Corrong.

Rainfall deficiency maps are produced by the Australian Bureau of Meteorology and assist with determining the prediction for a drought to continue, see Figure 3-8.

Corresponding information regarding rainfall received at Dubbo Airport illustrates a consistent decline in annual rainfall from 2016, shown at Figure 3-9.

Soil moisture

Climate predictions for the Murray Darling also capture information regarding soil moisture and current data regarding water storage across the system.

Figure 3-10 regards the current information for soil moisture. Soil moisture is below average, some parts of the catchment did receive near average rain in September. DRC remains below average.

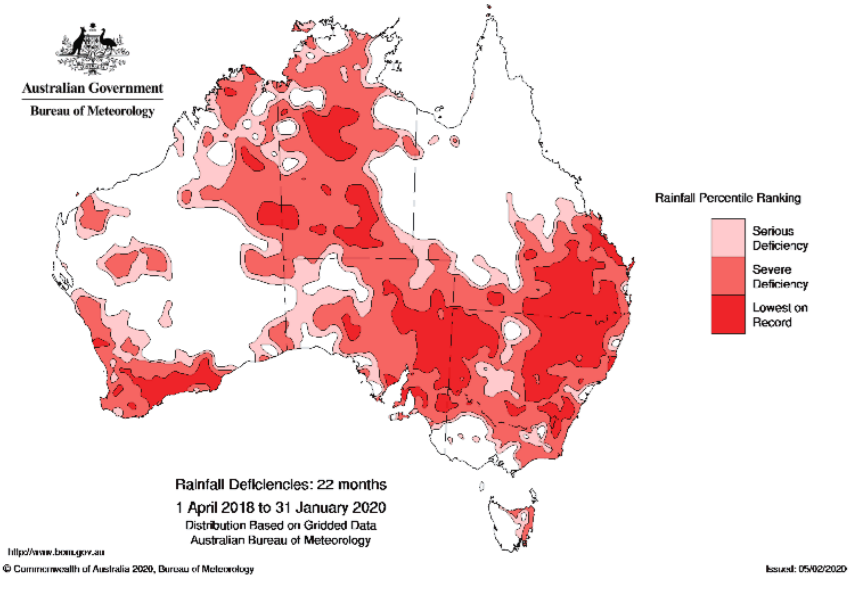


FIGURE 3-8:RAINFALL DEFICIENCY ACROSS AUSTRALIA *Source: Australian Bureau of Meteorology*

3.1.2 CLIMATE

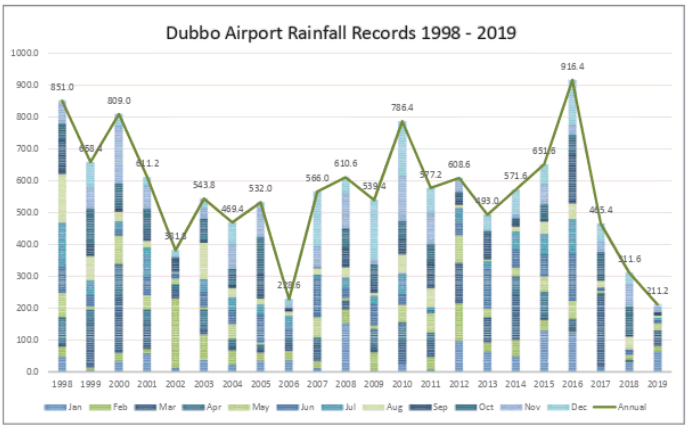


FIGURE 3-9: DUBBO AIRPORT RAINFALL RECORDS 1998 - 2019

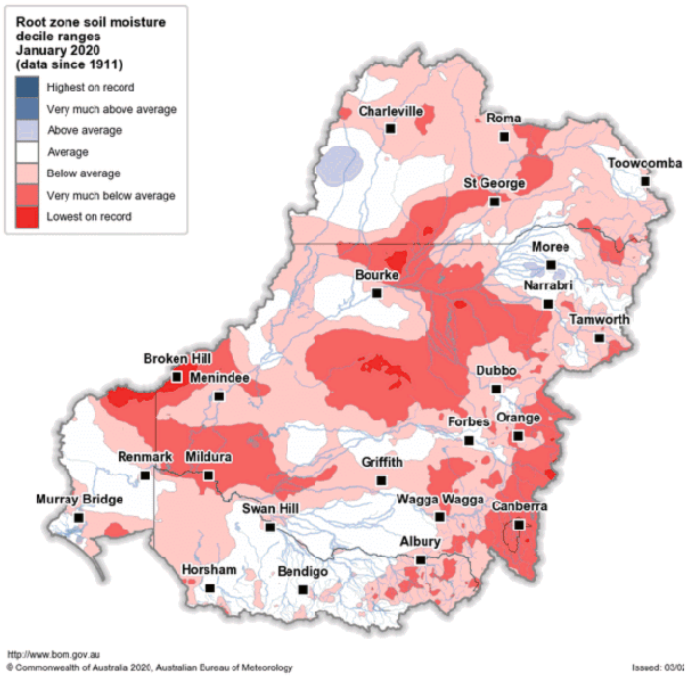


FIGURE 3-10: SOIL MOISTURE SEPT 2019 *Source: Australian Bureau of Meteorology*

Dry soil moisture levels have resulted in new long term records being set (Jan 2017 to Feb 2020). The result in less water being runoff and forming inflow to storages.

Water inflow

Long term rainfall deficiencies have had a great impact across water resources for DRC. The Macquarie catchment combines Lake Burrendong and Lake Windamere as the main storage dams. The Macquarie River is a regulated river controlled by intentional water releases from the Burrendong Dam which is situated 40 kilometres upstream of Dubbo Township.

The heat waves and bushfires have both put pressure on the water resources of the southern Murray–Darling Basin in January 2020. Several of the catchments of the major storages of the southern Murray–Darling Basin have been affected by bushfires.

The NSW Government (DPIE & WaterNSW) control the operation of Burrendong Dam.

A weir built in the 1940s on the Macquarie River, Dubbo, provides a weir pool for Council to extract raw water through the two raw water pumps.

Water quality

Increased blue green algae levels to red alert status have frequently raised water quality alerts at Burrendong and Windamere. Generally this occurs in low flow periods.

3.1.3 STORAGE LEVELS

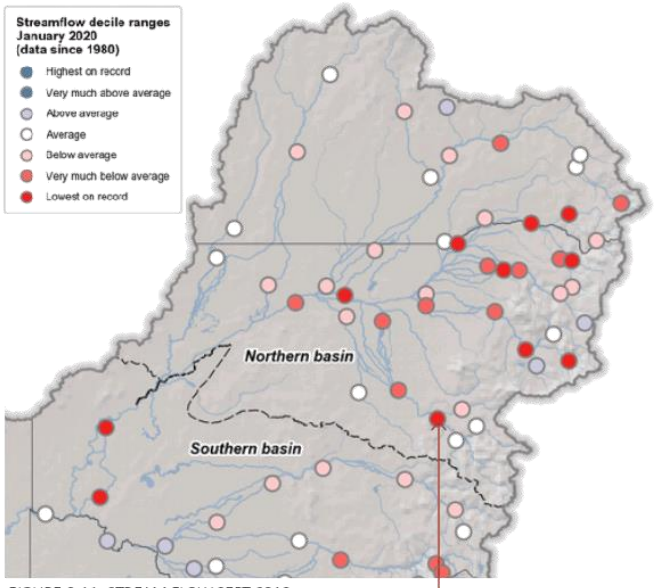


FIGURE 3-11: STREAM FLOW SEPT 2019

BURRENDONG DAM

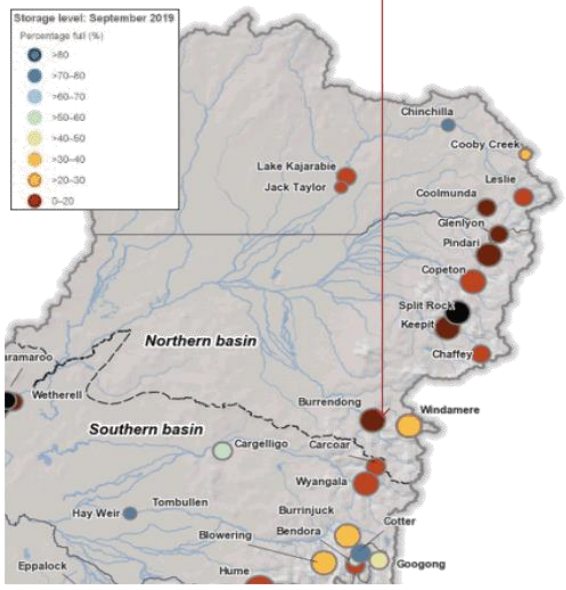


FIGURE 3-12: STORAGE LEVELS SEPT 2019 *Source: Australian Bureau of Meteorology*

Macquarie catchment storage levels

Water resources are greatly influenced by the occurrence and frequency of rainfall across the landscape, and further by temperature and consumptive water use. Given the historic low rainfalls and high temperatures, water availability in the soil, major storages, rivers and groundwater across the Murray–Darling Basin is low, shown at Figure 3-11.

Groundwater levels across the Murray–Darling Basin have also declined in response to the prolonged dry period. Aquifer systems are being impacted by low rainfall and stream recharge and by increased pumping for consumptive use, especially given the scarcity of surface water supplies. Thus, less water is getting into aquifers and aquifer systems are under further stress due to increased extractions.

Burrendong Dam

Burrendong Dam, at January 2020, was at 52 GL of a total capacity of 1,154 GL. This equates to 1.5% full. Of this amount, 18GL is active storage and 34GL dead storage. Burrendong Dam has been drawn below 10% on five similar occasions (June 1995, Jan 1998, Apr 2003, May 2004 and Jan 2007). Environmental water accounts have been suspended to extend water supplies.[17]

Lake Windamere is at 98GL of a total capacity of 368GL. This equates to 26.5% full. Active storage is 97 GL and 1 GL is dead storage. (MDBA, 2019). Dam levels are shown at Figure 3-12.

Water release will occur from Land Windamere to Burrendong periodically as per the water sharing plan [20].

3.1.4 RELIABILITY OF WATER SUPPLY

Drought reliability of the system

The volume required in Burrendong Dam to deliver all Water Sharing Plan requirements and run the river for a full water year, prior to delivering water to any general security users, is approximately 170 GL.

The adopted trigger for constrained deliverability of higher priority licences is:

- When Burrendong storage is below 119 GL (10 per cent of full supply volume) on 1 July; and
- Any available Windamere storage resource has been transferred (assuming that 70 GL is required to guarantee local supply under the bulk water transfer protocol).

The analysis therefore uses a total storage above 189 GL (119 + 70) in Burrendong dam as the trigger for constrained deliverability of higher priority licences.

If the modelled total storage is less than 189 GL at the end of June, then drought conditions are deemed to have commenced and higher priority licences will begin the water year with allocations of less than 100 per cent.

Figure 3-13 illustrates possible drought modelling against the percentage of dam level reduction over time. This model shows levels that would avoid surface flow reaching a cease to flow within a 2 year time frame.

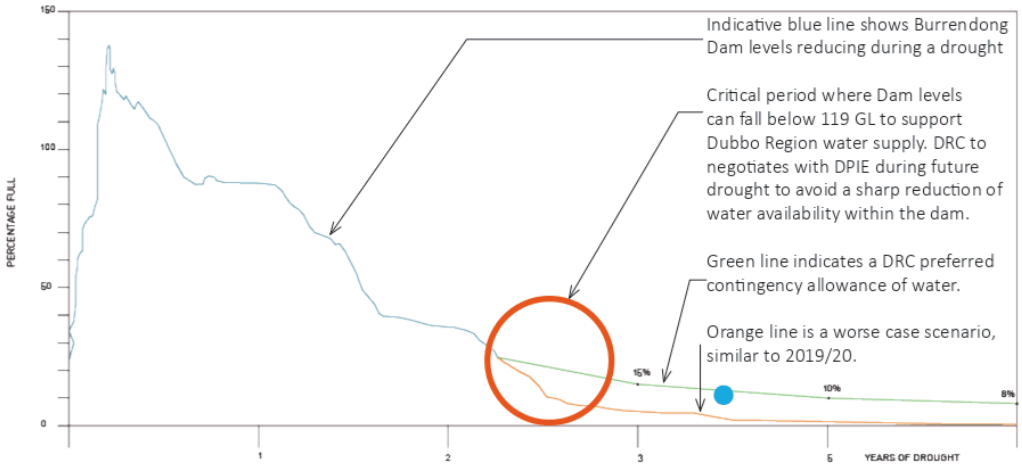


FIGURE3-13: DROUGHT MODELLING FOR PERCENTAGE DAM LEVEL REDUCTION OVER TIME

3.1.5 PAST DROUGHT INFORMATION

Drought History

Information from WaterNSW shown at Figure 3-14, illustrate the long term averages for inflow into the Macquarie River System and storage at Burrendong and Windamere Dams. This shows the usual inflow and allocation of this water to environment and irrigation.

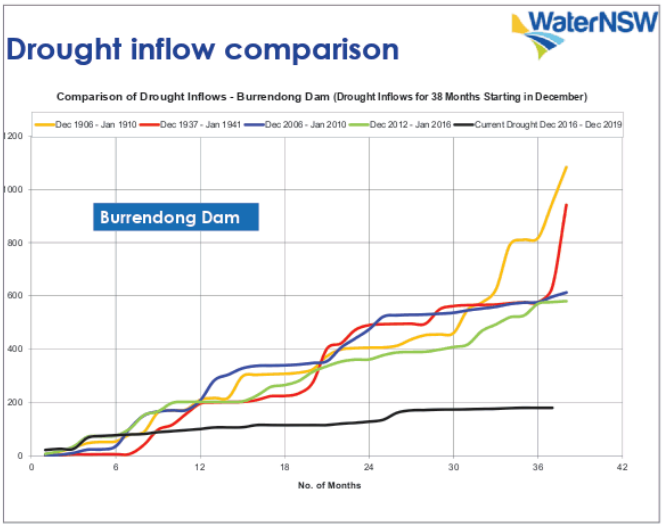


FIGURE 3-14: COMPARISON OF DROUGHT INFLOWS - BURRENDONG DAM
Source: WaterNSW 2019

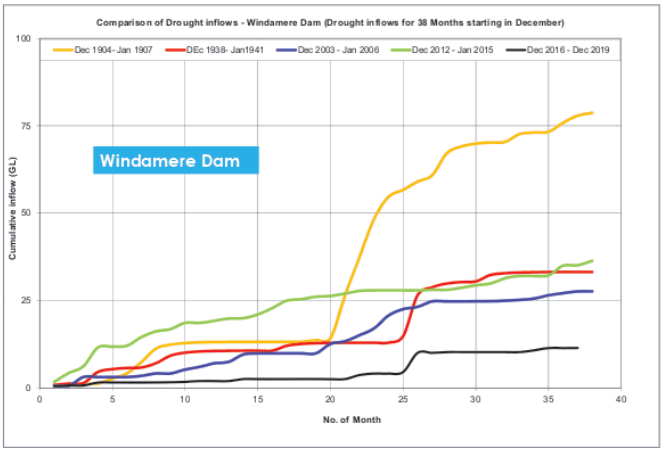


FIGURE 3-15: COMPARISON OF DROUGHT INFLOWS - WINDAMERE DAM 2019

Burrendong Dam

The average inflow in the past 6 years is 690GL far short of the long term average of 1,448 GL. This downward average has impacts on water storage and availability.

This shortfall is further illustrated at Figure 3-14 where the current drought is compared to previous droughts. These droughts included 1906-1909, 1937-1940, 2006-2008, 2012-2015 and the current drought since 2016.

The graph illustrates the fact that the extremely low levels in 1906, 1937 or 2007 were not dissimilar.

What is evident is that the current drought event inflow is significantly lower. This has the potential to push DRC drought management to far stricter limits than has occurred in any other drought to date.

This graph indicates how vital drought management planning is to Dubbo Regional Council.

When Burrendong is at very low levels the release of water to the Macquarie River to supply major towns such as Dubbo have very large impacts on the dam's sustainable supply.

Windamere Dam

Drought inflows at Windamere Dam correspond to low flows received at Burrendong Dam, shown at Figure 3-15. In January 2020 WaterNSW has introduced drought contingency measures that suspend Water Sharing Plan rules. Additional Bulk water transfer is planned from Windamere to Burrendong. Access of deep storage at Burrendong is planned.

3.1.6 CEASE TO FLOW MODELLING

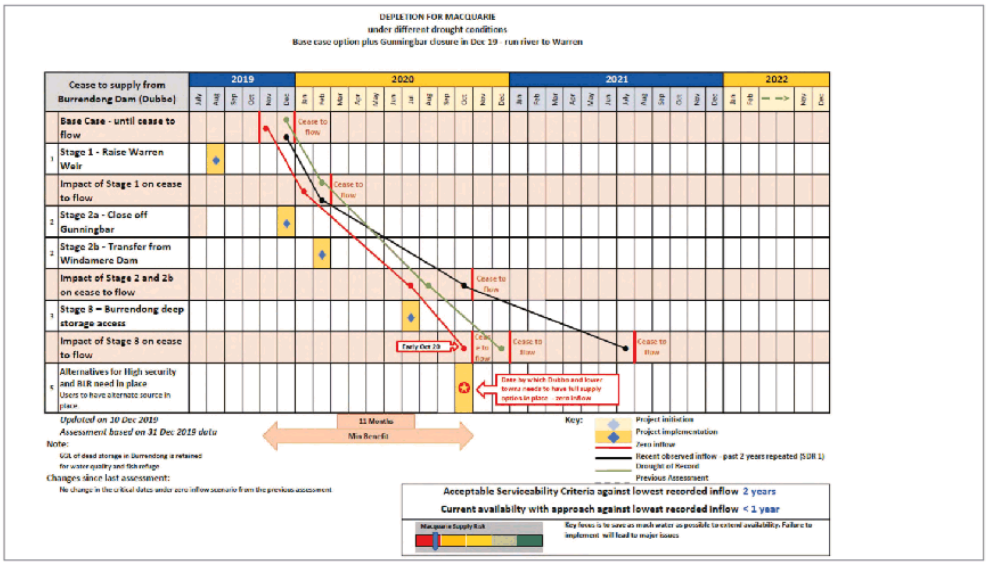


FIG 3-16: CEASE TO FLOW DATA

Modelling of the depletion of the Macquarie River under drought conditions determine various dates the river would cease to flow, see Figure 3-16. If inflow continues at a below average rate:

1. If no further rain is received in the catchment the Macquarie River will cease to flow in October 2020.
2. If the last two years of rainfall is repeated the river will cease to flow in July 2021.

Figure 3-17 shows the inflow vs. allocations depletion averages over time. Current emergency and contingency planning is required in preparation for the possibility that the Macquarie River will cease to flow in 9 to 16 months.

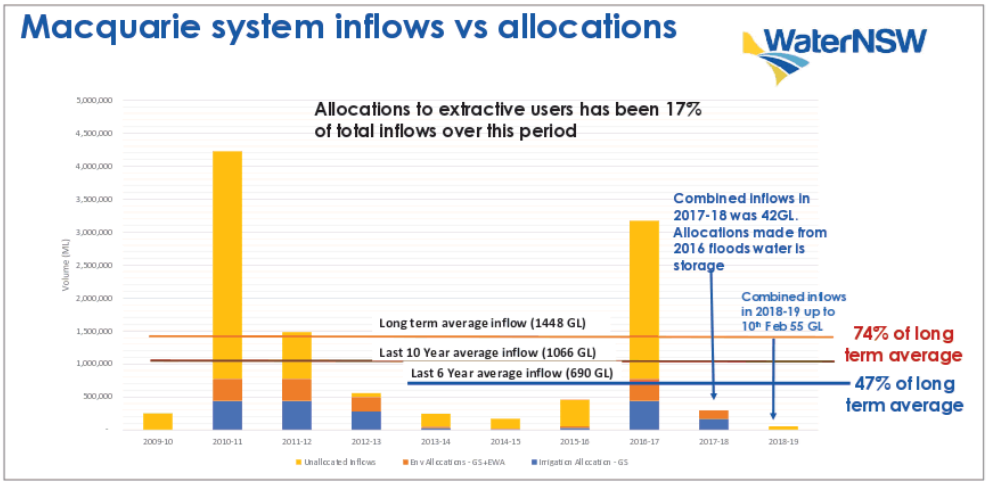


FIG 3-17: INFLOW VS ALLOCATION

3.1.7 FUTURE CLIMATE PROJECTIONS

Climate Change Projections

Climate change projections of the CSIRO for the catchments for the Murray Darling Basin, comprising the western plains area that extensively developed for dry land and irrigated agriculture, grazing and forestry predict that [3]:

- *Average winter rainfall is projected to decrease with high confidence. There is medium confidence in spring decrease. Changes in summer and autumn are possible but unclear. For the near future natural variability is projected to dominate any projected changes.*
- *Average temperatures will continue to increase in all seasons (very high confidence).*
- *More hot days and warm spells are projected with very high confidence.*
- *Fewer frosts are projected with high confidence.*
- *Average winter rainfall is projected to decrease with high confidence. There is only medium confidence in spring decrease. Changes in summer and autumn are possible but unclear.*
- *Increased intensity of extreme rainfall events is projected, with high confidence.*

Temperature trend changes for Dubbo

Since the 1970's there has been a rise in temperature of 1 degree Celsius which is slightly above the National and Global averages for climate change.[19]

It is anticipated that temperatures will rise 0.7 degrees Celsius by 2030 and 2.1 degrees by 2070. This increase represents a significant acceleration of the rate of temperature rise by comparison to the 20th Century. This also translates to a projected increase in the number of hot days (of over 35 degrees Celsius). Most of the Western Plains and Floodplain Local Landscapes will receive on average between 10 and 20 more days per year above 35 deg C by 2030, and around 30-40 days by 2070.

These landscapes are already exceedingly hot in summer, and it is expected that similar extreme temperatures will spread into spring and autumn as well. New high temperature records in the very high 40s and even 50s may be possible in the north-western parts of the region by mid-century.

Drought and soil moisture deficit

Increased temperatures, coupled with increases in potential evapotranspiration and changed distribution of rainfall has been shown at a global scale to indicate an overall landscape drying trend.

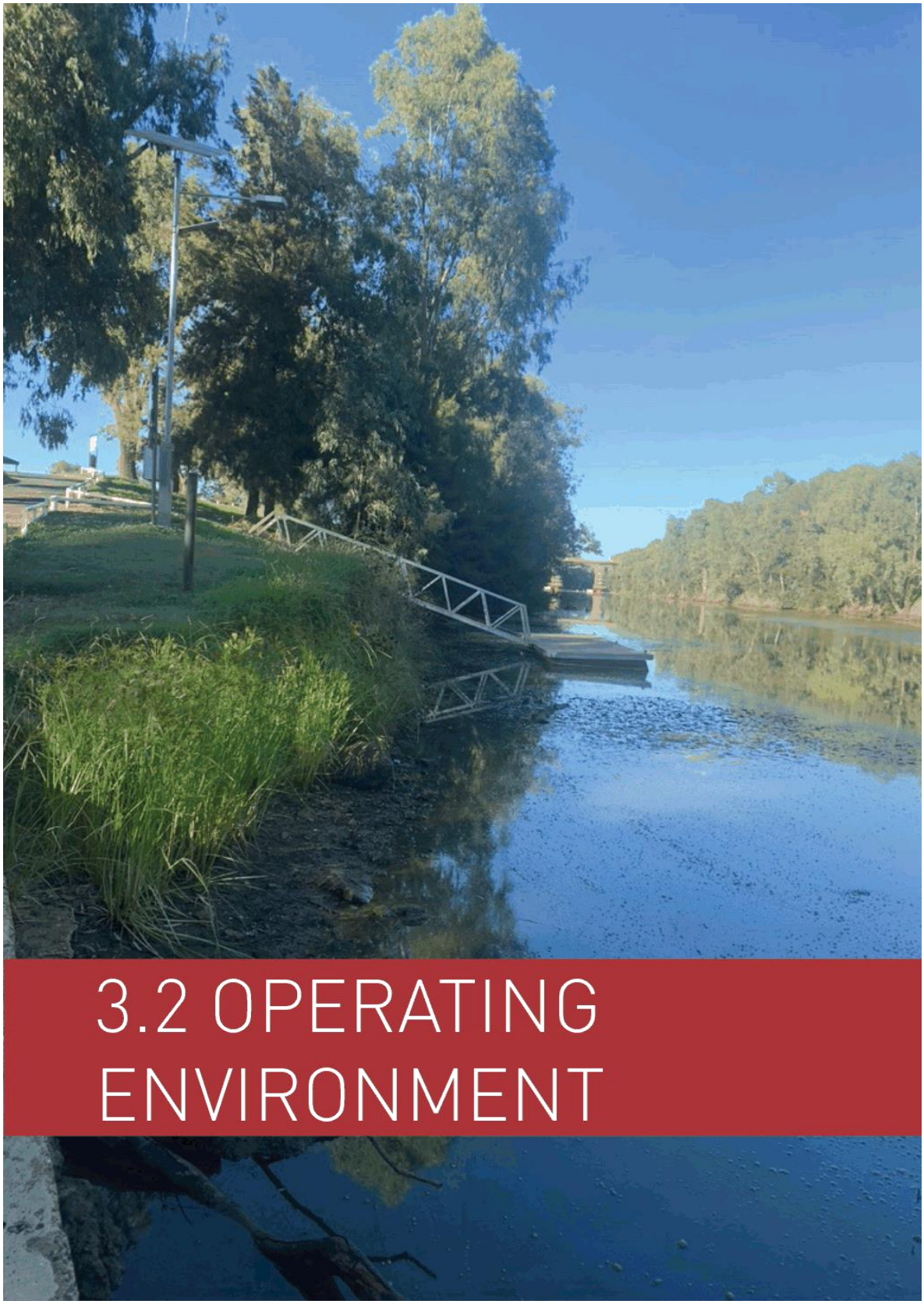
Rainfall and humidity trends

Rainfall trends in the Dubbo and Orana region are less predictable due to the historic variability of rainfall in the region. For the Central West region of NSW, it is predicted that mean rainfall will decrease in spring and increase in early autumn.

By 2070, a clear shift towards Summer/Autumn dominance will become evident, with a possible slight increase (5-10%) in annual totals. The extra rainfall in Summer and Autumn is projected to be associated with increased intensity events (e.g. storm cells), which are likely to increase the risk of hail and wind damage. Flash flooding risk from these events is also likely to increase.

Droughts per decade

Predictions for drought is to increase the incident of droughts per decade. The current guide is 3 per 10 year period. This will increase to 2-5 per decade by 2030 and will further change of 1-9 droughts per decade by 2070. [12]



3.2 OPERATING ENVIRONMENT

3.2 OPERATING ENVIRONMENT

3.2.1 POPULATION AND DEMOGRAPHICS

Overview

Population across the LGA is predominantly within urban centres at Dubbo and Wellington. Villages including Brocklehurst, Wellington, Wongarbon, Geurie and Mumbil are considered in detail within the IWCM Issues paper. See Reference 12.

Information relevant to the development of a best practice DCWERP are averages across the LGA.

Population Projection

The regional population demographics for population were commissioned by REMPLAN in 2016.

The data shown below at Figure 3-18 illustrates predicted growth of the Dubbo Region over time. This data combines the former Wellington and Dubbo City Council Areas. The adopted population growth can be noted as the green trend line.

Population growth includes extensive residential land release areas that will be developed over time across seven stages.

These figures support numbers published the Department of Planning Industry and Environment. DRC is anticipated to grow as a regional centre. The median age is 35 which is slightly younger than the NSW average of 38.[21]

The growth of Dubbo Region includes staged residential development of the cities.

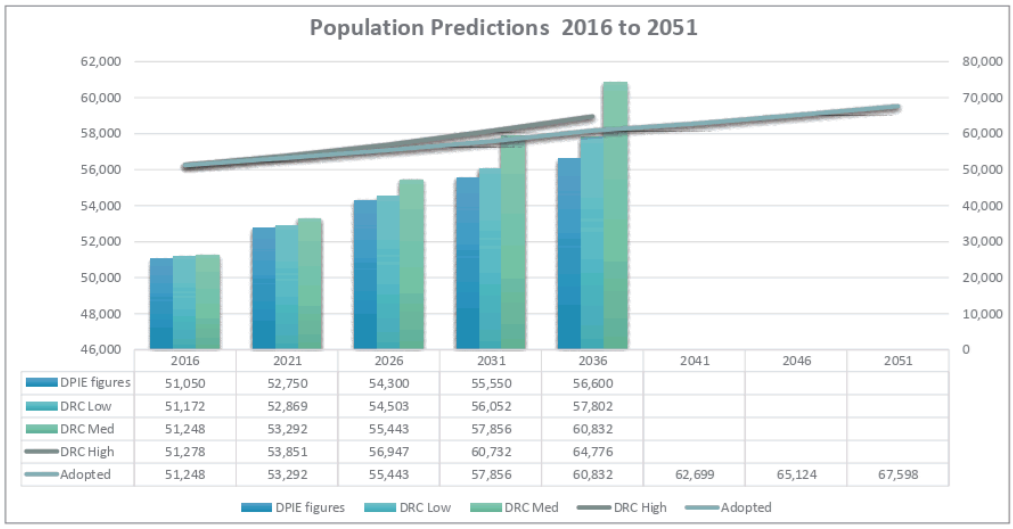


FIGURE 3-18: POPULATION PREDICTIONS Data Source: IWCM Issues Paper [12]

3.2.2 LEGISLATIVE FRAMEWORK

Overview

Legislation and policy regarding use of water across the Murray-Darling Basin, of which the dubbo region is a part of is complex.

DRC is not in control of the total catchment or water supply. There are many players, as can be seen by the NSW regional water management at Figure 3-19 below.

General issues will occur when a failure to meet legal obligations or agreed levels of service in water supply and sewerage occurs. In general these issues are part of the IWCM strategy and further detail can be found within these documents.

This section provides a brief overview of relevant policies.

Commonwealth legislation and policies

The **National Water Initiative** is an agreement signed by all states and territory government to increase the efficiency of Australia's water use and includes commitments to reform water markets and trading, and deal with over-allocated or stressed water systems.

Overarching legislation includes the **Commonwealth *Water Act 2007*** and **Murray-Darling Basin Plan 2012** (the Basin Plan).

The Commonwealth Water Minister has a role in accreditation and compliance of state water sharing plans. The Basin Plan requires the delivery of resource plans called Water Resource Plans. This means that there is oversight of the NSW government regarding plan making and implementation.

In part this is also managed by the Murray-Darling Basin Authority who set legally enforceable limits on the quantities of surface and ground water that may be taken. (MDBA, 2011).

COAG Strategic Framework for Water Reform implemented changes to the current system.

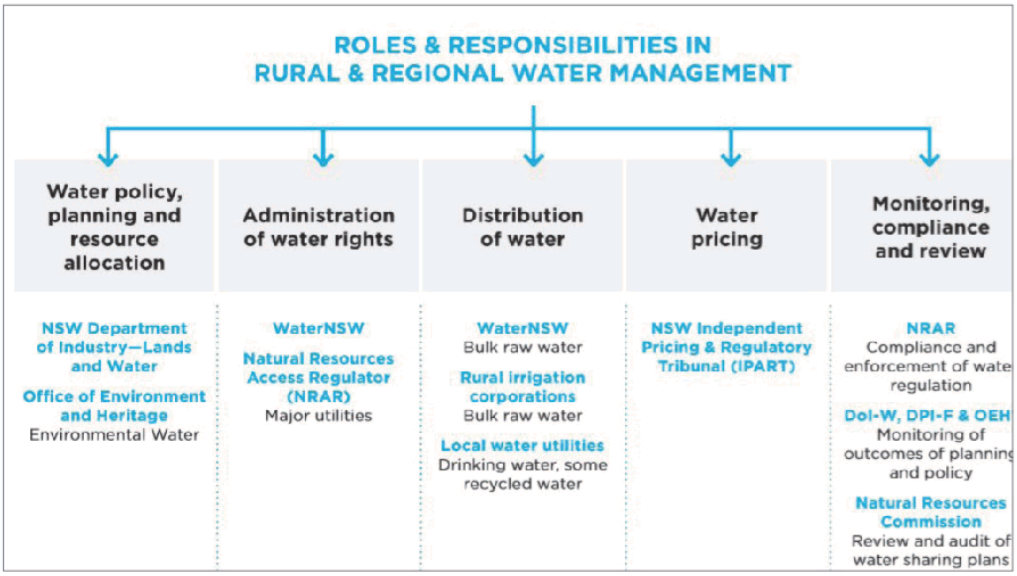


FIGURE 3-19: RURAL AND REGIONAL WATER MANAGEMENT
NSW Water management is complex. As is shown by NSW DPIE Roles and Responsibilities table above.

3.2.2 LEGISLATIVE FRAMEWORK


Water Management Act 2000 No 92

New South Wales

Status information

Currency of version

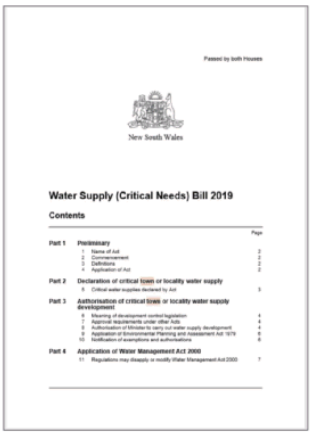
Provisions in force

Does not include amendments by—

Editorial note

Responsible Minister

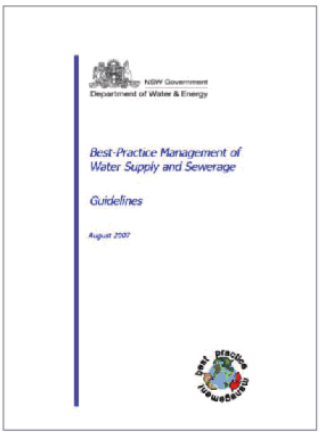
Authorisation


Passed by both Houses

New South Wales

Water Supply (Critical Needs) Bill 2019

Contents


NSW Government
Department of Water & Energy

Best-Practice Management of Water Supply and Sewerage

Guidelines

August 2007

NSW legislation

NSW Water Management Act 2000

The purpose of the act is to provide protection, conservation an ecologically sustainable development of the water sources for NSW.

The Act established a completely new statutory framework for managing water in NSW. The main objective [11]:

- To provide for the sustainable and integrated management of NSW water resources for the benefit of both present and future generations.
- Water Sharing Plans are made under the Water Management Act and the majority of NSW water access licences are issued under the Act.

This act specifies rules regarding water sharing plans across sources of surface water and ground water. These plans are revised on a 10 year cycle.

Under the Act DRC is defined as a Local Water Utility (LWU). The core function of a LWU is the sustainable provision of water supply and sewerage services to the community.

DRC is in control of several water licences under this act to extract water from the Regulated Macquarie River.

Best-practice management is fundamental to the effective and efficient delivery of these services.

NSW Water Sharing Plans

NSW Water Sharing Plans (WSPs) are regulatory instruments under the WMA 2000, and specific provisions are identified in each plan.

These plans cover surface and ground water. The status plans relevant to DRC are:

- Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2016
- Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012
- Water Sharing Plan for the Macquarie-Castlereagh Groundwater Sources 2019
- Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011

Water Resource Plans 2017 - 2019

NSW is required to develop 22 Water Resource Plans (WRP) by 2019 in the NSW Murray Darling Basin Zone These plans aim to:

- Set water sharing arrangements for consumptive users.
- Establish rules to meet environmental and water quality objectives.
- Show compliance with the Sustainable Diversion Limits.
- Include Water Quality Management Plans.
- Provide for environmental watering.
- Establish an extreme events policy.

3.2.2 LEGISLATIVE FRAMEWORK

Water Supply (Critical Needs) Bill 2019
Is to facilitate the delivery of water supply to certain towns and localities to meet critical human water needs and to declare certain development relating to dams to be critical State significant infrastructure.

The Bill allows for streamlined decision-making approval processes regarding critical infrastructure for localities including Dubbo and Wellington. The development project for Burrendong Dam access point relocation point is specifically mentioned under Schedule 2. Development listed under Schedule 2 are exempt from development control legislation (as per the *Environmental Planning and Assessment Act* 1979). It is intended that development carried out would not contravene the *Water Management Act,* however the Bill exempts State liability for the development.
The Bill has a temporary status for 2 years from assent (21 Nov 2019) with a possible extension of 1 year.

Local Government Act 1993
This Act covers day to day activities of Council. Its aim is to provide the legal framework for an effective, efficient, environmentally responsible, and open system of Local Government including the provision, management and operation of water supply and sewerage works and facilities.

The IWCM Strategy deals with section approvals relevant to the function and operation of Water Supply and Sewerage and requirements for annual reporting. Council has met regulatory targets for Section 60 approval for water and sewerage treatment works. STP effluent under a RWMP for reuse for park and farmland irrigation has not been finalised.

Public Health Act 2010
The provision of safe drinking water is an aim of this Act. Under the Act, Council is required to produce a Drinking Water Management Plan (DWMP).

Water quality is of particular issue during drought and is considered in the Emergency Management Plan at Section 8.

It is noted that the Fluoridation of Public Water Supplies Act (1957) is relevant to provision of safe drinking water.

Protection of the Environment Operations Act 1997

This Act provides for environmental protections. An object of the Act pertains to human health risks and the prevention of environmental degradation.

Council is licenced to operate Dubbo STP, John Gilbert WTP and Wellington STP. Council is obliged to meet licensing requirement for sewerage and trade waste and liquid waste discharges. Further information regarding licensing and compliance is with the IWCM Strategy currently in preparation.

The Emergency Management Plan at section 8 addresses Council approach during incidents and events that concern water and sewer.

NSW policy and guidance

Emergency Management Guidelines

Emergency management includes four recognised elements of emergency management:
Prevent or mitigate hazards from impacting the community or environment
1. Preparation
2. Response
3. Recovery
4. Prevention

Comprehensive emergency management deals with the strategies for risk assessment, prevention, preparedness, response and recovery.

The Best Practice Management of Water Supply and Sewerage Guidelines 2007

This guideline set out 6 criteria for best practice management of water supply and sewerage:
1. Strategic Business Planning
2. Pricing (including Developer Charges, Liquid Trade Waste Policy and Approvals)
3. Water Conservation
4. Drought Management
5. Performance Reporting
6. Integrated Water Cycle Management

DRC must illustrate compliance with the above in order to be considered to be following best practice. This document follows best practice for drought management.

The Framework for NSW Best Practice Management is at Appendix A.

3.2.3 DRC GOVERNANCE

DECISION MAKING OVERVIEW

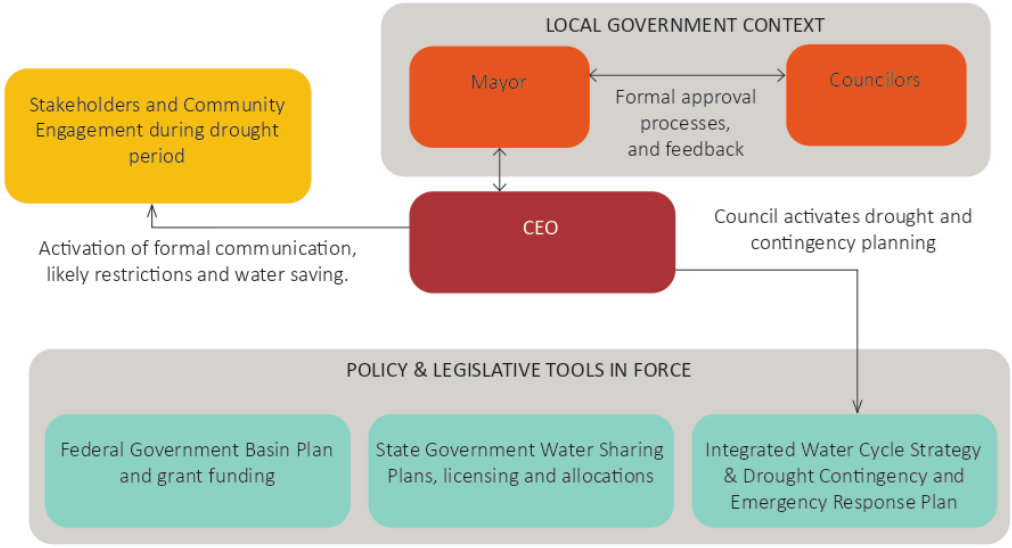


FIGURE 3-20: LOCAL GOVERNMENT CONTEXT

Council endorsement of this document gives authority to the Chief Executive Officer, in activating the drought management team and the actions within this plan. The Drought Contingency and Emergency Reponse Plan provides the policy tool to activate drought management agreed actions. This relationship is shown at Figure 3-20.

The drought management flowchart illustrates the high level actions taken by Council as part of a best practice approach. The flowchart is shown at Figure 3-21. The flowchart is responsive to changes in the drought event as it lessens or worsens based on drought trigger monitoring. DRC will categorise and escalate the incident as required, delivering a proportionate response ranging from dispatch of operations staff for routine and minor incidents, through to whole of business response for major or emergency incidents.

Council is at its discretion to activate the team structures as it deems needed. It is projected that under less severe drought circumstances the activities of the DCWERP are managed under Infrastructure teams for Water Supply and Sewer.

During a more severe drought incident the CEO may activate a whole of Council team lead by the Drought Coordinated Response Team.

DROUGHT MANAGEMENT ACTION FLOW CHART

BE WISE WITH OUR WATER

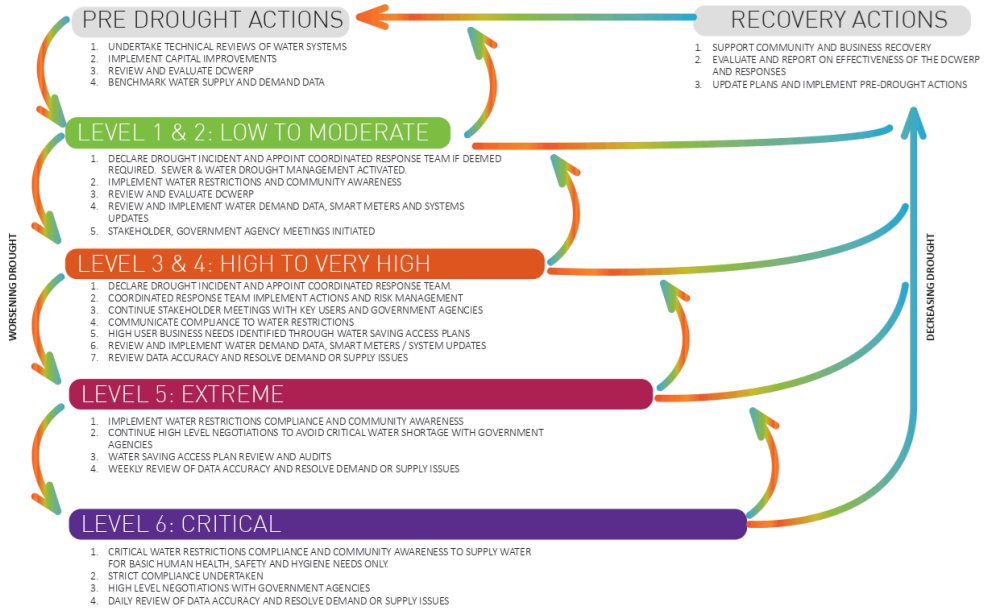
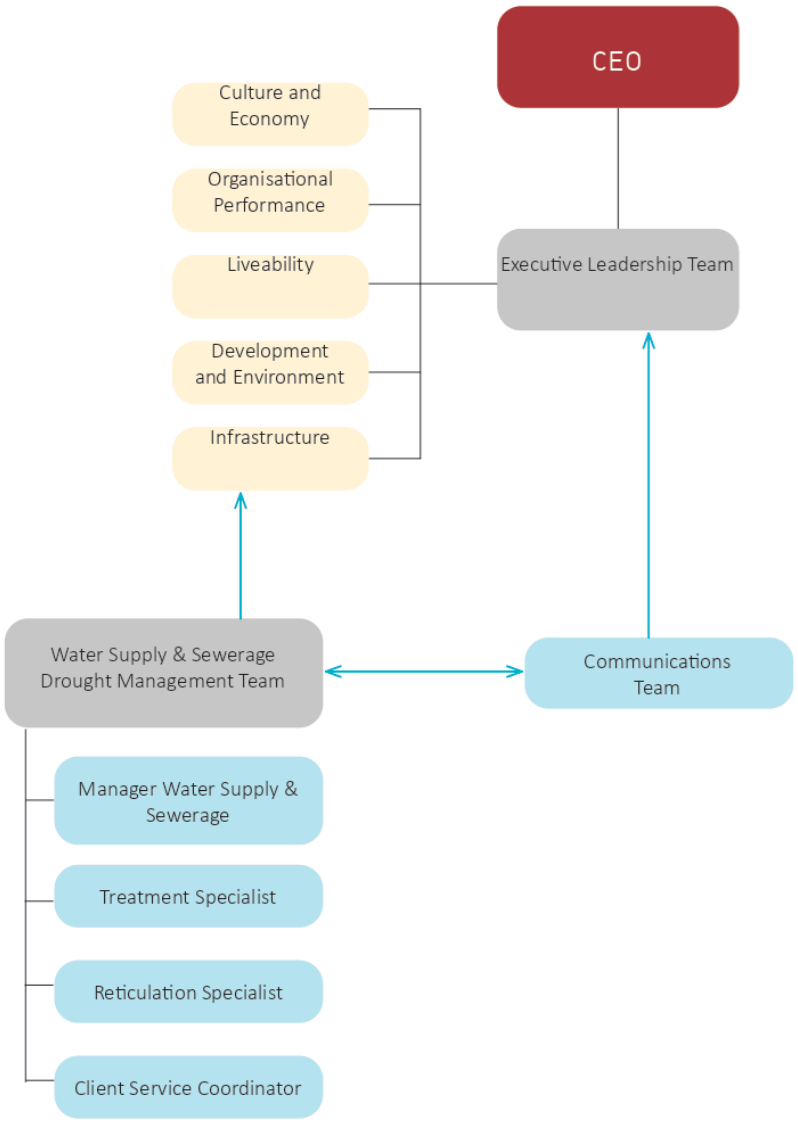


FIGURE 3-21: DROUGHT MANAGEMENT ACTION FLOWCHART

3.2.4 DRC TEAM STRUCTURE 1: LEVELS 1-3

RESTRICTION LEVELS 1 - 3: MODERATE DROUGHT CONDITIONS

FIGURE 3-22: GOVERNANCE STRUCTURE AT RESTRICTIONS LEVELS 1-3
The current structure of Council governance splits drought management activities into 2 stages. Stage 1 (Restriction Levels 1-3) structure is managed by the Sewer & Water team with support by the communications team.

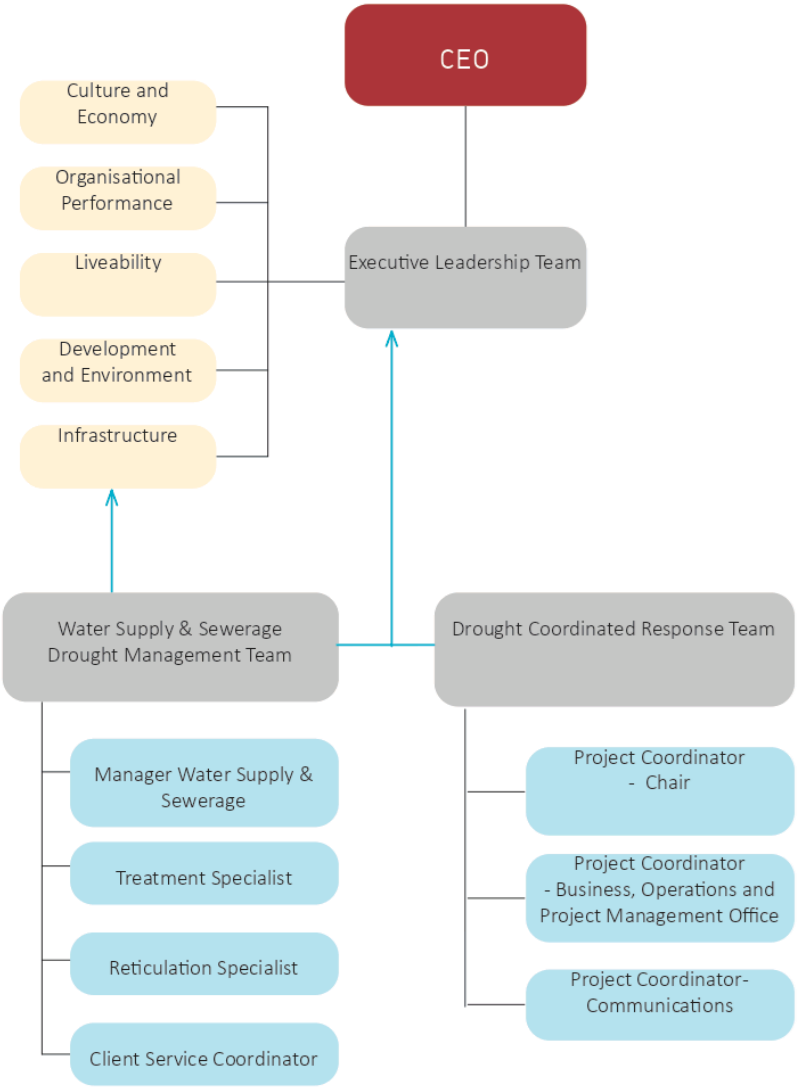


3.2.5 DRC TEAM STRUCTURE 2: LEVELS 4-6

RESTRICTION LEVELS 4-6 -EXTREME ONGOING DROUGHT

FIGURE 3-23: GOVERNANCE STRUCTURE AT RESTRICTIONS LEVELS 4-6

As indicators become apparent that drought conditions are worsening to the point that surface water is predicted to cease to flow the, CEO,activates the Drought Coordinated Response Team to facilitate management issues across all sections of Council. The roles and responsibilities of the team are structured is aligned to cover major program management monitoring and tracking and communications roles. It is recommended that the Drought Management Team is commenced 1 month prior to Level 4 restriction coming into effect.



3.2.6 ROLES AND RESPONSIBILITIES

Table 3-1 shown below identifies roles and responsibilities at all levels throughout a drought response period.

TABLE 3-1: ROLES AND RESPONSIBILITIES

ROLE	RESPONSIBILITY
Chief Executive Officer	• In consultation with the Mayor, officially declare a Drought Incident • Activate and deactivate the Drought Coordinated Response Team • Provide high level approvals
Executive Leadership	• Provide overarching guidance to the Drought Coordination Response Team • Provide intermediate approvals and strategic direction • Coordinated sub teams to deliver program actions for Culture and Economy, Organisational Performance, Infrastructure, Development and Environment and Liveability.
SEWER & WATER DROUGHT CONTINGENCY AND EMERGENCY MANAGEMENT TEAM	
Manager- Water Supply and Sewerage	• Attends Drought Coordinated Response Team meetings when the team becomes activated by the CEO. • Provide assessment of the available data with respect to security of supply • Assess timing for implementation of Level 4 restrictions and advise ELT • Call meetings and coordinate the activities of the team • Provide assessment of the available data with respect to security of supply • Prioritise tasks and allocate to team members • Assess inputs from the Operations and Communications staff and implement actions required • Identify and supply support resources for the team • Communicate with stakeholders,government agencies and major customers • Monitor progress of allocated tasks, any new developments and information flows • Assess need for and provide relief staff where necessary during an extended incident • Monitor performance of team members and take action if required. • Approve all situation reports and media releases • Assess timing for implementation of Level 4 restrictions and advise Director Infrastructure • Determine completion of response phase , advise Director and commence recovery • At the end of the drought incident coordinate a review of the response and update DCWERP for future incidents

3.2.6 ROLES AND RESPONSIBILITIES

Water & Sewer Operations Treatment Specialist	• Responsible for the link between the DCWERP and DRC Operational Activities • Implement water production operational response during the drought incident • Receive tasks from the Drought Incident Manager and coordinate group • Brief the Drought Incident Manager • Identify any additional resources required and implement with Drought Incident Manager's approval • Establish communications channels and protocols with Water Operations team and obtain detailed situation assessments and updates • Assess impact of any change in supply conditions and consider contingency options in order to maintain services • Identify need for technical advice where necessary- expedite such advice • Liaise with external groups such as emergency services and regulators • Stand down as instructed and contribute to debrief and any necessary investigations
Water & Sewer Operations Reticulation Specialist	• Implement water reticulation operational response during the drought incident • Receive tasks from the Drought Incident Manager and coordinate own group • Brief the Drought Incident Manager as required • Identify any additional resources required and implement with Drought Incident Manager's approval • Establish communication channels and protocols with Reticulation team and obtain detailed situation assessments and updates • Assess impact of any change in supply conditions and consider contingency options in order to maintain services • Identify need for technical advice where necessary and expedite such advice • Handle communications with external groups such as emergency services and regulators • Stand down as instructed and contribute to debrief and any necessary investigations
Water & Sewer Client Service Coordinator	• Responsible for customer liaison • Liaise with Drought Incident Manager to implement the Customer Notification Procedure • Receive briefing and role allocation and coordinate own group • Establish ongoing stakeholder information briefings and presentations • Provide input into preparation of media releases • Organise customer enquiry responses and answers to Frequently asked Questions for customer experience • Provide data to update website information • Assess requests for exemptions from water restrictions for the approval of the Manager Water Supply and Sewerage (includes new turf watering, first fill of pools and exceptions) • When Level 3 restrictions are implemented organise for top 100 water users to prepare their Water Savings Action Plans ready for implementation commencing from level 4 restrictions. • Implement water saving displays and public education activities • Manage breach procedures, administration and compliance with LG Act.

3.2.6 ROLES AND RESPONSIBILITIES

Facilitation of DRC wide drought management activities are managed through a Coordinated Response team. This team formalises reporting on activities that extend beyond Sewer and Water. A chair is designated to lead the team.

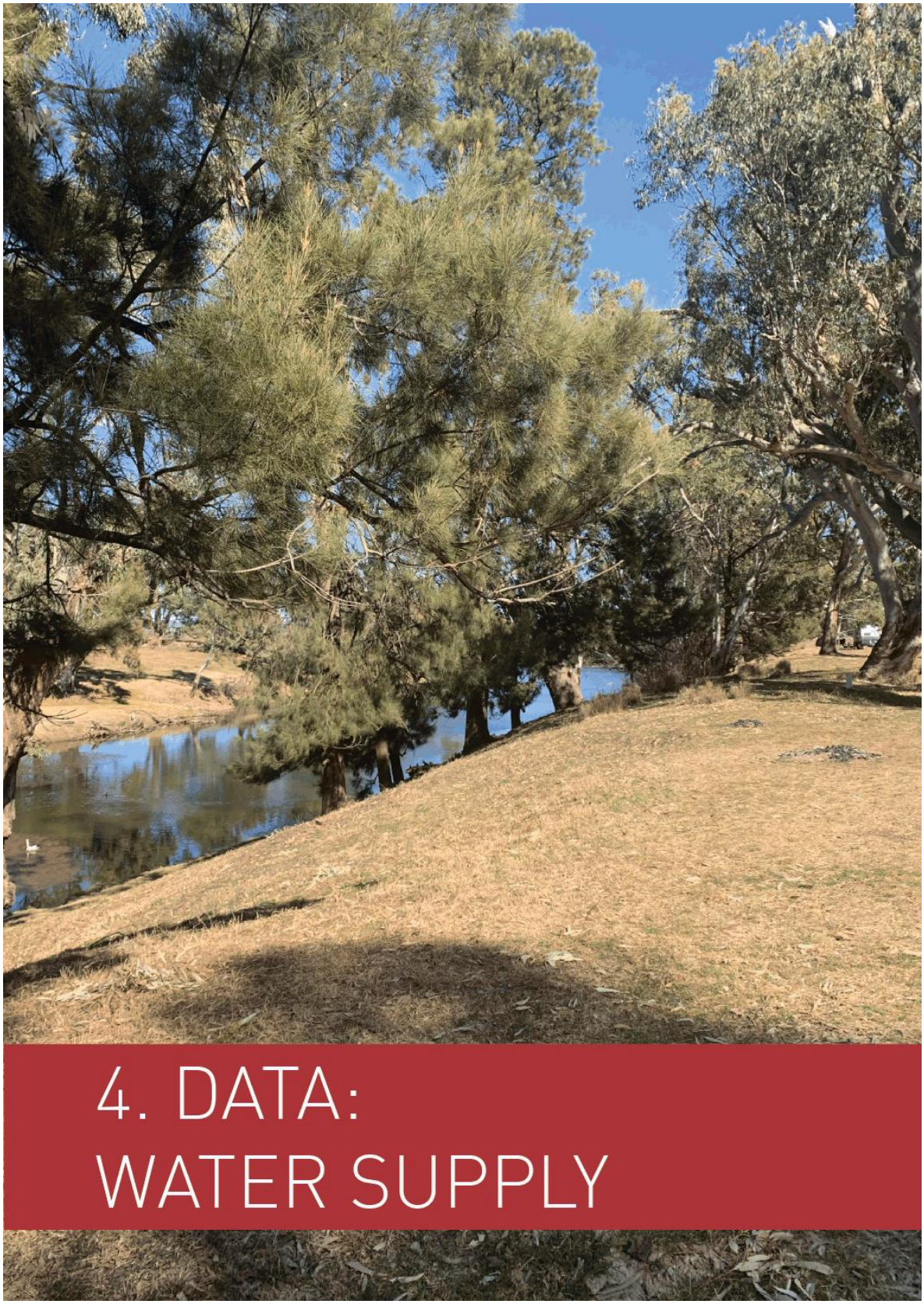
Activities of the wider DRC business are likely to have commenced, however, they are not yet formally operating through the DCWERP.

The CEO activates the operation of the Drought Coordinated Response Team (DCRT). DCRT Team activities are at Appendix F.

DROUGHT COORDINATED RESPONSE TEAM	
Project Coordinator- Chair	• Coordinate assessments of drought response • Report on water security, restrictions implementation and drought specific activities by level. • Coordinate timely briefings to Executive leadership and CEO • Allocate roles and prioritise tasks • Ensure adequate facilities and resources – both specialist and support • Ensure key stakeholders notified and personally handle liaison with authorities and major customers • Arrange provision of any essential support requirements • Assess key issues, priorities and potential implications, and develop overall response strategy and tactics • Direct and co-ordinate the inputs of the operations and communications groups • Reconvene the whole team as required for updates and reviews • Monitor new developments, information flows, and response effectiveness • Monitor the use of procedures and guidelines and effectiveness of actions taken • Monitor team member performance and establish relief system during an extended incident, including relief for the Incident Controller role • Issue stand down instructions as appropriate and ensure arrangement of debrief /counseling / investigation/recovery plan • Commence potential contingency or recovery plans as needed • Approve all situation reports prior to circulation • Post incident, coordinate review of incident and update to DCWERP • Determine completion of response phase ,advise Director and commence recovery • Coordinate drought recover review • Finalise arrangement for team on completion of DCWERP activities or at the reduction of drought to level 3 or below.

3.2.6 ROLES AND RESPONSIBILITIES

Project Coordinator- Business Operations and Project Management Office	• Implement the Operational Response Procedure during drought • Identify additional resources required • Establish communication channels and protocols with Operations Team at site, then obtain detailed situation updates and assessments • Assess incident details and collate appropriate reference material (system maps, directories, operating procedures etc.) • Facilitate responses by Rangers • Undertake monitoring, risk assessment and project management activities and report as required. • Assess impact of any change in supply conditions and consider contingency options in order to maintain services • Coordinate responses to grant funding and source further opportunities • Stand down as instructed and contribute to debrief and any necessary investigations • Coordination of materials for executive leadership program status
Project Officer- Communications	• Liaise with team to implement the communication strategy • Receive briefing and role allocation and co-ordinate own group members; identify additional resources required • Ensure the media database and customer notification listing are current • Allocate specific responsibilities for communication with each stakeholder category (authorities, customers, media, and staff) • Obtain latest incident details and arrange priority notifications • Establish ongoing stakeholder update processes • Consider media management strategy and media monitoring • Liaise with other response agencies regarding communications responsibilities and actions • Seek approvals and issue agreed initial media releases / holding statement. Consult with Drought Incident Manager as needed. • Provide “messages” guidelines to the Communications Team and other affected staff, and ensure all external messages and statements are centrally co-ordinated and approved • Arrange media interviews etc. as appropriate and brief spokesperson • Organise inquiry response resources • Develop staff information bulletins as required • Monitor communications effectiveness and external perceptions • Stand down as instructed, and contribute to debrief/investigation • Coordinate IT representative to be on standby and issue alerts to customer alert database • Coordinate and monitor communication via social networking (Facebook, Twitter, other)



4. DATA: WATER SUPPLY

4.1 WATER SUPPLY

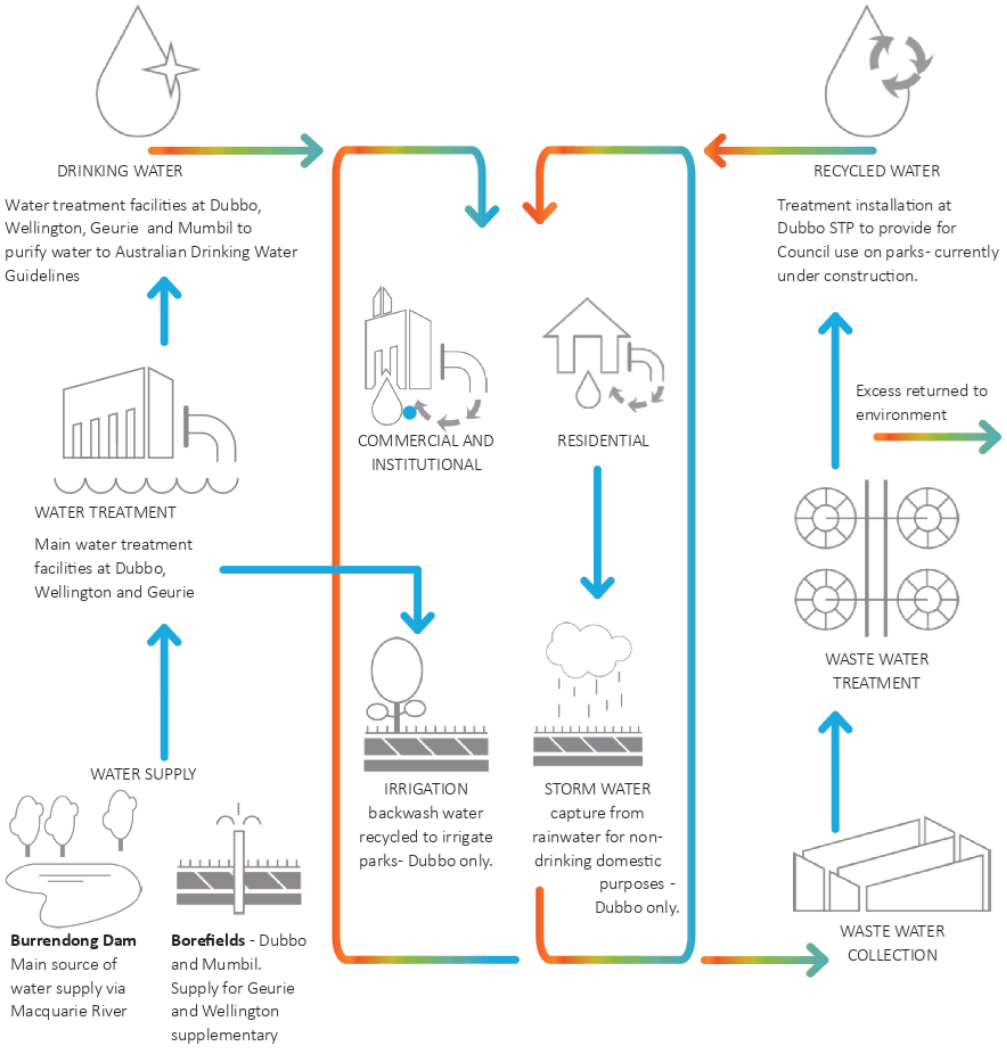


FIGURE4-1: WATER SOURCE SUPPLY, TREATMENT AND RETURN TO THE ENVIRONMENT

4.1.1 EXISTING WATER SUPPLY SYSTEMS

General

The City of Dubbo and the villages of Wongarbon, Brocklehurst Ballimore, Eumungerie and Mogriguy are served with the Dubbo Water Supply Scheme.

The town of Wellington and the villages of Geurie and Mumbil are served with separate reticulated water supply schemes, see Figure 4-1. Almost all properties within the designated urban boundaries in these centres are or can be connected to the reticulation systems.

Water supply schemes are not connected across the LGA.

1. Dubbo Water Supply Scheme:
   - Wongarbon
   - Brocklehurst
   - Ballimore
   - Eumungerie
   - Mogriguy

Refer the Dubbo Water Supply Reticulation Schematic Layout Plan, Figure 4-2.

2. Wellington Water Supply
Refer the Wellington Water Supply Scheme, Figure 4-5.

3. Geurie Water Supply
Refer the Geurie Water Supply Reticulation Schematic Layout Plan, Figure 4-3.

4. Mumbil Water Supply
Refer the Mumbil Water Supply Reticulation Schematic Layout Plan, Figure 4-4.

5. Stuart Town Water Supply
Stuart Town Water supply is non-potable supply available at a water filling station.

6. North Yeoval is currently served by the Yeoval water supply scheme, which is operated and maintained by Cabonne Council.

Other nearby smaller villages are connected to separate private non-potable water schemes or rely on rain water tanks and bores with potable water trucked in during dry periods.

BELL RIVER, WELLINGTON

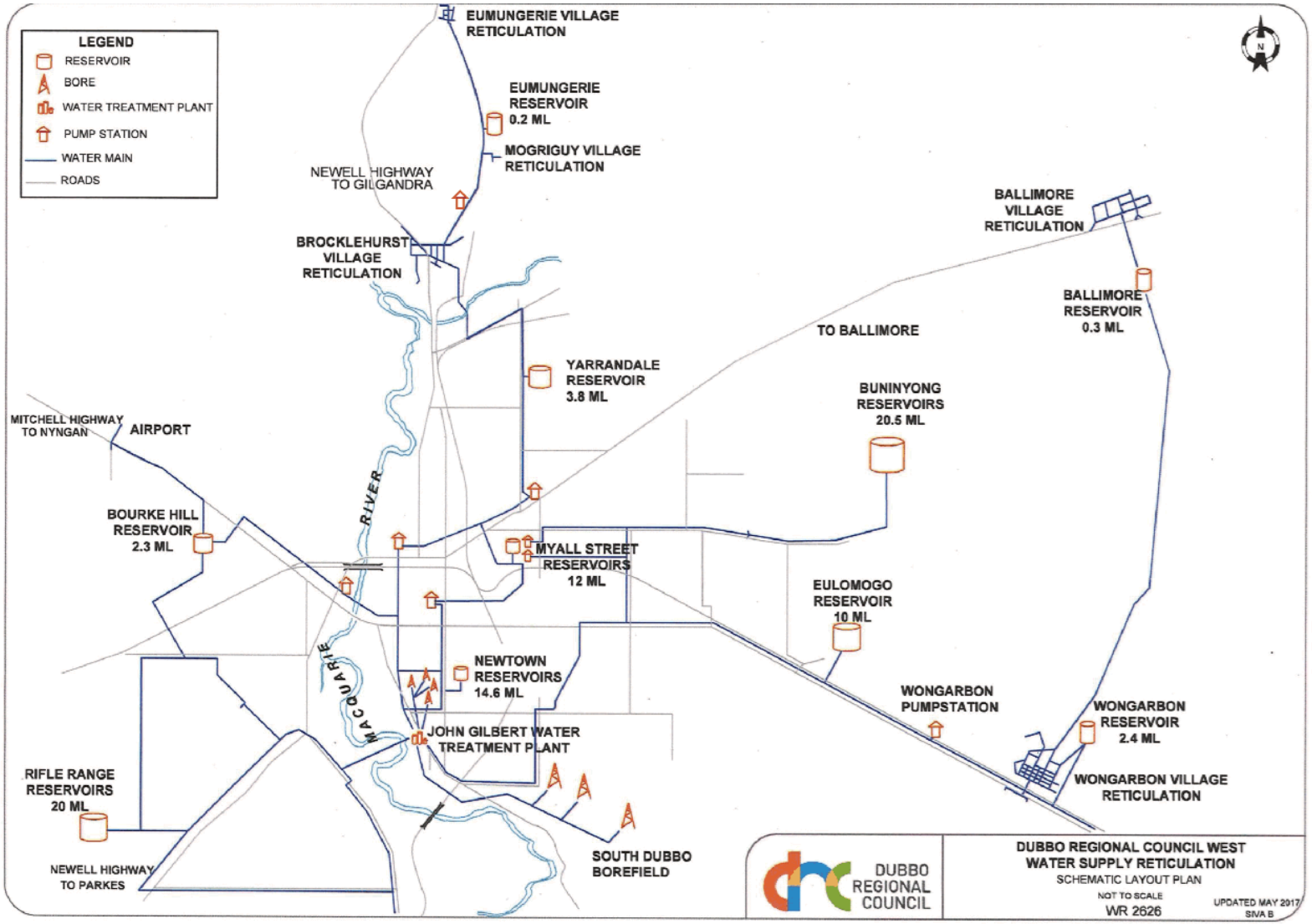


FIGURE 4-2: DUBBO WATER SUPPLY RETICULATION SCHEMATIC LAYOUT PLAN

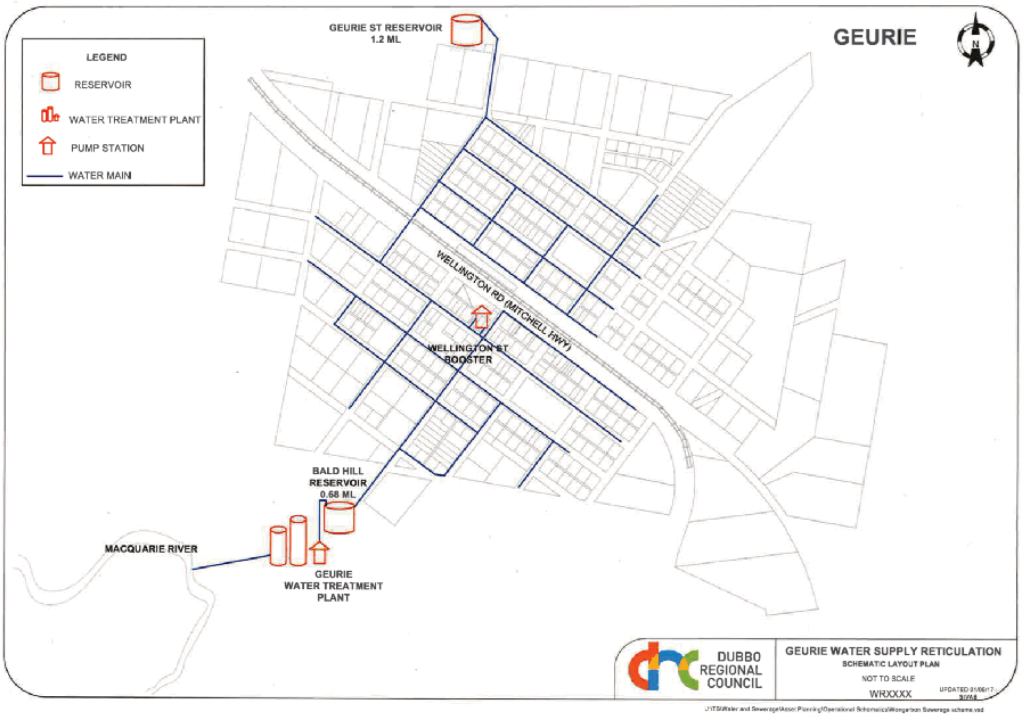


FIGURE 4-3: GEURIE WATER SUPPLY RETICULATION SCHEMATIC LAYOUT PLAN

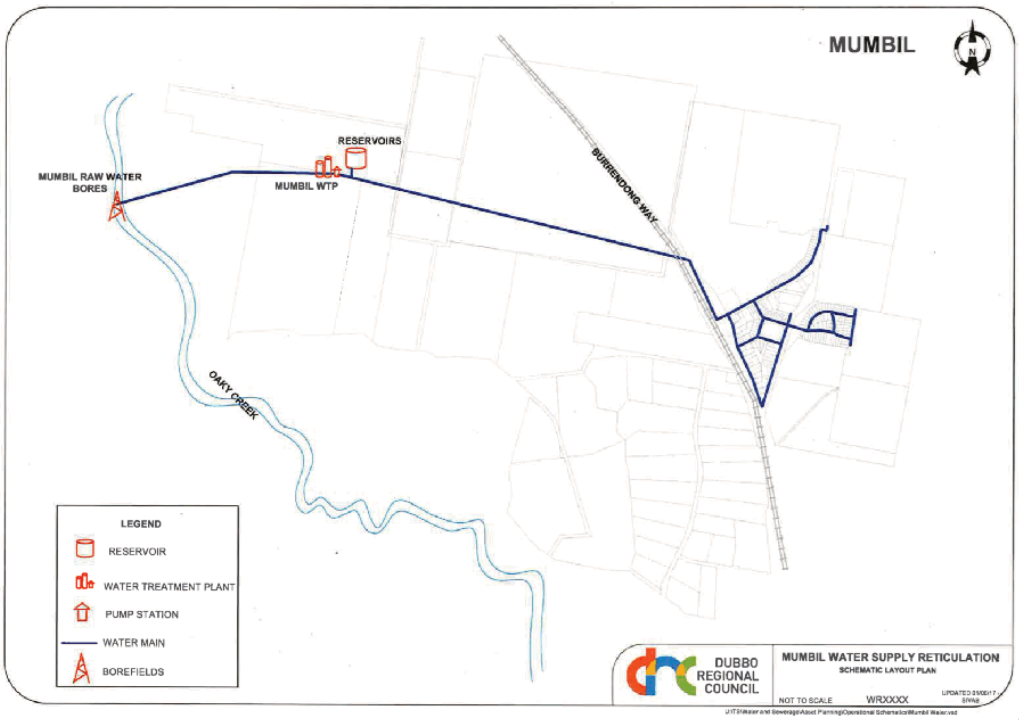


FIGURE 4-4: MUMBIL WATER SUPPLY RETICULATION SCHEMATIC LAYOUT PLAN

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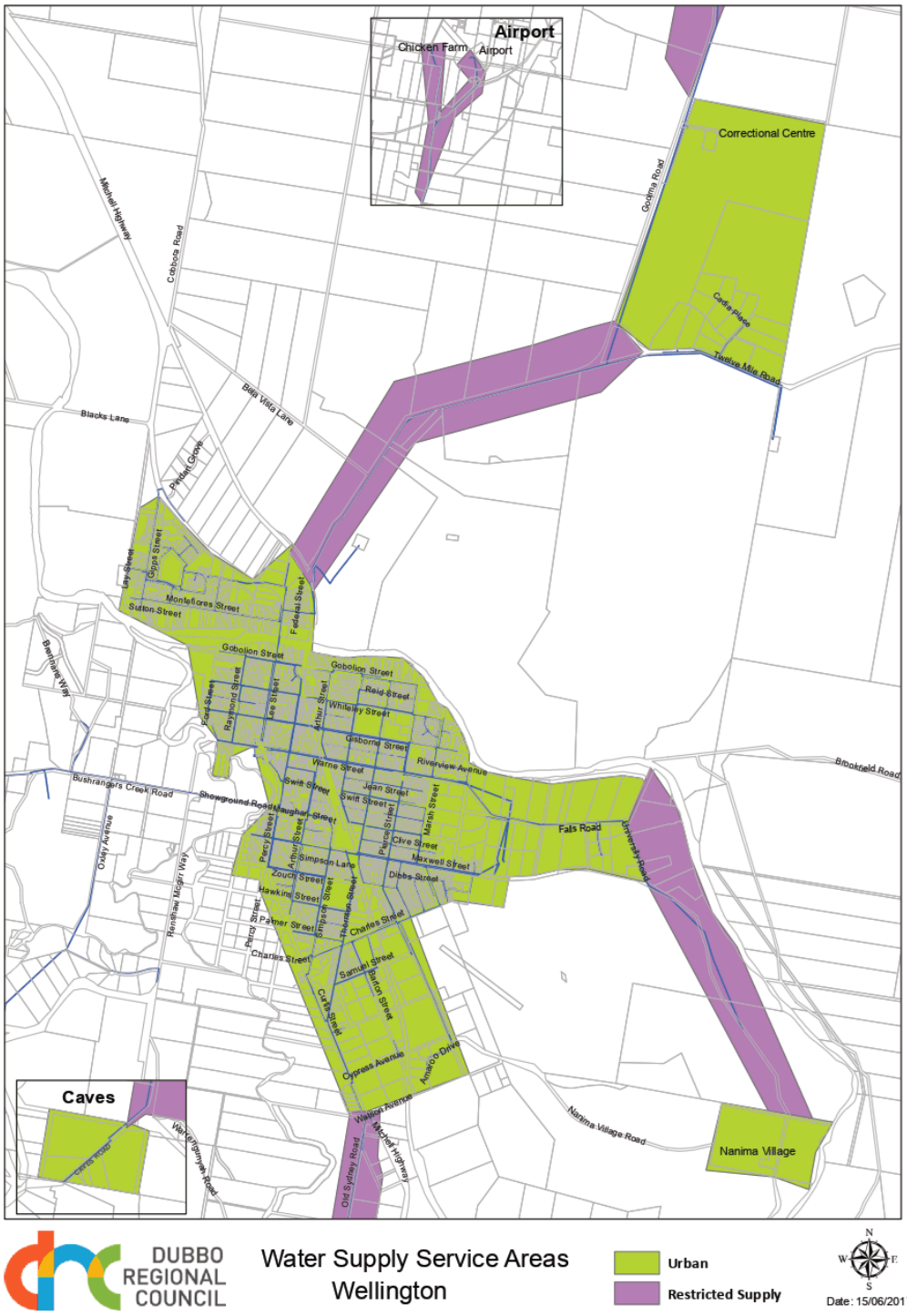


FIGURE 4-5: WELLINGTON WATER SUPPLY SCHEME

4.1.2 WATER ALLOCATION AND LICENCES

Background

Burrendong dam is the largest supplier of raw water to DRC being delivered via the Macquarie river.

Water quality in the Macquarie River is highly variable, particularly during storm events that result in high turbidity in the River. Water quality is influenced by flows in the unregulated Bell River and Little River which joins the Macquarie River downstream of Burrendong Dam. Water from Burrendong dam is the largest supplier to DRC of potable supply.

Dubbo, Wellington and the other villages on the Macquarie River use less than 2% of the annual volume of water that flows down the river valley.

Dubbo also accesses ground water from operable bores in the city vicinity. The quality of water sourced from groundwater is considered to be good, and normally supplies 30-35% of the water being treated at Dubbo Treatment Plant. The bore water is treated for hardness while possible contamination of the bores is constantly monitored. There is concern that drawing Council's full allocation from the existing bores may not be sustainable in the long term and this is being investigated. Council is also connecting other nearby irrigation bores to the water treatment plant with a view to increasing the capacity to extract its full ground water allocation in a sustainable manner.

Water Sharing Plan allocation

Water available to the towns (from the Macquarie system) is determined by the Water Sharing Plan allocations for each town water supply system. Inflow verse allocation is shown below at Figure 4-6. [6]

Water allocations for Dubbo, Wellington, Geurie and Mumbil are determined by DPIE under the Water Sharing Plans for the Macquarie and Cudgegong Regulated Rivers Water Source and the Macquarie Bogan Unregulated and Alluvial Water Source.

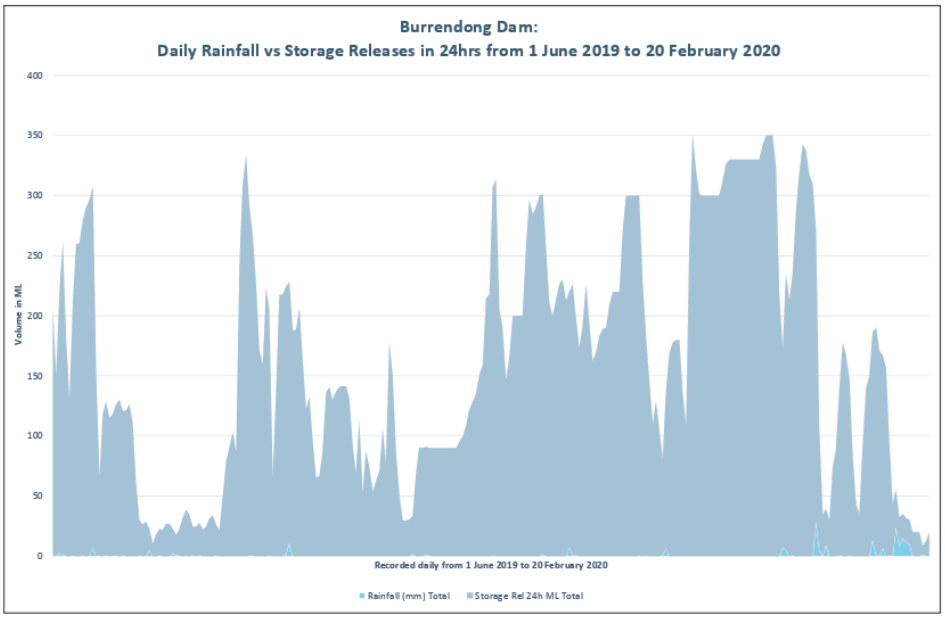


FIGURE 4-6: FORECAST FOR WATER EXTRACTION FROM 2016 TO 2051 (ML)

4.1.2 WATER ALLOCATION AND LICENCES

The *NSW Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source (2016)* states that:

1. *The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows into this water source (based on historical flow information held by the Department when this Plan commenced).*
2. *The volumes of water set aside from assured inflows into this water source and reserves held in Windamere Dam and Burrendong Dam water storages or other water storages shall be adjusted as required over the course of this Plan if necessary to do so, to ensure subclause point 1, is satisfied.*

Interpretation of this clause of the Plan indicates that management of releases from Burrendong Dam will need to be adjusted to enable 100% allocations being made available in light of the current drought of record.

The DRC town water entitlement and DRC licences to access surface water or extract groundwater are shown at Table 4-1.

LICENCE NUMBER	PURPOSE	ENTITLEMENT (ML/ANNUM)	WATER SHARING PLAN: WATER SOURCE
Dubbo Licences for Town Water			
WAL6447	Surface Water for Town water supply	8,700	Macquarie and Cudgegong Regulated Rivers Water Source
80PT970432	Groundwater for Town water supply. The entitlement is restricted at 0% surface water to 2000ML.	3,850	Macquarie Bogan Unregulated and Alluvial Water Sources: Upper Macquarie Alluvial Groundwater Source
80PT970864	Groundwater for Town water supply Part allocation for recreation	150	Macquarie Bogan Unregulated and Alluvial Water Sources: Upper Macquarie Alluvial Groundwater Source
Dubbo Licence for Facilities, Parks and Sportsfields			
80PT970045	Recreation (Elston Park) Groundwater	150	
80PT970188	Stock & Industrial (saleyard) Groundwater		
80PT971105	Recreation	50	
80PT971113	Recreation	5	
80PT971093	Irrigation	27	
Wellington, Geurie and Mumbil			
WAL6451	Surface water for Wellington WTP	1855	Macquarie and Cudgegong Regulated Rivers Water Source
WAL3008	Surface water for Wellington WTP	36	Macquarie and Cudgegong Regulated Rivers Water Source
WAL3009	Surface water for Wellington WTP	2.70	Macquarie and Cudgegong Regulated Rivers Water Source

TABLE 4-1: WATER ACCESS LICENCES

4.1.2 WATER ALLOCATION AND LICENCES

WAL6452	Surface water for Geurie WTP	300	Macquarie and Cudgegong Regulated Rivers Water Source
WAL35088	Groundwater supply for Geurie township	120	Macquarie Bogan Unregulated and Alluvial Water Sources: Upper Macquarie Alluvial Groundwater Source
WAL33851	Groundwater for Mumbil town water supply	70	Macquarie Bogan Unregulated and Alluvial Water Sources: Bell Alluvial Groundwater Source
Wellington, Geurie and Mumbil Licences for Facilities, Parks and Recreation			
80SL128721	Groundwater supplying Wellington Montefiores Bore	350	
WAL35293	Wellington caves groundwater recreation supply	100	NSW Murray Darling Basin Fractured Rock Groundwater Sources: Bell Alluvial Groundwater Source
WAL35683	Wellington caves groundwater recreation supply	41	NSW Murray Darling Basin Fractured Rock Groundwater Sources: Lachlan Fold Belt Mdb Groundwater Source
80BL236615	Unspecified Bore	19	
WAL33829	Unspecified Bore	25	NSW Murray Darling Basin Fractured Rock Groundwater Sources: Bell Alluvial Groundwater Source

Key to the discussion on adequacy of water supply is the ability for the supply to meet the needs of basic health and hygiene requirements. DRC has responsibility to be able to supply water to communities on reticulated water supply. Villages that are more vulnerable to drought will require alternative sources such as interim water cartage.

During drought periods cartage of water to villages without a potable water supply may be subsidised by NSW State Government and carried out by Council.

Water cartage

Water cartage from DRC to the smaller villages without a reticulated water supply is an impact requirement of longer droughts. Currently the towns that may require water cartage are Stuart Town, Elong Elong and Euchareena. It is an unlikely scenario that the town centres, Dubbo, Wellington, Mumbil and Geurie would require water carting. This scenario is based on no availability of surface water or groundwater. [22]

There are essentially two categories of events that may lead to an emergency that would require water carting to be implemented:

1. *A catastrophic event leading to non-availability of raw water from the Macquarie River. This includes events such as a plane crash or road tanker with toxic load into Lake Burrendong or Macquarie River upstream of the Dubbo weir pool; or failure of the water treatment plant.*
2. *Long term depletion of raw water sources leading to non-availability of water from the river and local groundwater sources.*

Under the scenario of complete failure of raw water availability from Lake Burrendong due to prolonged drought the supply of water would be more critical. The drought conditions would also lead to significant depletion in groundwater availability. However, this scenario would be predictable from monitoring of storage levels and

4.1.3 SURFACE WATER

prevailing weather conditions. This means that Council would have longer lead times to implement a coordinated plan.

Refer the Water Cartage Plan at Appendix E.

Emergency management planning at (Chapter 7) covers emergency conditions that could lead to the necessity of water carting.

The Emergency Water Carting for Dubbo Region plan investigates the infrastructure required and costs associated with water carting. These include:

- Drinking Water Quality Problem
- Major Asset Failure
- Chemical or Toxic Spill or Leak
- Natural Disaster
- Criminal Acts and Security Threats

Council is currently reviewing its Business Continuity Plan which will further detail management of emergency situations including Water Supply.

Surface Water

General

This section discusses surface water height/storage volume and height/surface area graphs for all water supply dams and weirs.

The section includes performance non-revenue water.

Burrendong Dam volume requirements

DPIE Water has undertaken modelling of the Macquarie- Cudgegong regulated river system over the 123-year period of record 1890 to 2013 to assess the drought reliability of the system, see Figure 4-7. The results of the analysis are summarised below.[12]

The volume required in Burrendong Dam to deliver all Water Sharing Plan requirements and run the river for a full water year, prior to delivering water to any general security users, is approximately 170GL. The adopted trigger for constrained deliverability of higher priority licences is:

- When Burrendong storage is below 150 GL (10 per cent of full supply volume) on 1 July. And
- Any available Windamere storage resource has been transferred (assuming that 70 GL is required to guarantee local supply under the bulk water transfer protocol).

FIGURE 4-7: BURRENDONG HISTORICAL STORAGE LEVELS 1993 - 2021,

The *NSW Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source (2016)* states that:

> *The water supply system shall be managed so that available water determinations for local water utility access licences of 100% of share components can be maintained through a repeat of the worst period of low inflows into this water source (based on historical flow information held by the Department when this Plan commenced).*

Interpretation of this clause of the Plan indicates that management of releases from Burrendong Dam will need to be adjusted to enable 100% allocations. Changes to the revised Macquarie–Castlereagh Surface Water Resource Plan (pending adoption) will see allowances for environmental water at Windamere Dam to be permitted at levels above 110GL. Historic data is at Figure 4-8.

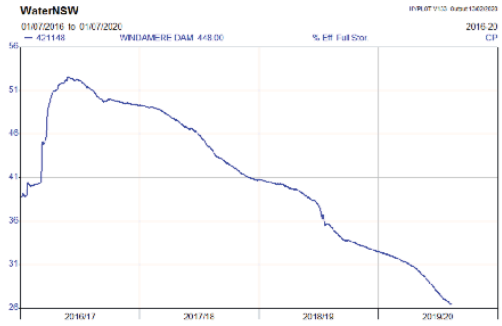


FIGURE 4-8: WINDAMERE DAM SINCE 1/07/16

4.1.4 GROUND WATER

High security water licences for bores across DRC are found at Dubbo, Wellington, Geurie and Mumbil. Parkland bores are shown. Parkland bores are not high security licences.

Dubbo

Dubbo currently has 7 production bores that normally contribute 30-35 % of the water used by the John Gilbert Water Treatment Plant.

The combined ground water licences for Dubbo total 4000ML/yr. During dry years DPIE have advised there is a lowering of the groundwater table that may damage the aquifer. Council has previously voluntarily reduced its pumping from these 7 bores to 50%.

Testing is currently being carried out to determine the sustainable yield from the bores.

Information regarding Dubbo bores is at Table 4-2. The supply shown indicates the bore performance at the time that the bore was commenced.

Current safe yield levels may differ based on dry years, wet years and overall draw down of the aquifer.

In order to provide further confidence in the availability of sustainable groundwater extractions Council is currently (February 2020) undertaking a project to connect at least 3 Council owned irrigation bores to the Water Treatment Plant.

Wellington

Council is currently planning the drilling and completion of a new bore adjacent to the existing bore at Montefiores.

Testing of the bore at Bicentennial oval indicates a safe yield of 15 ML/day . Together with the expected good yield from the new bore there should be sufficient water to supply Wellington without restrictions.

Completion of this project including connection to the Town water supply is scheduled for July 2020.

Geurie

A new bore near the decommissioned bores on the southern side of the Macquarie River on Arthurville Road has been completed and determined to have a safe yield of 0.4 ML/day which is sufficient to supply Geurie on Level 2 restrictions.

The project involves connecting the new bore via an under bore of the Macquarie River to the existing raw water rising main to the Water Treatment Plant.

Mumbil

Mumbil has a secure supply from a bore adjacent to the Bell River. The only issue is that the water is hard. Council has budgeted to install a softener.

BORE NAME	LICENCE NO.	YEAR DRILLED	PUMP INSTALL	DIA (MM)	DEPTH (MM)	SUPPLY* (L/S)
Driftwell Bore	V109157	1975	1976	305	55.2	70
Harper	V109158	1974	1976	304	45.7	40
Wheelers	V106337	1970	1979	324	59.2	70
Ronald	v109155	1975	1976	305	47.2	33
Thorby	v109156	1973	1976	305	70.1	60
Shibbles 1	v100431	1974	1979	304	46.6	80
Shibbles 2	v100432	1974	1979	304	49.3	126
Parkland Bores						
Elston park	v106335	1964	1966	203	61	40
River bank	23374	1967	1972	203	38.4	30
Martins	V106336	1957	1958	305	37.8	53

* Bore performance at the time of commenced year

TABLE 4-2: DUBBO BORE INFORMATION

4.1.5 WATER TREATMENT PLANTS

Ground water and surface water is treated at WTPs. The Water Supply Service Areas (WSSA) are shown at:

- Dubbo - Figure 4-9
- Eumungerie & Mogriguy - Figure 4-10
- Wellington - Figure 4-12
- Geurie - Figure 4-11 and
- Mumbil- Figure 4-14.

Refer to the IWCM Strategy for greater detail regarding water treatment plants.

John Gilbert Water Treatment Plant

Treated water is pumped from two hydraulically connected clear water tanks at the plant, before distribution to the City of Dubbo, Brocklehurst and Wongarbon, Ballimore, Mogriguy and Eumungerie.

The connection to Eumungerie & Mogriguy includes a pump station at Brocklehurst which pumps water through a 16.6 km long rising main to a 100 kL reservoir at a high point. From there, water gravitates through a main to reticulation at Eumungerie & Mogriguy. A chlorination plant is installed and now commissioned at the Eumungerie supply.

The main reservoirs supporting this supply system are at Rifle Range, Newton, Eulomogo and Buninyong. See Table 4-3 for details.

Water Supply Scheme	Description
Dubbo - John Gilbert Water Treatment Plant	
Bore water maximum extraction capacity	27.5 ML/d
Raw water extraction capacity	64 ML/d
Predosing	Powdered Activated Carbon, Ferric Chloride, Polyelectrolyte, Soda Ash, Lime
Clarification	Conventional
Post Clarification	Re-carbonate
Filtration	6 sand/coal gravity filters
Chlorination	Chlorine, Fluoride
Clear water tank	4.5 ML

TABLE 4-3: DUBBO - JOHN GILBERT WTP

Wellington water supply scheme

The Wellington scheme was commissioned in 1993 and is not as complex. The reservoirs that support this system are located at Barton, Montefiores, and Hospital Hill, at Table 4-4.

Water Supply Scheme	Description
Wellington	
Raw water maximum extraction capacity	25 ML/d or 19.4
Bore water extraction capacity	Not currently in operation.
Treatment capacity	14.6 ML
Predosing	Powdered Activated Carbon, PACL, Lime, Polymer, Potassium permanganate
Sedimentation	Two settling lagoons
Post Clarification	Hydrated lime
Filtration	6 sand/rapid gravity filters
Chlorination	Chlorine, Fluoride
Clear water tank	0.8 ML

TABLE 4-4: WELLINGTON WTP

Geurie water supply scheme

This water scheme is a simplified scheme with only reservoirs at Bald Hill and Geurie Street and a booster at Wellington Road, at Table 4-5.

Water Supply Scheme	Description
Geurie	
Raw water maximum extraction capacity	22 ML/d
Bore water maximum extraction capacity	Not currently in operation.
Treatment capacity	1.5 ML
Predosing	Powdered Activated Carbon, Alum, Soda Ash and Powdered Activated Carbon
Sedimentation	Two settling lagoons

TABLE 4-5: GEURIE WTP

4.1.5 WATER TREATMENT PLANTS

Geurie continued

Post Clarification	Soda Ash
Filtration	6 sand/coal/rapid gravity filters
Chlorination	Chlorine,
Clear water reservoir	15 kL

TABLE 4-5: GEURIE WTP

Mumbil water supply scheme

Mumbil system was constructed in 1955. The scheme currently serves approximately 250 persons. The WTP is co-located with the reservoir for the village.

Water Supply Scheme	Description
Mumbil	
Raw water maximum extraction capacity	1.1 ML/d
Treatment capacity	1.5 ML
Chlorination	Chlorine Bore water is chlorinated without pre treatment.
Clear water tank	32 kL

TABLE 4-6: MUMBIL WTP

Stuart Town, Euchareena and Elong Elong

The villages have limited schemes and are reliant on majority of water from individual rainwater tanks and bores.

Euchareena (approximately 25 houses) have a limited non-potable water supply scheme operated by residences in conjunction with individual household rainwater tanks. Not all properties within Euchareena are connected to the communal scheme.

North Yeoval

Water scheme is managed by Cabonne Council.

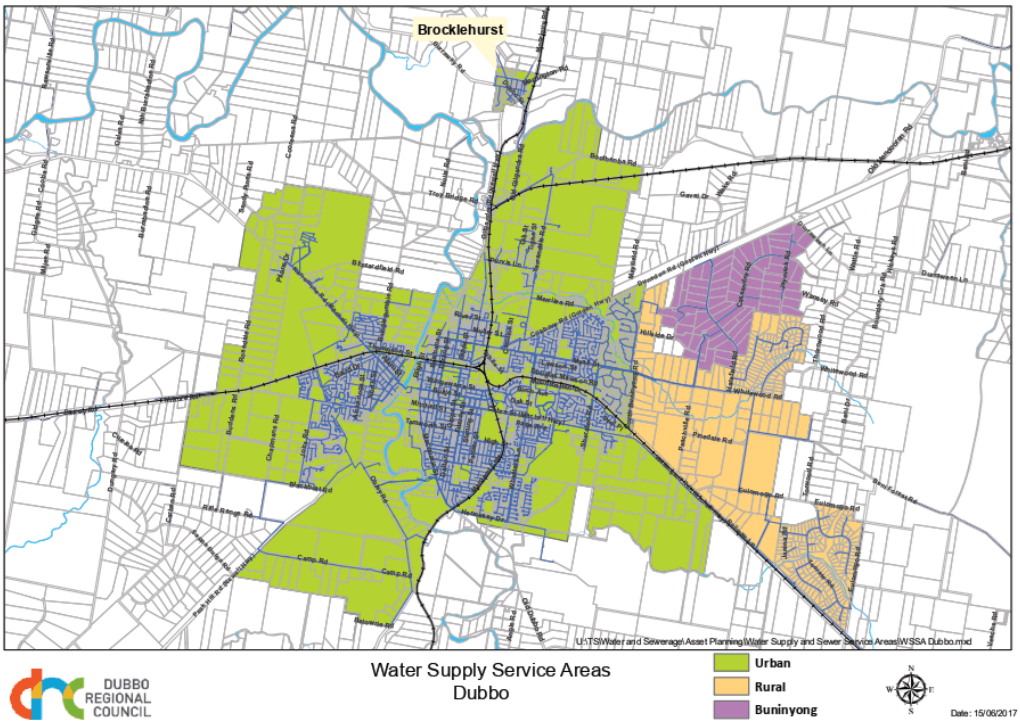
Identified risks to WTPs

DRC Business Continuity Plans cover the ongoing development and management of strategies around the two main risks:

- loss of production at WTPs
- extended power interruption at WTPs.

Emergency management considers these risks within the plan at Chapter 7.

FIGURE 4-9: WATER SUPPLY SERVICE AREAS FOR DUBBO



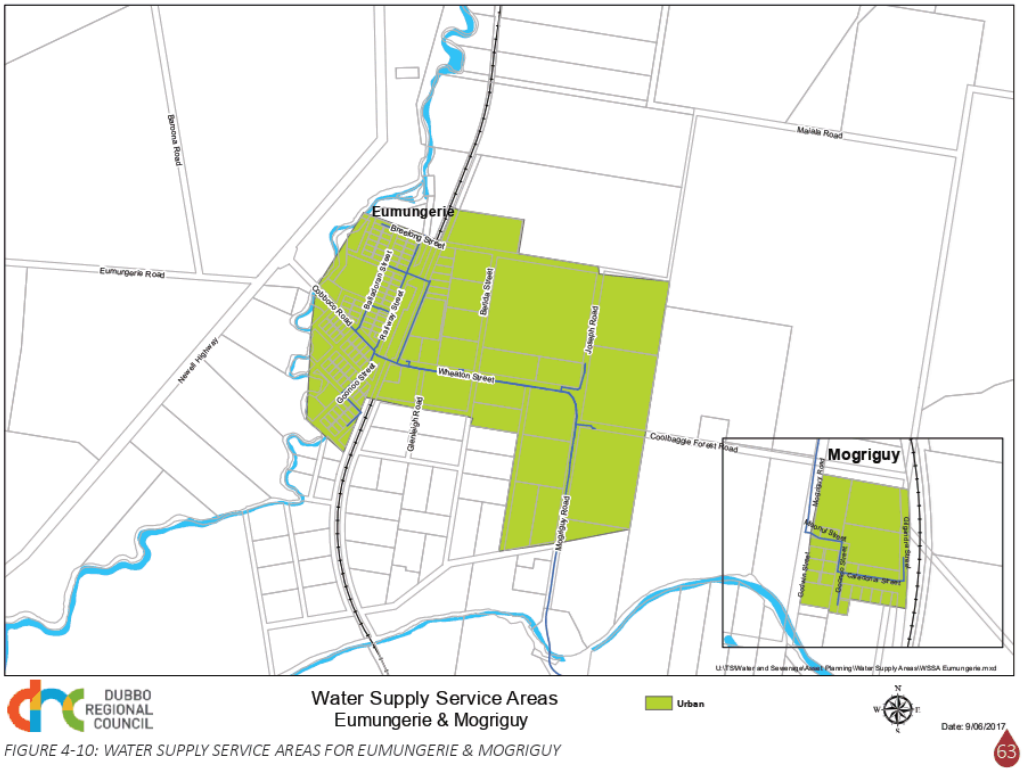
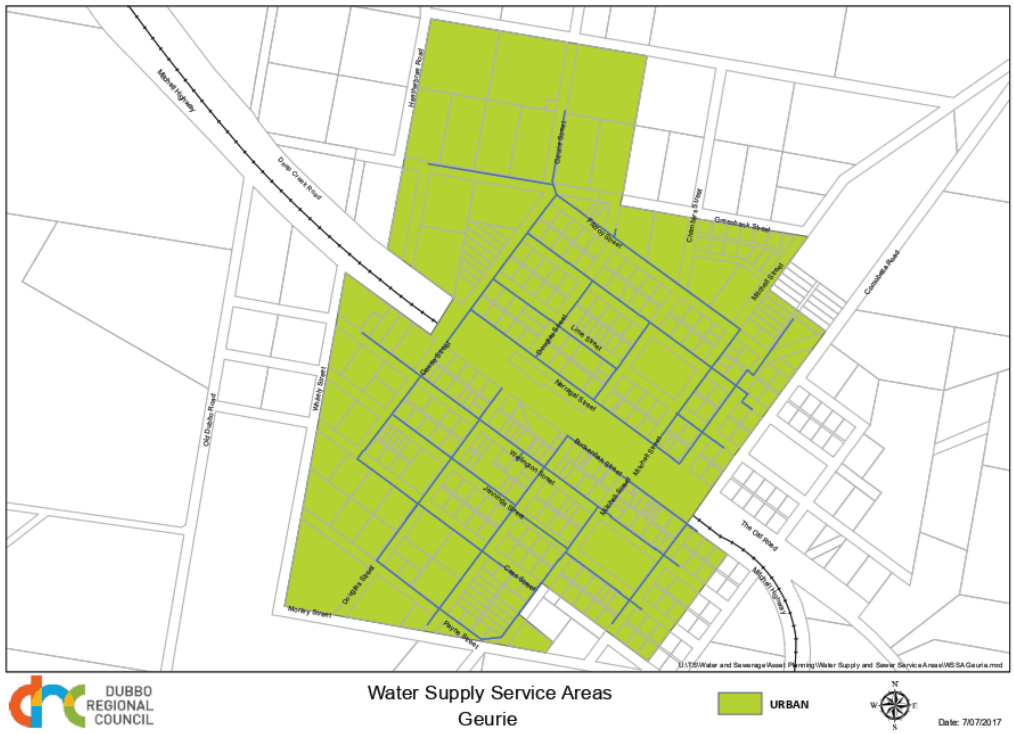


FIGURE 4-10: WATER SUPPLY SERVICE AREAS FOR EUMUNGERIE & MOGRIGUY

FIGURE 4-11: WATER SUPPLY SERVICE AREAS FOR GEURIE



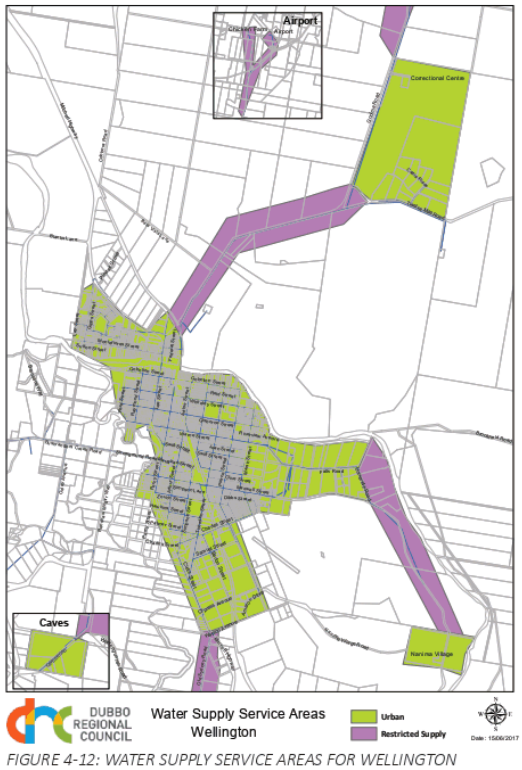
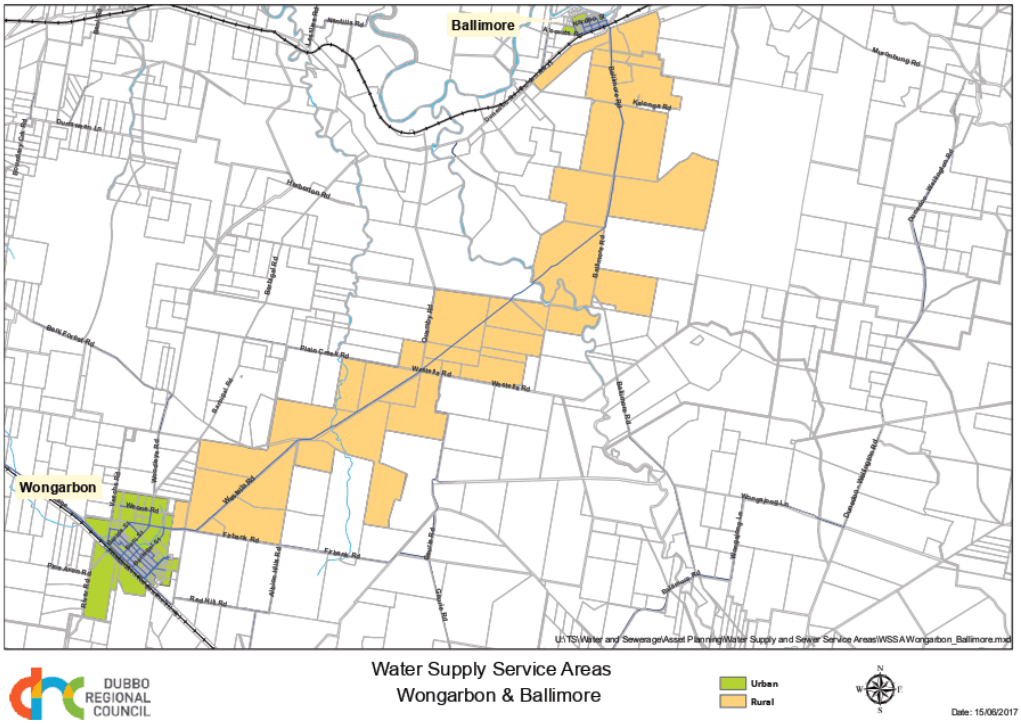


FIGURE 4-12: WATER SUPPLY SERVICE AREAS FOR WELLINGTON

FIGURE 4-13: WATER SUPPLY SERVICE AREAS FOR WONGARBON & BALLIMORE



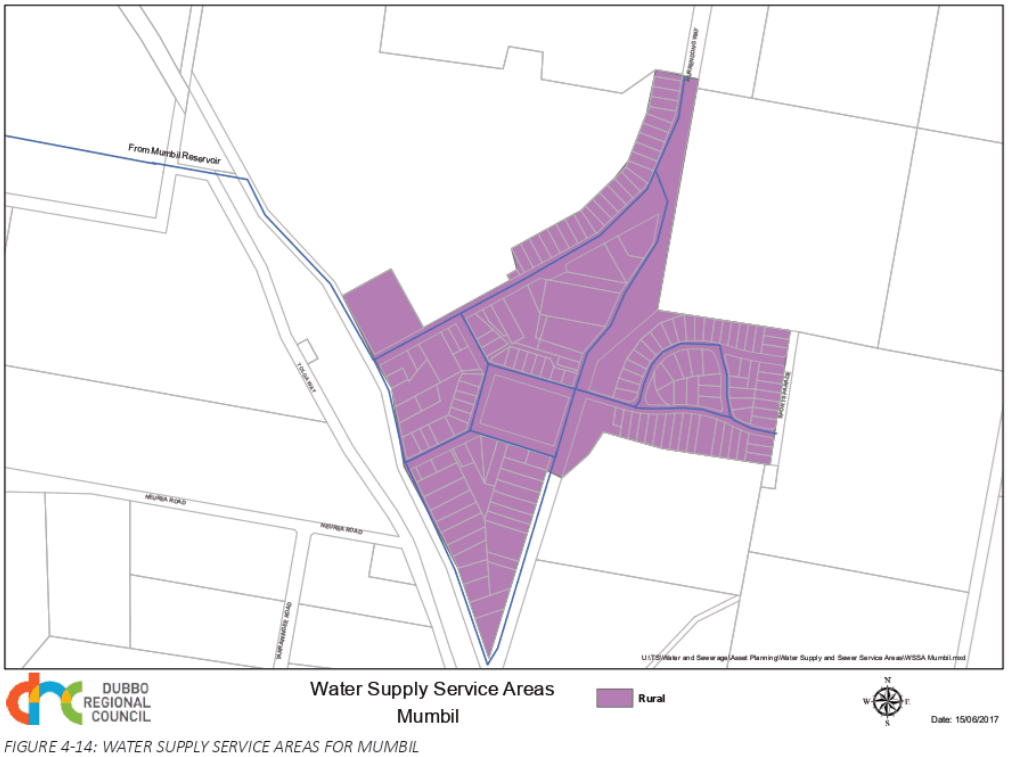


FIGURE 4-14: WATER SUPPLY SERVICE AREAS FOR MUMBIL

4.1.6 SEWAGE AND STORM WATER

Wastewater systems

Dubbo Regional Council operates separate sewerage schemes for Dubbo (including Brocklehurst), Wellington, Geurie, Mumbil and Wongarbon. Outside of these service areas, on-site sewage management (including septic tanks, aerated wastewater treatment systems, pit toilets and composting toilets) and private sewerage systems are used.

Wastewater treatment processes rely on both biological processes and chemical processes to treat wastewater to an acceptable quality for discharge into local waterways under licence.

Treatment processes include:
Inlet works
Biological Treatment
Chemical treatment
Biosolids handling
Effluent disinfection

Dubbo Sewerage Treatment Plant (STP)

Dubbo and Brocklehurst return waste water to Dubbo STP. Once treated the effluent may:

1. Be used for Irrigation of the STP grounds and bird wading ponds.
2. Be used to irrigate nearby farmland. Farm lands include Fletchers International (abattoir), Polldale and Greengrove.
3. Be used for irrigation at sports fields and parks.
4. Treated effluent under licence conditions may be discharged to the Macquarie River. Treated effluent is only discharged to the Macquarie River during wet weather events when the storage ponds reach capacity.

Biosolids are applied as a soil conditioner at Council's Greengrove Effluent facility.

The sewage received at the Dubbo STP is currently treated and then irrigated on Council owned and some privately owned properties in order to produce fodder (under licence).

Council received $30 million in funding to secure the City's town water supply and Council is currently undertaking an effluent reuse project with a view to substituting irrigation of some Parks and Recreation facilities with treated effluent.

The project also includes delivering treated effluent to the Taronga Western Plains Zoo and eventually to an irrigator south of the city in exchange for bore water.

Further effluent reuse is being scoped across Parks and Recreational areas.

Wellington STP
The sewage system at Wellington is via pumping stations, 84.4km reticulation and rising mains that transport the sewage to a STP.

The effluent is disinfected and is currently discharged into the Macquarie River. Council is currently planning on discharging directly into the Macquarie River via a pipeline.

The former Wellington Council has installed an effluent reuse system for the Wellington Race Course and is available for use when required.

Geurie STP

The sewerage scheme comprises approximately 9.5 km of gravity sewers, 1.5 km of rising mains, 1 sewage pumping station and an STP. The Geurie STP treats sewage to a standard suitable for irrigation and is allowed to be discharged into a nearby creek during wet weather events.

Wongarbon STP

The Wongarbon STP treats sewage to oxidation and evaporation ponds. Effluent is also irrigated via centre pivot on adjoining land.

Mumbil wastewater

Mumbil has a common effluent system where the effluent from private septic tanks is discharged to oxidation/evaporation ponds.

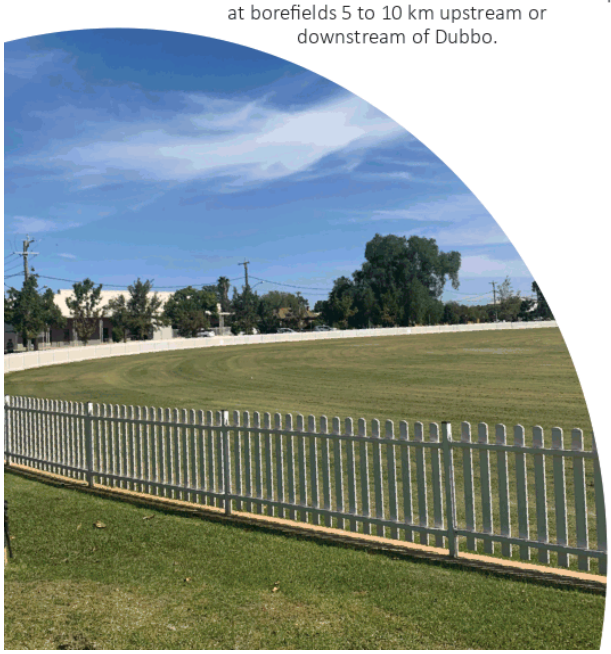
4.1.7 WATER SUPPLY FOR OPEN SPACE

Approximately two-thirds of irrigation demand is met by town (potable) water. The remaining one-third of irrigation demand is met by either raw bore or river water, with approximately 80 percent being irrigated with bore water and 20 percent with raw river water. A small area is irrigated through effluent reuse.

Parks irrigated with river water are at a very high risk, as it is likely that general security allocations fall below 100 percent of allocation in dry years. 'Zero' allocations during some years are also a possibility.

Reduced general security allocations occurred during 15 of the last 30 years, a trend that is likely to continue with an increase in rainfall variability and drought frequency and severity. The cease to flow of surface water triggers will incorporate the level of reduction of water for parks and recreation purposes. This will have severe impacts on the ability of Council to maintain the upkeep of its green open spaces, which are of significant importance to the region. Water NSW is considering raising the rock point weir to sustain water supply to assist with this purpose.

By contrast, falling groundwater levels in are a more localised issue. This mainly only affects the groundwater level in the vicinity of the bore. This occurrence is largely limited to South Dubbo Borefield. The issue is less prevalent, or does not exist, at borefields 5 to 10 km upstream or downstream of Dubbo.



It is recommended that DRC consider under-utilised High security licences (due to its voluntary extraction limit). It may therefore be possible to use a portion of the remaining High Security licences at other parks for irrigation purposes.

Current parks and recreation restrictions tables are at Appendix D.

Use of recycled water and water efficient landscaping

Recycled sewage effluent is used for agricultural purposes in Dubbo.

Storm water harvesting and reuse programs are proposed for DRC.

In addition to the use of recycled water for open space irrigation, Council has implemented water efficient turfing and landscaping in some open space areas.

Stormwater reuse

Council has installed a stormwater reuse system at Apex Oval. A grant application has been submitted for further capture, treatment and reuse of stormwater near the Macquarie River.

4.1.8 WATER SECURITY

Water security is a longer term issue that is not drought specific and is part of the IWCM strategy and supported within the Business Continuity Plan.

Drought reliability

However, drought reliability and the strategies are important to ensure that during drought times water supply is reliable, safe to use and measurable.

During the drought of 2017-2020 water security measures of immediate concern include:

- Additional ground water allocations on a temporary basis are available to be purchased.
- Treatment of effluent to a standard suitable for reuse on Council Recreation areas utilising part of $30 M funding from the State Government.
- Connection of irrigation bores to the water Treatment Plant in order for Council to extract more water, utilising part of $30 M funding from the State Government
- Bore water supply associated with higher security licences at Wellington and Geurie are functioning and available as an emergency supply.
- Burrendong Pipeline project in line with $30M received funding and the Critical Water (Bill) NSW 2019.

Triggers that relate to worsening drought include the assessment of available surface water supply. Groundwater supply is considered the emergency supply that DRC must rely on should surface water in the Macquarie River cease to flow.

Demand management

Refer to 4.2 Demand management for further information regarding peak daily demand information.

All Council operated facilities are required to:

- Submit WSAPs.
- Comply with published non-residential restrictions for commercial and institutional facilities.
- Parks and gardens are designated water reductions in line with published DRC Restrictions. These tables are at Appendix D.

New residential development zones

Systems upgrades are included in planning and strategic development under the IWCM. This includes planning for expanded areas of residential supply.

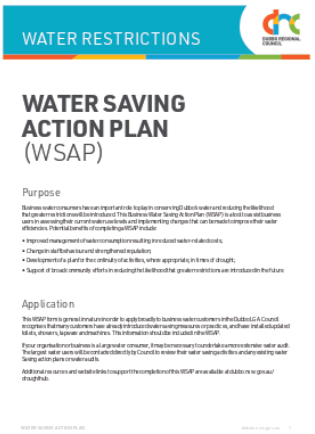


FIGURE 4-15: WSAP AT APPENDIX C

Drought modelling

Drought modelling of Burrendong Dam releases will undertaken by DPIE and WaterNSW in order to provide more secure water supply to LWU's and High security users in future droughts of record.

4.1.9 WATER QUALITY

Water source quality

Raw Water quality may impact the ability of Council to supply a large number of customers with potable water meeting the Australian Drinking Water Guidelines. Incidents and risks are set out in the Emergency Response Plan.

Levels of Service for water quality are set out in detail within the Business Continuity Plan, IWCM Strategy and Issues Paper.

Drinking Water Management Systems (DWMS) have been prepared for the former Wellington and Dubbo Councils. These systems define the critical control points (CCP) for drinking water quality. Operational Limits for each system are shown below at Table 4-7.

CRITICAL CONTROL POINT	OPERATIONAL LIMITS	ADJUSTMENT LIMITS	CRITICAL LIMITS
Dubbo Water Supply			
CCP1 pH	6.5 – 8.5	<7.0- >8.0	<6.5- >8.5
CCP2 Turbidity	<5.0 NTU	>0.2 NTU	>1.0 NTU
CCP3 Colour	<15.0 HU		
CCP4 Free Chlorine – High	2.0 – 3.0 mg/L	>2.5	>4.5
CCP5 Free Chlorine – Low	2.0 – 3.0 mg/L	>1.5	>1.5
CCP6 Fluoride – High	0.8 – 1.2 mg/L	>1.0	>1.2
CCP7 Fluoride – Low	0.8 – 1.2 mg/L	<0.8	<0.9
Wellington Water Supply			
Mixing, flocculation and sedimentation: Turbidity	1.5 – 4.0 NTU	2.0--4.0 NTU	>4.0 NTU
Mixing, flocculation and sedimentation: pH	7.5 – 8.0	<7.5- >8.2	<6.5- >8.5
Six filtration units: Turbidity	0.2 – 0.5 NTU	>0.5 NTU	>1.0 NTU
Clearwater quality: Turbidity	0-0.5 NTU	0-1.0 NTU	>1.5 NTU
Clearwater quality: pH	7.4 – 8.2	<7.4 and > 8.2	<7.0- >8.6
Clearwater quality: Free Chlorine	2 – 4 mg/L	<2.0- >4 mg/L	<1.5- >2.0 mg/L
Post dose chlorination: Chlorine Residual at CWT Outlet	2-5 mg/L	<2- >5 mg/L	<2- >5 mg/L
Fluoridation Plant: Fluoride content	0.95 – 1.1 mg/L	<0.95- >1.1 mg/L	<0.8- >1.5mg/L

TABLE 4-7: WATER QUALITY CRITICAL CONTROL POINTS OPERATIONAL LIMITS - DUBBO & WELLINGTON

4.1.9 WATER QUALITY

CRITICAL CONTROL POINT	OPERATIONAL LIMITS	ADJUSTMENT LIMITS	CRITICAL LIMITS
Geurie Water Supply			
Mixing, flocculation and sedimentation: Turbidity	1.5 – 4.0 NTU	2.0--4.0 NTU	>4.0 NTU
Mixing, flocculation and sedimentation: pH	6.8 – 8.5	<6.5- >7.5	<6.5- >8.0
Six filtration units: Turbidity	0.2 – 0.5 NTU	>0.5 NTU	>1.0 NTU
Clearwater quality: Turbidity	0-0.5 NTU	0-1.0 NTU	>1.5 NTU
Clearwater quality: pH	7.4 – 8.2	<7.4 and > 8.2	<7.0- >8.6
Clearwater quality: Free Chlorine	1 – 1.5 mg/L	<1.0- >1.5 mg/L	<0.5- >2.0 mg/L
Post dose chlorination: Chlorine Residual at CWT Outlet	1.0 – 2.0 mg/L	<1- >1.2 mg/L	<0.6- >5.0 mg/L
Mumbil Water Supply			
Post dose chlorination: Residual Chlorine at the Clear Water Tank Outlet	0.9 – 1.2 mg/L	<0.9- > 1.2 mg/L	<0.2- >1.5 mg/L

TABLE 4-8: WATER QUALITY CRITICAL CONTROL POINTS OPERATIONAL LIMITS - GEURIE & MUMBIL

4.1.10 WATER SUPPLY MONITORING

TREATMENT PROCESS - TURBIDITY TARGET (CCP for treated water is between 0-0.5 NTU, if the treatment plant can consistently produce water with turbidity ≤0.3 NTU, the LRV of Conventional filtration can be considered)	LOG REDUCTION VALUE (LRV) CREDIT		
	PROTOZOA	VIRUS	BACTERIA
Dubbo Water Supply - Conventional filtration			
Individual filtrate turbidity ≤0.3 NTU for 95% of the month and not >0.5 NTU for 15 consecutive minutes. Combined filtrate turbidity ≤0.3 NTU for 95% of the month and not >0.5 NTU for 15 consecutive minutes.	3.0	2.0	2.0
Chlorination (C.t of 161.9 mg.min/L)		4.0	2.0
Dubbo Total LRV	3.0	6.0	4.0
Wellington Water Supply- Conventional filtration			
Individual filtrate turbidity ≤0.3 NTU for 95% of the month and not >0.5 NTU for 15 consecutive minutes. Combined filtrate turbidity ≤0.3 NTU for 95% of the month and not >0.5 NTU for 15 consecutive minutes.	3.0	2.0	2.0
Geurie Water Supply			
Individual filtrate turbidity ≤0.3 NTU for 95% of the month and not >0.5 NTU for 15 consecutive minutes. Combined filtrate turbidity ≤0.3 NTU for 95% of the month and not >0.5 NTU for 15 consecutive minutes.	3.0	2.0	2.0

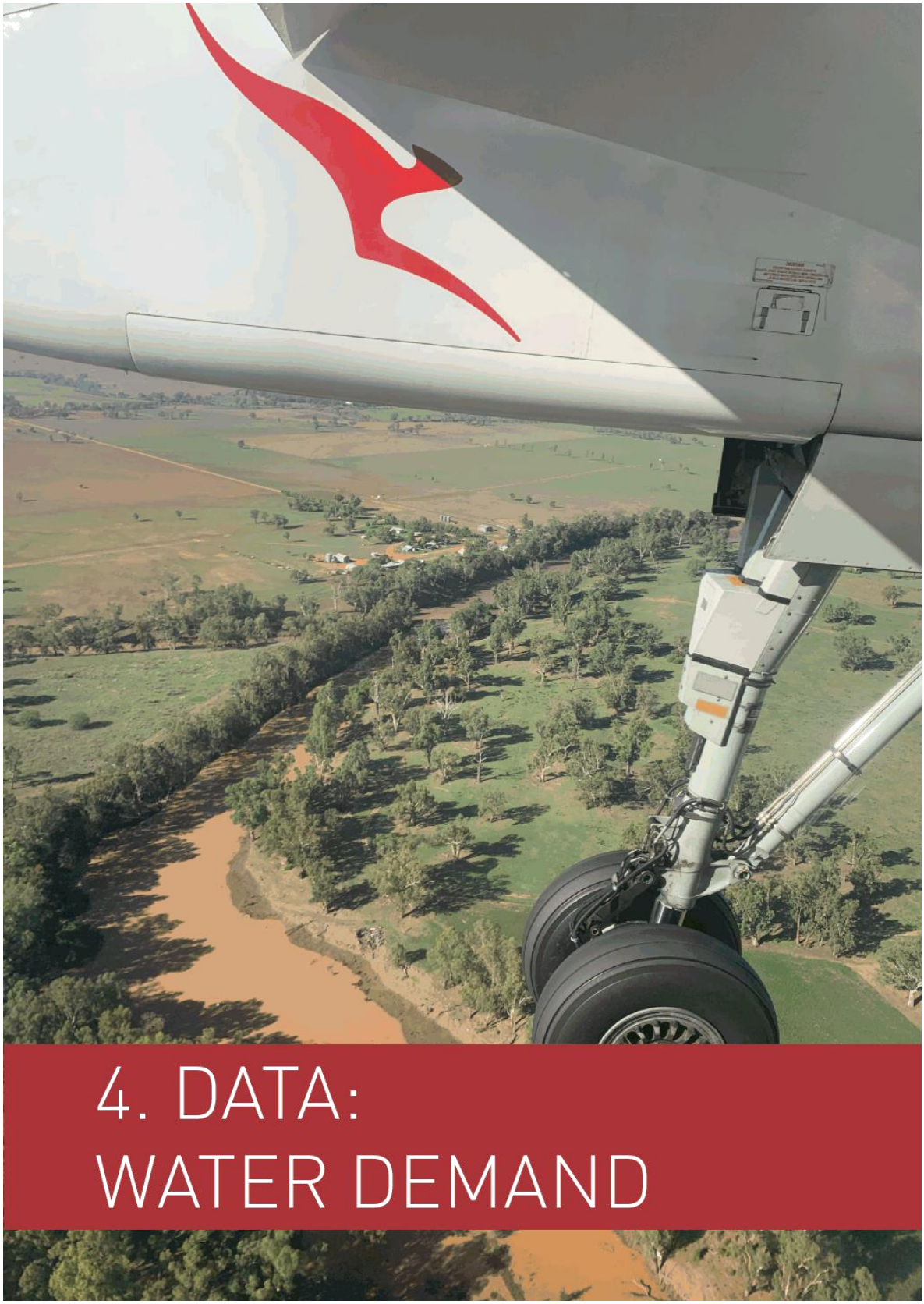
TABLE 4-9: WATER SUPPLY HBT

Monitoring water quality

Water quality is managed for several factors. These include:

- Effective disinfection of water leaving the WTPs by measuring Free Chlorine Levels.
- Calculation of minimum chlorine contact time to ensure sufficient inactivation of chlorine for chlorine sensitive pathogens.
- Periodic inspection of reservoirs
- Daily monitoring of town water quality in Dubbo and weekly monitoring at other supply systems.

The Department of Health is considering introducing Health Based Targets (HBT's) as a measure of microbial safety of water. The current treatment capability and assessment category of the treatment Plants is presented in Table 4-9 below. Further detail can be found within the IWCM Issues Paper.



4. DATA: WATER DEMAND

4.2 DEMAND FOR WATER

Overview

This section covers the Demand Management aspects of delivering a water supply system. Information regarding day to day operations and demand assessment are part of the IWCM. The DCWERP covers high level information and data to support the actions of the plan.

Demand Management is covered under the NSW Office of Water Best Practice Management Guidelines (2007). [10] Demand management should cover four elements:

1. Demand monitoring
2. Demand forecasting
3. Demand management planning
4. Implementation

Water conservation measures were developed for the former Dubbo City Council under the Demand Management Plan 2014.

The information provided within this section complies with best practice guidance.

It will cover:

- Historical demand information.
- Management of areas such as new release areas.
- Identification of normal and minimal potable and non potable water requirements.
- Fire fighting and issues of pressure availability.
- Tourism demand.
- Impacts of demand by major users or large water consumers.
- Trigger information.
- Current water usage information and production.

DRC demand management of the water supply during drought periods can include:

- Active reduction of demand through water restrictions.
- Promotion of leak detection, pressure management and water efficiency programs for residential and commercial use.

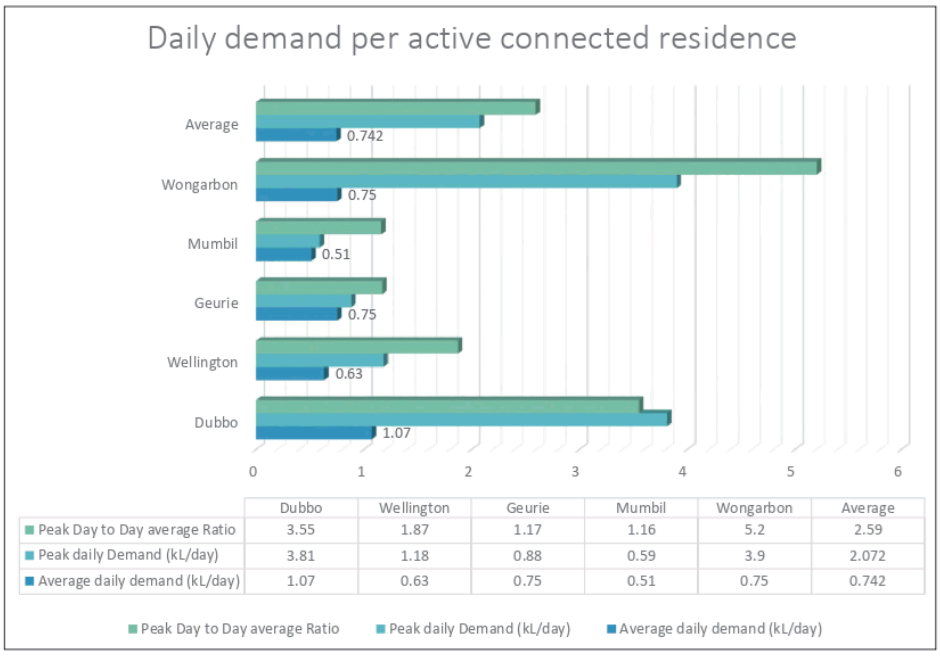


FIGURE 4-16: AVERAGE DAILY DEMAND FOR RESIDENTIAL WATER USAGE

4.2.1 DEMAND MANAGEMENT

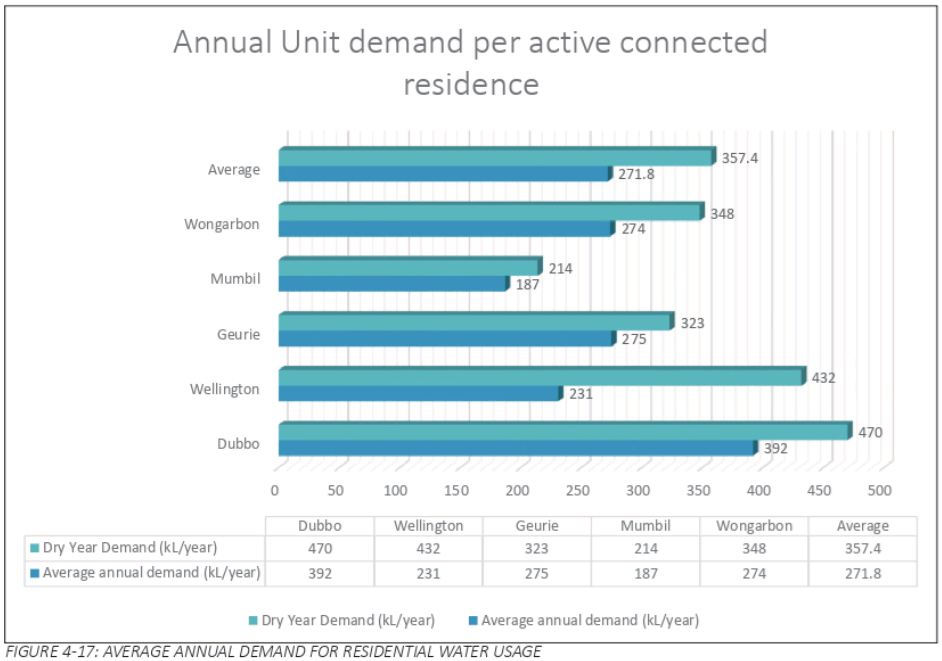


FIGURE 4-17: AVERAGE ANNUAL DEMAND FOR RESIDENTIAL WATER USAGE

- Implement water recycling.
- Installation of rainwater tanks across all Council buildings and facilities.

A note on water triggers

Water triggers are discussed within the context of demand management and as they relate to water restrictions. However this document supports a transition to a system of information to support decision making on drought and restrictions.

Historic demand data

The demand for water was based on current data information to set the baseline. The baseline data is the standard estimated water consumption per person per day for residential use. Residential uses include indoor activities, such as showering, toilet flushing, dish washing and external use for garden maintenance.

The baseline data for water demand across connected residents from Dubbo and Wellington is 357 kL residence per year . Daily demand at Figure 4-16 and Annual demand Figure 4-17 per active connected residence charts shown. These figures are derived from data from 1 January 2013 to 13 February 2017.

Bulk water production is metered and monitored. This includes accounting for non-revenue water.

System leakage

There are unidentified sources of 'leakage' across the town water supply system. Where this occurs the data is assessed for outlier peak demand uses that have affected the general modelling. For example, Wellington residential water demand can be affected by institutional uses from the correctional centres located nearby. These facilities use tanks and periodically refill from town water. When this occurs figures for Wellington demand spike. These types of intermittent water demands are systematically assessed across water demand to reduce inaccuracy.

4.2.1 DEMAND MANAGEMENT

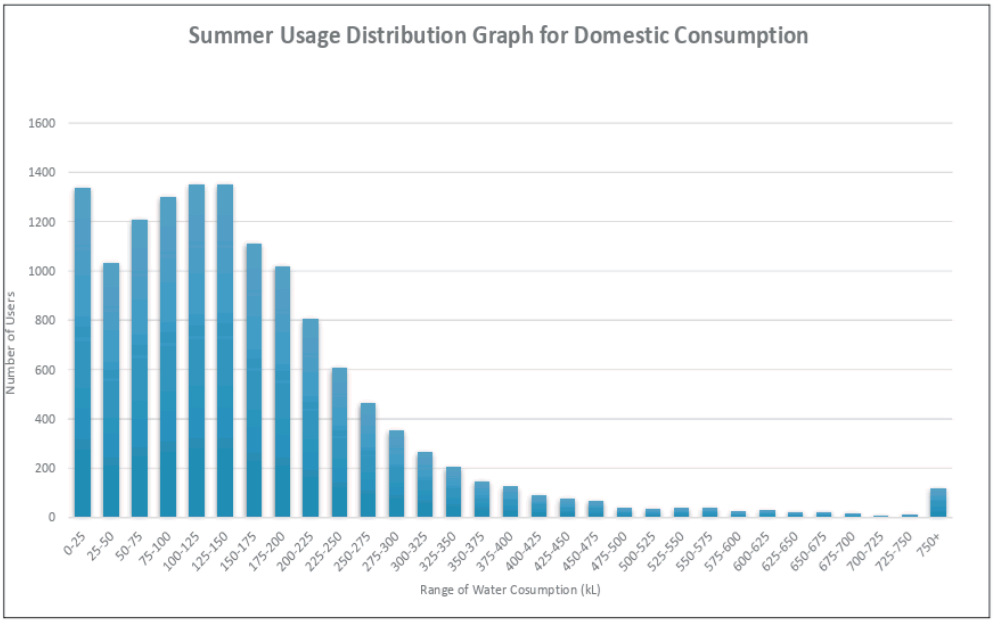


FIGURE 4-18: SUMMER USAGE DISTRIBUTION GRAPH FOR DOMESTIC CONSUMPTION

Climate variability

The impact of climate change prediction has been projected across south-east Australia. These predictions are for rainfall, temperature and transpiration records from 2020- 2070. Peak wet weather flow has been calculated at 15 times average dry weater flow for Dubbo, 12 times for Wellington and 16 times for Geurie.

Forecast for customer accounts and metered demand

2019 modelling for Dubbo domestic consumption during summer peak has indicated that 25% of residential domestic customers are using 54% of the water. This is shown at Figure 4-18, summer usage distribution graph for domestic consumption.

The graph above equates to:

1. The majority of the population are conserving household use. 83% of the population are in the 25-350kL daily water use range, accounting for 78% of total water consumption.
2. 10% of users are super efficient using 1% of total water consumption. These users are within 0-25kL band.
3. The least efficient 7% use 21% of water, this is over 350kL.

The forecast change to customer accounts and metered demands are shown at Figure 4-19, number of accounts (by type of customer) by year graphs. Further breakdown information is detailed in the IWCM. The table shown provides an indication of the increasing demand for consumption by type of user over time. The figures shown do not include an increased efficiency through BASIX on new residential housing development. BASIX in the Dubbo Region targets 30% reduction in water consumption.

Ongoing monitoring is essential for the operation of the plan. The plan sets out triggers and target usage measures that can be tracked to reduce risks and limit ongoing issues around water shortage.

During a drought or emergency incident the water restrictions are set to reduce demand. These are triggers to indicate whether Council will need to change water restrictions to an alternative level.

4.2.1 DEMAND MANAGEMENT

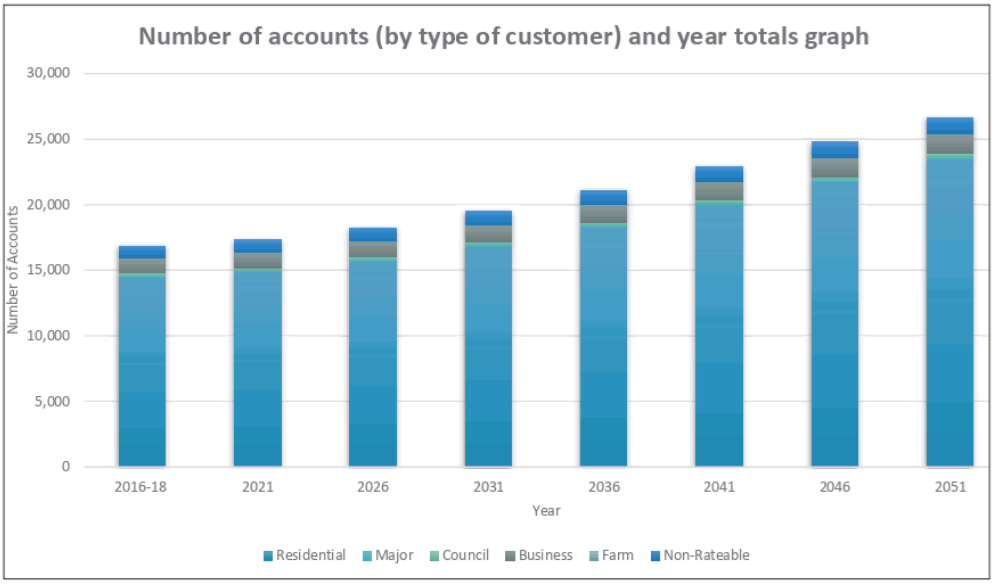
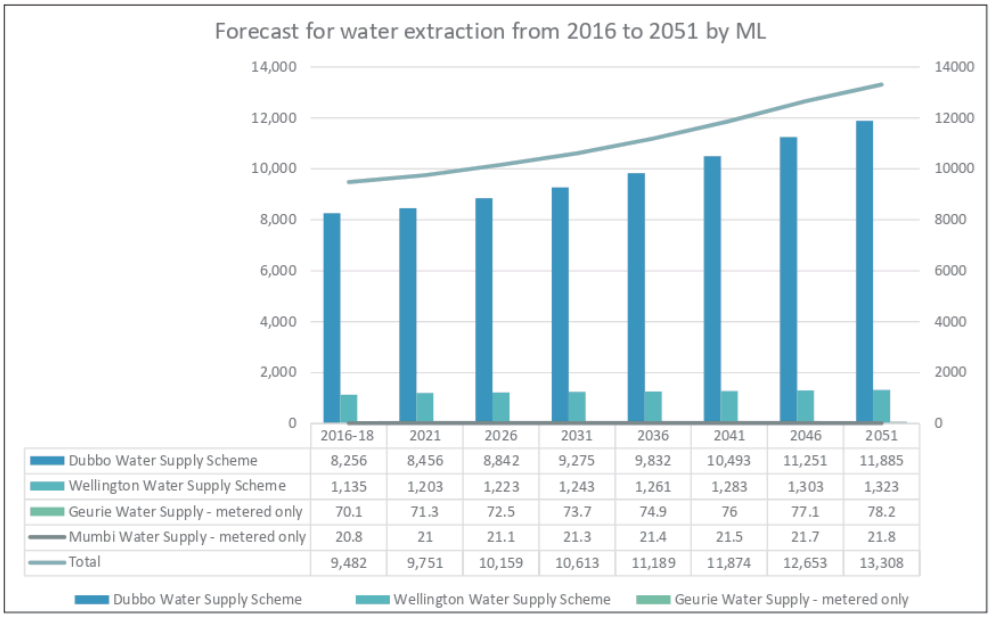


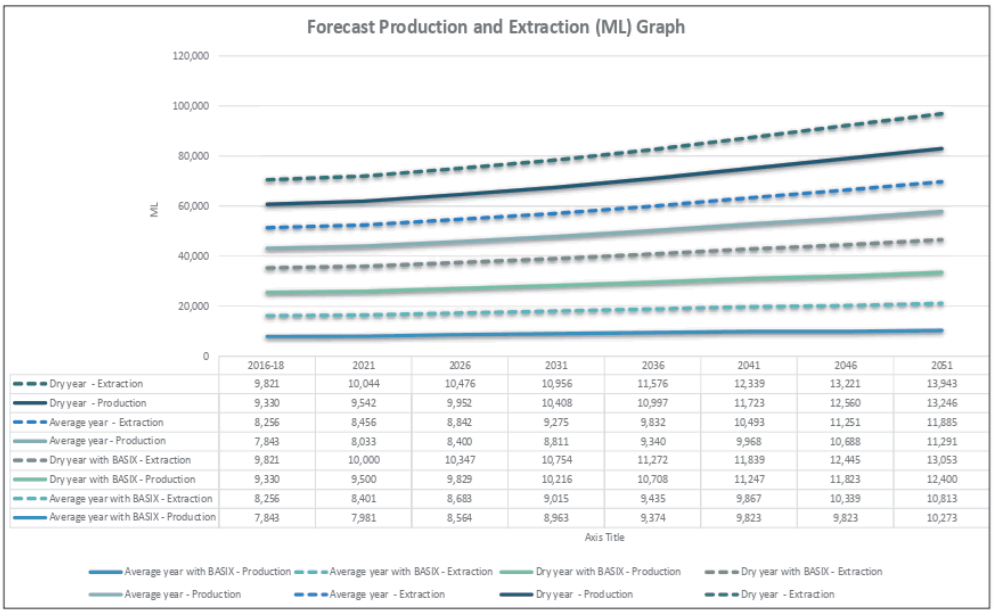
FIGURE 4-19: NUMBER OF ACCOUNTS BY TYPE OF CUSTOMER



	2016-18	2021	2026	2031	2036	2041	2046	2051
Dubbo Water Supply Scheme	8,256	8,456	8,842	9,275	9,832	10,493	11,251	11,885
Wellington Water Supply Scheme	1,135	1,203	1,223	1,243	1,261	1,283	1,303	1,323
Geurie Water Supply - metered only	70.1	71.3	72.5	73.7	74.9	76	77.1	78.2
Mumbi Water Supply - metered only	20.8	21	21.1	21.3	21.4	21.5	21.7	21.8
Total	9,482	9,751	10,159	10,613	11,189	11,874	12,653	13,308

FIGURE 4-20: FORECAST FOR WATER EXTRACTION FROM 2016 TO 2051 (ML)

4.2.1 DEMAND MANAGEMENT



	2016-18	2021	2026	2031	2036	2041	2046	2051
Dry year - Extraction	9,821	10,044	10,476	10,956	11,576	12,339	13,221	13,943
Dry year - Production	9,330	9,542	9,952	10,408	10,997	11,723	12,560	13,246
Average year - Extraction	8,256	8,456	8,842	9,275	9,832	10,493	11,251	11,885
Average year - Production	7,843	8,033	8,400	8,811	9,340	9,968	10,688	11,291
Dry year with BASIX - Extraction	9,821	10,000	10,347	10,754	11,272	11,839	12,445	13,053
Dry year with BASIX - Production	9,330	9,500	9,829	10,216	10,708	11,247	11,823	12,400
Average year with BASIX - Extraction	8,256	8,401	8,683	9,015	9,435	9,867	10,339	10,813
Average year with BASIX - Production	7,843	7,981	8,564	8,963	9,374	9,823	9,823	10,273

FIGURE 4-21: SUMMER USAGE DISTRIBUTION GRAPH FOR DOMESTIC CONSUMPTION

Forecast for extraction

The average forecasts for water supply demand is shown at Figure 4-20, forecast for water extraction from 2016 to 2051, as a measure of extraction that will be required.

Extraction refers to water supply from both surface and ground water sources discussed in the previous chapter against the water returned to the sewerage system.

As a comparison, Figure 4-21 illustrates the forecast for water extraction against the required production. This table illustrates predictions for both average years and dry years.

Response to the restrictions in place

Current predictions for extraction during this drought have modelled the combined totals of surface water and bore water during a normal year with no restrictions in place against the current 12 month period. The figures predict that the savings in surface water through reduced demand will be:

- 2.17% where the level of restriction is reduced to level 3 by the end of February.
- 2.62% where level 4 restrictions are maintained until June 30, 2020.

During the 2017-2020 drought Council has progressively implemented tighter water restrictions .No discernible reduction in usage was achieved during level 2 restrictions that were in place from 1st July 2019 to 30 September 2019.

Level 3 restrictions were implemented during October 2019 resulting in a minimal reduction of 1.5 % compared to the same period in October 2019 without restrictions. With level 4 restrictions in place a 24% reduction in usage between I November 2019 and mid January when good rainfall started to occur.

While there was a 24 % reduction in water usage by Council this only accounted for a 3.5% saving in flow in the Macquarie River during this time.

4.2.1 DEMAND MANAGEMENT

Water production

DRC monitors flows from and return of water to the river. Monthly flows over the past 8 months of data collection are shown below at Figure 4-22.

Quality of water produced

The issues paper has identified that satisfaction with water quality and the taste of water require improvement.

Information regarding water conservation of water has indicated room for education and communication as an ongoing outcome for improved Levels of Service.[12]

There were several questions about water conservation, the key responses were:

- *67% of customers believe that Council should do more to encourage water conservation.*
- *45% of customers were un-aware that they were allowed to install rainwater tanks without Council permission.*
- *54% of customers thought that Council should adopt a water pricing system to encourage residents and other users to practice water conservation.*
- *81% of customers would choose water restrictions over higher prices as a method to reduce consumption during drought.*

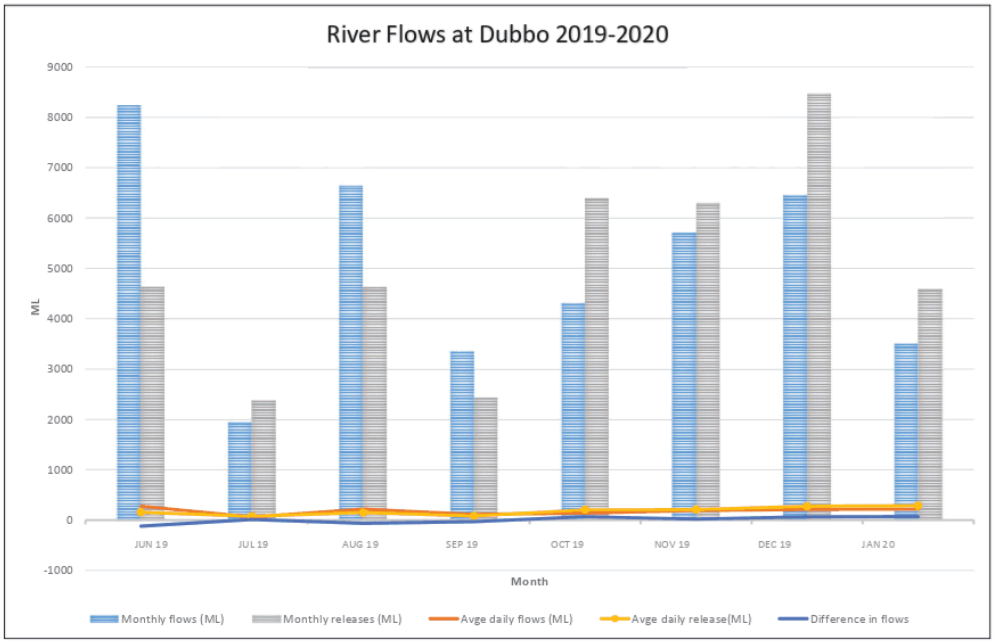


FIGURE 4-22: RIVER FLOWS AT DUBBO

4.2.2 DEMAND MONITORING & REBATES

Infrastructure requirements to meet future growth in Dubbo

The majority of future growth is expected to occur in the Rifle Range and Eulomogo reservoir zones. The 30-year peak day demand of the Rifle Range reservoir zone exceeds the capacity of the existing reservoirs and trunk mains. Council is currently modelling the infrastructure requirements to meet the growth demands particularly in west Dubbo.

The ability to meet the Levels of Service in these reservoir zones needs to be reviewed.

Recommendations for assessment of reservoir capacity include:

- Reassess locations of reservoirs for future growth.
- Reassess requirement for Newtown and Myall St Reservoirs in 30 years time if Buninyong/ Eulomogo sites are augmented.
- Consider how to Newtown and Myall St reservoirs in the medium term to provide additional clear water storage in the event of loss of production at the WTP.

Monitoring demand during drought

DRC monitors demand through current systems that focus on:

- Bulk water production metered and recorded on a daily basis.
- Customer water consumption billed four times a year.
- Customers are classified and reported annually under residential, commercial, industrial, institutional and rural, fire meters and DRC meters.
- Smart meters

DRC has ongoing internal programs to improve water consumption, efficiency and reporting. Currently 72 additional smart meters have been installed to improve monitoring of Recreation and Council facility consumption.

Demand management rebates

During the 2017/2020 drought, level 4 restrictions have triggered a further water saving rebates administered by DRC.

DRC has completed an analysis of potential water savings in installing rain water tanks using the model developed by NSW Office of Water. Based on this analysis Council has committed substantial funds in the form of rebates for the installation of rain water tanks.

To further encourage and assist residents to achieve a daily water usage target of 280 litres per person per day under Level 4 water restrictions, Dubbo Regional Council has implemented a Water Saving Rebate Scheme. Rebates apply to water saving products on a per household/per business basis and only to new water-efficient products.

4.2.3 NON PERFORMANCE WATER

An Unaccounted for Water (UFW) analysis was undertaken for the purposes of this demand management plan to indicate the level of leakage and non-revenue water in the Dubbo water supply scheme. UFW represents leakage, water losses and unbilled water. (Leakage studies for over 70 NSW LWUs indicate an average leakage from potable water supply distribution systems of 10% of annual consumption (range from 2% to 27%).

Statewide analysis of non-revenue water (NRW) (i.e. real loss, apparent loss and unbilled water) for NSW water utilities other than bulk water suppliers indicates a minimum of 10% of annual water supplied. (Source: 2011-12 NSW Benchmarking Report by NSW Office of Water)

Dubbo UFW is estimated based on Dubbo's annual (i.e. financial year data) water production figures (total water that passes through bulk meters at the treatment plant) and consumption data from Council's water bill data base (i.e. water consumption by tariff category).

Current figures on non-performance water:

Dubbo	NRW is 75L/connection/day
Wellington	NRW is 265L/day
Geurie	NRW is 400KL/day

Council has identified several leaks in the Geurie reticulation system and is currently repairing these, after which a further analysis of water losses will be undertaken. A similar leak detection exercise is to be carried out in Wellington.

Council is recommended to continually monitor the levels of leakage and non-revenue water to ensure the levels of water losses and unbilled water remain steady or keep dropping.

4.2.4 LARGE WATER CONSUMERS

Large water consumers are generally, institutional, industrial or business users.

The approach to water use by institutional and business users has been set out in the water restrictions tables, refer Appendix B.

A breakdown of the top 100 largest water users for business purposes is shown at Figure 4-23. Some points regarding DRC modelling and reporting on large water users:

- 27% are tourism focused businesses. These include the Zoo, large Dubbo clubs, accommodation and restaurants.
- 23% are education based facilities. These are the many local schools as well as college and university institutions.
- 23% represent institutional facilities and service providers for retirement and nursing homes. The hospital is included in this sector. Many of these are residential style living facilities which are home to older members of the community.
- 17% are the office and retail spaces and are a combination of large shopping centres and office buildings that cater to many small businesses.
- 6% related to food processing facilities, such as flour mills and abattoir with an additional 2% farm users to support this industry.
- The remainding 2% are businesses in transport and construction.

Objectives for setting restrictions

Restrictions have been set to apply across the entire business community. This is in order to maintain a supply for human health, hygiene and safety purposes as a top priority.

All businesses are expected through drought periods to comply with water use restrictions tables published.

The second level of direction is to determine the future demand for water. This has been set by identifying the top 200 largest users of commercial, business or institutional use.

The top 100 businesses identified as large water consumers are notified to complete a Water Saving Action Plan (WSAP).

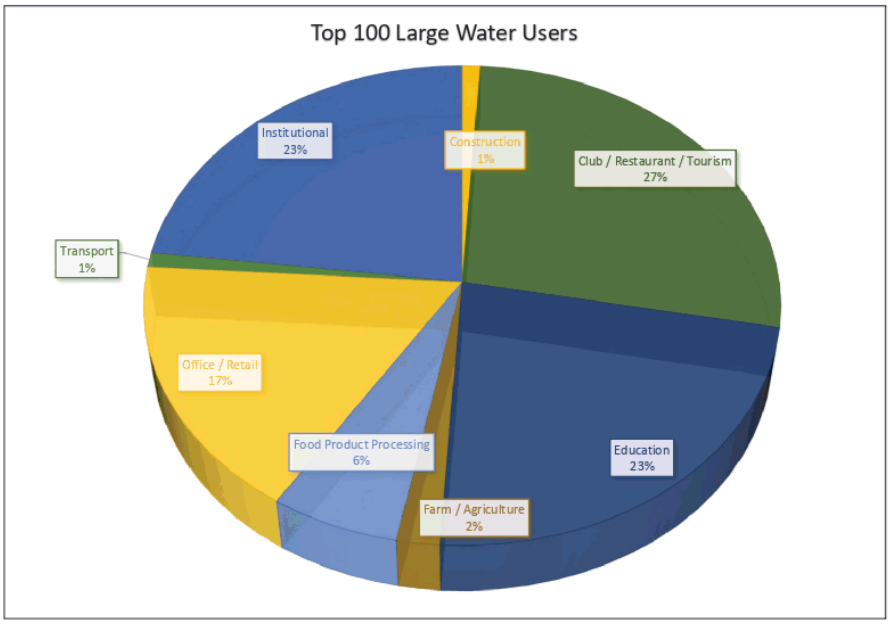


FIGURE 4-23: TOP 100 LARGE WATER USERS

4.2.4 LARGE WATER CONSUMERS

Current restrictions advice to business

It is a strategic direction of this plan to enable businesses to use water to meet their business needs for as long as is possible. Individual businesses may have different needs and uses. The preparation of a water Sharing Plan (WSAP) by individual high water users provides an opportunity to identify where different business needs arise for water supply. These WSAP's are approved are approved by Council.

Level 3 restrictions

1. Follow the water restrictions for Commercial and Institutional.
2. Council is required to notify businesses to prepare a Water Saving Action Plan (WSAP) for council approval.
3. Use this Water Restrictions Commercial and Institutional Guide- Activities to help prepare your application.

Level 4 restrictions

1. Follow the water restrictions for Commercial and Institutional.
2. Activate and comply with the approved Water Saving Action Plan.

Level 5 restrictions

1. Follow the water restrictions for Commercial and Institutional.
2. Improve water use efficiency where possible.
3. Review essential or core business needs for water use as extreme drought conditions continue.
4. Partnered approach (Council and industry) in on site auditing, support, and advice on Water Saving Action Plan, if required.

Water for fire fighting

Water for fire fighting is part of the contingency water supply allocation.

In Dubbo, this equates to the last 20% of all water stored. This allocation is approximately enough water for 3 days supply during an emergency event.

The current level of service for Dubbo, Wellington and Geurie would remain unchanged for fire fighting.

Fire fighting water availability is compliant with Australian Standards and aims to:

- Provide 170kPa 95% of the time.
- Provide rural areas including Firegrove and Richmond hydrants at 120m spacing with 150kPa 95% of the time
- Allow for spacing fire hydrants in urban areas at 60m apart.

Dubbo Airport has agreed with RFS to access a future bore at the airport site once operational.

4.2.5 WATER RESOURCE TRIGGERS

		Dubbo Residential	Wellington Residential	Geurie Residential	Mumbil Residential	Formulated target per person per day
Restrictions	**Target reduction in demand**	**Expected average demand ML/d**	**Expected average demand ML/d**	**Expected average demand ML/d**	**Expected average demand ML/d**	
Everyday Water Saving Measures	0%	17.3	1.4	0.301	0.147	400
Level 1: Low	5%	16.4	1.3	0.286	0.139	380
Level 2: Moderate	15%	14.7	1.2	0.256	0.125	360
Level 3: High	25%	12.9	0.95	0.225	0.110	320
Level 4: Very High	35%	11.2	0.9	0.195	0.096	280
Level 5: Extreme	45%	9.5	0.77	0.165	0.081	240
Level 6: Critical	55%	7.7	0.63	0.135	0.066	195

TABLE 4-10: WATER RESTRICTION TRIGGERS AND TARGET PER PERSON

The drought triggers as shown in Table 4-10 are activated when Council determines to commence drought actions.

Each restriction level has an associated target demand and required water saving measure for residential and non-residential potable use.

Compliance with water restrictions will be monitored and enforced from level 1. However, Everyday Water Saving measures are not enforceable.

If storage levels drop further or target demands are not met higher restrictions requiring greater reductions in water usage can be adjusted and implemented.

During the 2008/2009 period in which the former DCC had a water restriction level of 2 average water consumption was found to be increased by 33%. This increase has been attributed to an odds and evens system of watering. Following these findings Council proposed residential garden watering for lower level restrictions based on overall time per week.

4.2.4 CURRENT WATER USAGE

DRC modelling of the current water usage during 2018/19 against predicted water consumption for 2019/20 show that the water restrictions in place have produced a water saving of as much as 23% in terms of consumption, see Figure 4-23.

Usage rates have increased since 2011 by 63% from $0.94 to $2.07 per kL.

Uses for agricultural and industrial uses are generally operated with bore water licensing. This is managed by NSW Government. Landholders apply for a water access licence through WaterNSW under the WMAct 2000.

This section refers to predominantly residential use and supply across the LGA.

DRC average annual residential demand

Water use in the LGA is traditionally higher than other neighbouring areas.

Annual use is shown in the Figure 4-24 regarding predicted water saving with restrictions in place.

Previous records of drought restrictions indicate that Council mandated restrictions have only come into effect since 1980s. The majority of restrictions were voluntary until 2006. Since 2006 Council has issued water restrictions on external watering.

Additional demand during drought

It has been found that previous Odds and Evens watering systems have caused an increase in demand for watering. It is due to this, 2019 revised restrictions moved away from this system. The alternative preference is to allow adequate watering to upkeep gardens for as long as is possible. Watering has been set for nominated days per week with maximum times by restriction level.

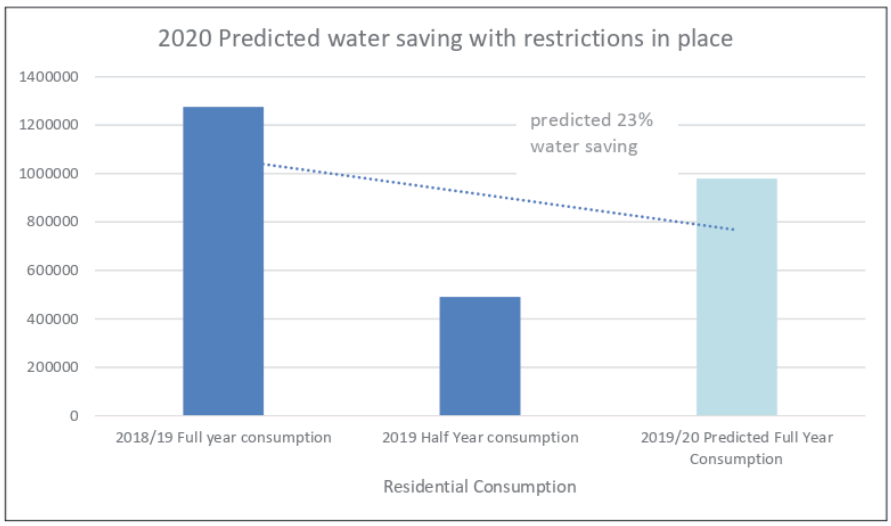
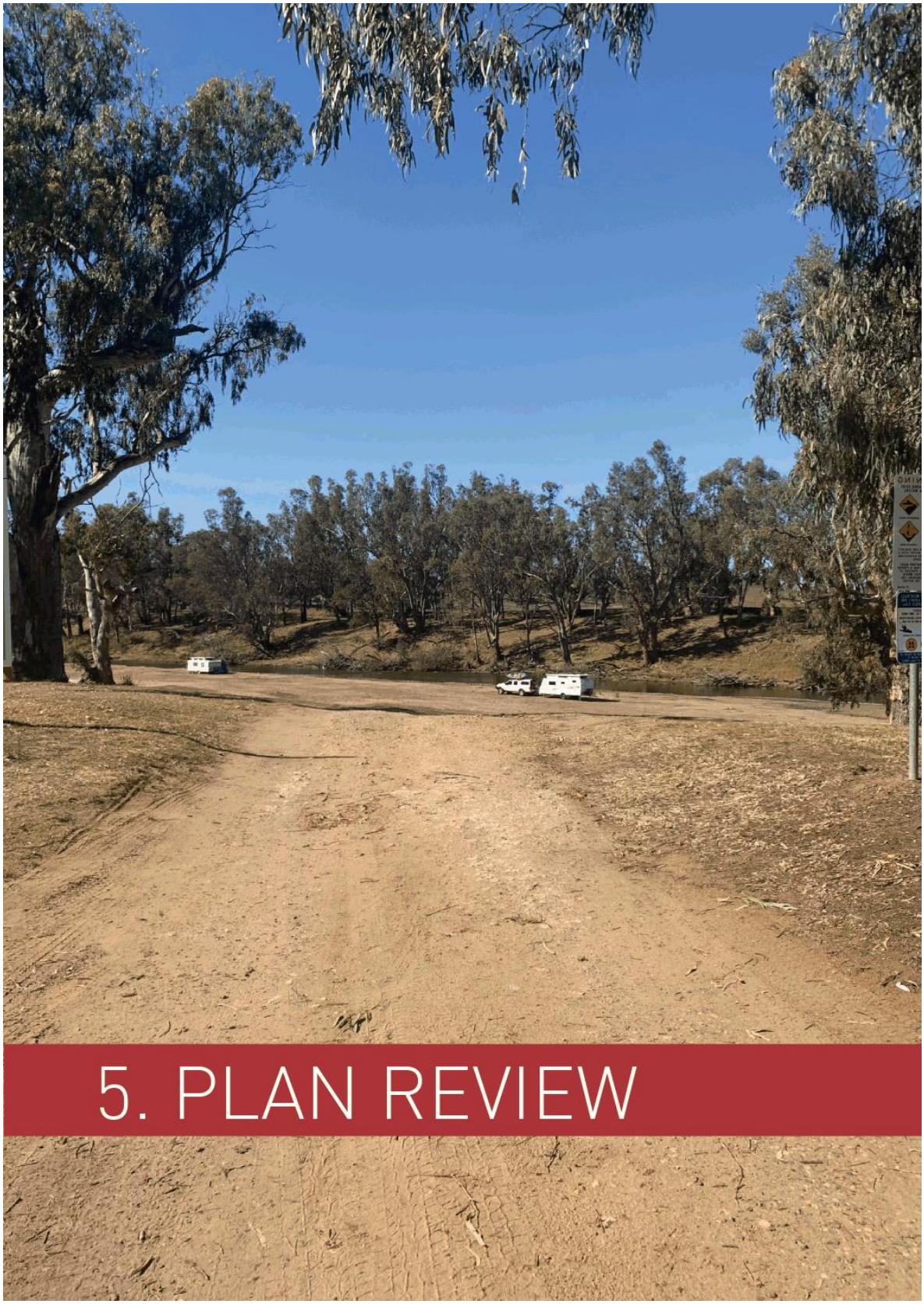


FIGURE 4-24: DRC 2020 PREDICTED WATER SAVING WITH RESTRICTIONS IN PLACE



5. PLAN REVIEW

5. PLAN REVIEW

5.1 EVALUATION AND UPDATE OF THE PLAN

Review period

In addition to evaluation and revision after each period of drought, regular reviews of the DCWERP should be undertaken at least every 5 years. The plan review should update:

- The latest information on water supply systems, including any augmentations that have occurred, changes to operating rules and up-to-date water consumption data and flow/ level monitoring data for water sources.
- Any major changes / augmentations to water supply systems.

Funding sources for future works

Programs for Water Security are available through NSW and Commonwealth funding sources.

NSW Government funding

Safe and secure water program

Department of Planning, Industry and Environment – Water (DPIE-Water).
Allocation: $1 billion fund.
Co-funding program for eligible planning or capital projects in regional NSW – funding for strategic water plans (e.g. Integrated Water Cycle Management Plan)

Emergency relief for regional town water supplies program

DPIE – Water.
Water carting. Currently supporting DRC funding for Euchareena (from October 2019).

Aboriginal communities water and sewerage program

DPIE – Water.
Former Wellington Council has been funded through this program.

Australian Government Funding Programs for Water Security Projects

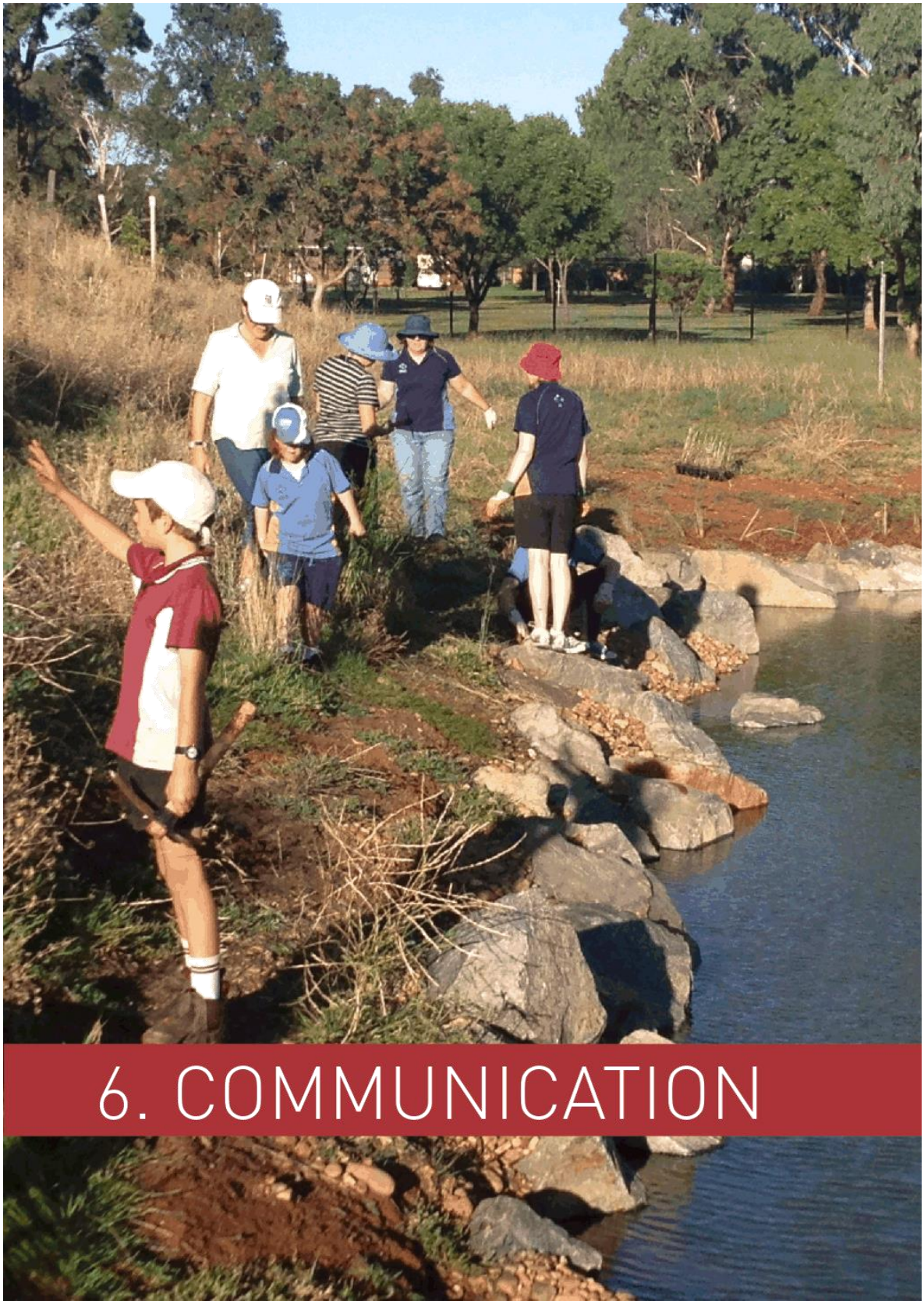
Building better regions fund

Department of Infrastructure, Transport, Cities and Regional Development.
Allocation: $841.6 million Fund. Three rounds completed to date. Round 4 with an allocation of $200 million to open in second half of 2019.
Available for local councils and other eligible organisations to apply to Infrastructure Projects Stream and Community Investments Stream.

Drought communities programme

Department of Infrastructure, Transport, Cities and Regional Development.
Fund to support drought-affected regions across Australia.
DRC received $1 million in late 2018 to support local infrastructure projects. This includes:

- $560K to Stuart Town Water Supply
- $245K amenities project to Church Street, Dubbo
- $195K to Sales yard for shade sails.


6. COMMUNICATION

6.COMMUNICATION

COMMUNITY AWARENESS AND ACTIONS

The strategic directions of this plan include a range of media and communication tools to convey messages to the community, business and other stakeholders.

The development of a communication strategy should be approved by the CEO and implemented by the Drought Coordinated Response Team.

Communication with authorities and stakeholders

In ensuring the successful implementation of the Drought Management Plan the communication strategy must be developed and implemented. Liaison with key government agencies is an important component of the communication strategy.

Relevant agencies are informed when significant impacts on the community, the environment or other stakeholders are expected as a result of emergency incidents or drought.

Once an incident has been categorised, DRC follows standard procedures to identify and notify all relevant stakeholders and to update identified stakeholders with any changing circumstances.

DRC specialist resources may assist with stakeholder communications during incidents:

- Internal Media relations officers
- External communications support
- Incident management teams
- Crisis management specialists

Liaison with agencies, businesses or local irrigators ensures they are aware of possible impacts they may have on the town water supplies and conversely, to make sure they are aware of the potential impacts that Council's actions, arising from the implementation of the plan, may have on them.

In the event of a pollution incident, all relevant authorities must be immediately notified unless there is substantial evidence that they are already aware of the details of the incident. The authorities may advise that they will not be required to attend, however the appropriate level of information must be provided to them so an informed decision on their response can be made.

Communication with customers during drought events or emergency incidents

Community awareness is vital for ensuring the actions that directly impact them, such as water restrictions are implemented. Associated fines and exemptions are communicated.

The community is given advice on how to minimise the impact of various water restrictions (including options for household recycling of water and when this should be done) and advice on saving water around the home in general.

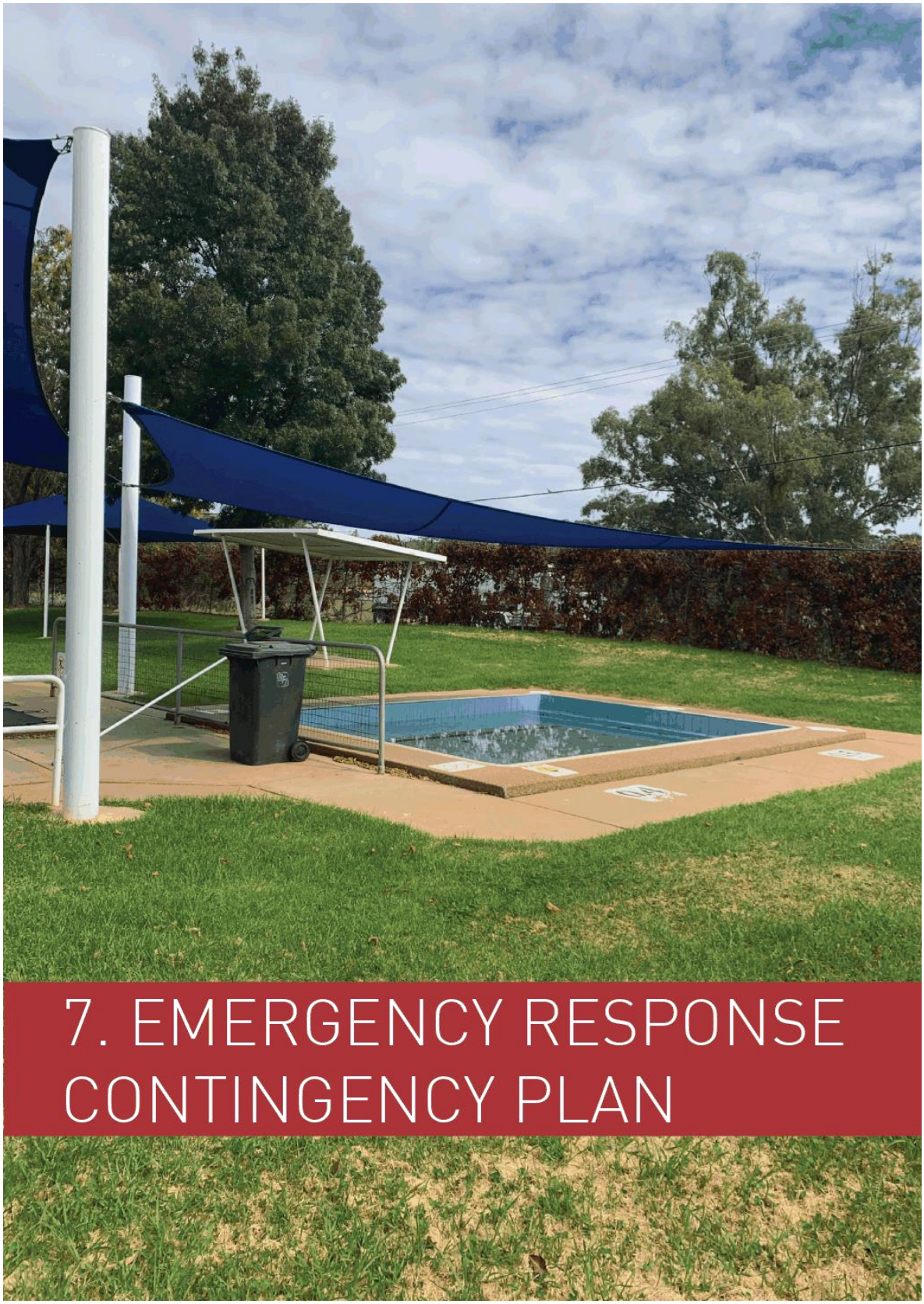
It is important that the community is kept up-to-date with the status of water supply sources. This includes river flows, dam storage volumes and possible consequences of not achieving target reductions in water consumption.

DRC often receives information relating to system faults e.g. sewer manhole overflows, water leaks and breaks from members of the public via (02) 6801 4000.

DRC Drought Hub is also available for information at https://www.dubbo.nsw.gov.au/droughthub

Additional methods of communication to inform:

- Radio and Media broadcasts
- Door Knocking via Rangers or Operations staff (usually first to respond to incidents) to communicate with customers who are or who may be impacted by an incident
- Warning and informational signage
- Letter box drops
- Social media
- Phone calls



7. EMERGENCY RESPONSE CONTINGENCY PLAN

7. EMERGENCY RESPONSE CONTINGENCY PLAN

7.1 INTRODUCTION

This section of the Drought and Emergency Response Contingency Plan addresses all identified emergencies other than Drought.

Dubbo Regional Council currently has Business Continuity Plans (BCP's) for Water and Sewerage which address responses to emergencies .

These are:

- Former Dubbo City Council-Water Supply and Sewerage Branch – Business Continuity Plan—August 2018.
- Former Wellington Council – Divisional Business Continuity Sub Plans-April 2016.

Dubbo Regional Council is currently preparing a Business Continuity Plan including sub plans for each division for the amalgamated Council. It is expected the new BCP will be completed in 2020.

In the meantime the Dubbo BCP shall be referenced when responding to an emergency.

Once completed a summary of the new BCP will be included in this document.

Response to emergencies

The Dubbo BCP describes the response process as:

- Assess the Level of Emergency which is either Routine (Level1), Emergency (Level 2) or Crisis (Level 3)
- Establish Emergency Management Team depending on the level of the Emergency
- Respond to the Emergency
- Recovery
- Debriefing

The flow chart at Figure 7-1 describes the notification process and how to assess the Level of the Emergency.

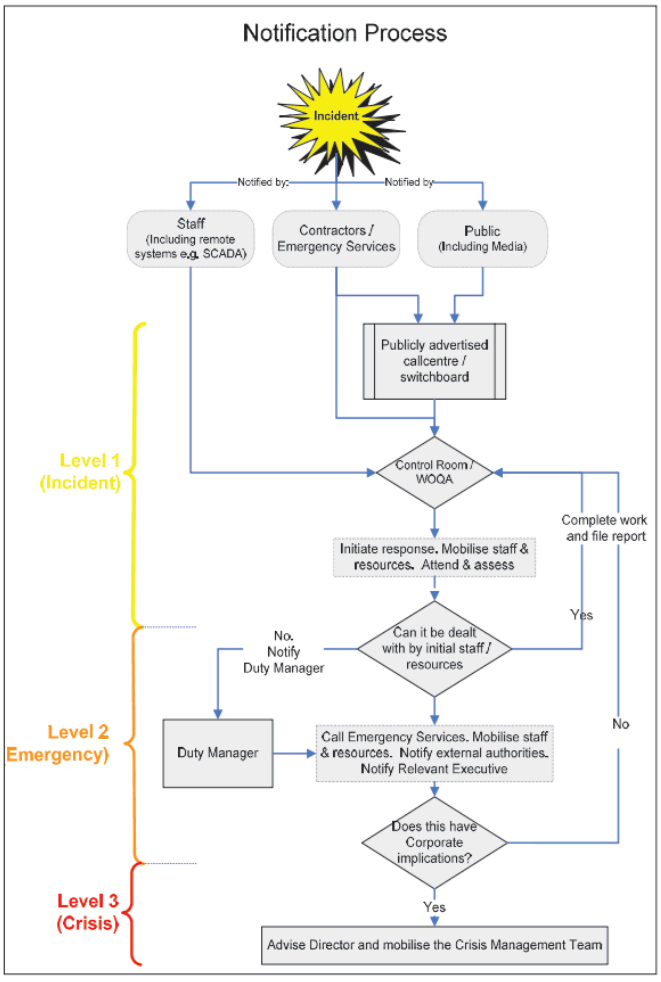


FIGURE 7-1: DRC NOTIFICATION FLOW CHART TO ASSESS EMERGENCY

7.2 IDENTIFIED EMERGENCIES IN THE BUSINESS CONTINUITY PLAN

Further action required in Emergency Management Procedures

Further evaluation of identified risks and identification of other risks needs to be undertaken as part of the preparation of the new BCP for Dubbo Regional Council.
Minimising the impact of potential risks needs to be undertaken by :-

- Regular training of staff in how to respond to an emergency
- Improved preventative maintenance procedures
- Adequate supply of critical spares especially those with long delivery times.
- Identifying improvements in the operation of the water and sewerage systems and carrying out capital works if required.

Identified emergencies in the BCP

The current Dubbo BCP identifies the emergencies described in the tables below and the required responses. These include:

- Drinking Water Quality Problem
- Major Asset Failure
- Business Systems, IT or Communication problem
- Chemical or Toxic Spill or Leak
- Natural Disaster
- Physical Safety Related Incident
- Criminal Acts and Security Threats
- Building or Office problem
- Pressure Group Action

Each emergency is discussed below.

Drinking water quality problem

INCIDENT TYPE	Raw water problems, turbidity, parasites, water treatment failure, contamination	
Impacts	• Risk to public health • Loss of supply	• Media attention • Attention from regulatory authorities
Business consequences	• Inability to supply water and/or treated effluent within parameters • Loss of revenue • Additional operational costs	• Fines due to (EPA) licence breach • Public litigation • Damage to water business image & reputation
Response	• Communicate & liaise with customers & public • Communicate & liaise with external authorities (e.g. NSW Health) & assist with investigations • Assist authorities to issue public alert (e.g. boil water notice) & assist in alerting high risk groups (AIDS, cancer, immune suppressed) • Deal with media	• Reconfigure delivery system to use filtered stored supply • Provide emergency equipment if possible • Apply restrictions if necessary • Begin planning for systems to ensure future water quality is protected • Instigate public education program to restore confidence in water business

FIGURE 7-2: DRINKING WATER QUALITY PROBLEM

Major asset failure

INCIDENT TYPE	Dam failure, failure of treatment plant process or major equipment, collapse of trunk main / valve, pumping station problem (choke, explosion, fire)	
Impacts	• Harm to employees or public • Releases to environment • Damage to public & private property	• Shut down of operating area • Media attention • Attention from regulatory authorities
Business consequences	• Inability to supply water and/or treated effluent within parameters • Loss of revenue • Additional operational / emergency supply costs	• Public litigation & compensation claims • Damage to image & reputation • Repair & restoration time & costs
Response	• Shutdown affected assets and assess damage • Make area safe • Check welfare of staff & public, provide aid • Communicate with business unit • Communicate & liaise with customers • Communicate with regulators & authorities • Liaise with Emergency Services & assist	• Provide temporary supply or reconfigure delivery system if possible • Provide emergency equipment (pumps, generators, manual systems, local needs etc) • Apply restrictions if necessary • Use public education program to manage available supply • Conduct repairs & begin planning for permanent repairs or replacement assets

FIGURE 7-3: MAJOR ASSET FAILURE

Business systems / IT / communications problem

INCIDENT TYPE	Failure of business systems (SCADA, telecoms, financial, accounting, billing, IT, etc), computer virus	
Impacts	• Loss of business processes • Loss of data & information • Loss of crucial hardware & software	• Loss of operational capability • Loss of communications • Media attention
Business consequences	• Loss of operational capacity • Disruption to systems / data • Reporting & decision-making delays • Time & cost to repair & replace damaged equipment / systems	• Increased staff levels & costs • Loss of operating / maintenance instructions • Damage to customer service • Loss of revenue
Response	• Advise internal & external businesses & bodies • Check & clean system (if virus affected) • Implement IT Disaster Recovery Plan • Create accounts & reports manually • Replace hardware & software – lease equipment short-term if necessary • Replace lost data where possible with back-up data – recruit additional staff if necessary	• Re-key other lost data & information • Review IT Disaster Recovery plan for effectiveness & revise where necessary • Begin planning for permanent repairs & systems that will ensure no repeat of lost business • Communicate & liaise with external authorities

FIGURE 7-4: BUSINESS SYSTEMS / IT / COMMUNICATIONS PROBLEM

Chemical / toxic spill or leak

INCIDENT TYPE	Chlorine leak, sewage or sludge spill, hazardous chemical spill, gas release, oil spill	
Impacts	• Harm to employees or public • Releases to environment • Contamination of area • Contamination of supply	• Shut down of operating area or asset • Media attention • Attention from regulatory authorities
Business consequences	• Inability to supply water and / or treated effluent within parameters • Loss of revenue • Additional operational costs	• Fines due to licence breach • Public litigation & compensation claims • Damage to image & reputation • Repair & restoration time & costs
Response	• Shutdown affected assets and assess damage • Check welfare of staff & public, provide aid • Make area safe & activated spill containment systems & procedures • Check welfare of staff & public, provide aid • Communicate with business unit • Communicate & liaise with customers	• Communicate with regulators & authorities • Liaise with Emergency Services & assist with containment & clean up • Reconfigure delivery system if possible • Assess public attitude to Corporation • Use public education program to manage available supply • Begin planning for more robust systems & procedures to ensure spills are minimised

FIGURE 7-5: CHEMICAL / TOXIC SPILL OR LEAK

Natural disaster

INCIDENT TYPE	Earthquake, landslide, bushfire, storm, wind, hail, lightning, drought	
Impacts	• Damage to / or loss of facilities and assets • Loss of power / communications • Loss of supply or treatment (quantity / quality)	• Spills, leaks & releases to environment • Risk to public / employee health & safety • Public / private property damage • Loss of access to operating sites
Business consequences	• Inability to supply water and / or treated effluent within parameters • Deterioration of stored water quality • Loss of data / communications • Reduction of operational manpower	• Repair & restoration time & costs • Loss of revenue • Additional operational costs • Public litigation
Response	• Shutdown affected assets and assess damage • Make area safe • Check welfare of staff & public, provide aid • Communicate with business unit • Communicate & liaise with customers • Communicate with regulators & authorities	• Liaise with Emergency Services & assist • Provide temporary supply or bypass if possible • Provide emergency equipment (pumps, generators, manual systems etc) • Apply restrictions if necessary • Use public education program to manage available supply • Conduct repairs & begin planning for permanent repairs or replacement assets

FIGURE 7-6: NATURAL DISASTER

Physical safety related incident

INCIDENT TYPE		
Impacts	• Harm to employees or public • Stress to workers • Grief / outrage staff / public & next-of-kin	• Shut down of operating asset or business area • Media attention • Attention from authorities
Business consequences	• Lost time / loss of key resources • Workers compensation investigations & claims • High cost of additional safety measures • Litigation by staff / public	• Fines from authorities (e.g. WorkCover) • Liability of individuals (Executives / Board) • Damage to water business image & reputation
Response	• Make area safe • Check welfare of staff & public, provide aid • Liaise with Police, Ambulence or relevant Government agency & assist with investigation • Liaise with external authorities & assist with investigations • Review safety at affected site & implement improved work practices & site security	• Deal with media • Assess staff morale • Conduct critical incident stress debrief – provide stress & trauma counselling • Assess public attitude to water business • Instigate public education program to restore confidence in the Corporation

FIGURE 7-7: PHYSICAL SAFETY RELATED INCIDENT

Criminal acts / security threats

INCIDENT TYPE	Terrorism, robbery, fraud, sabotage, extortion, serious vandalism	
Impacts	• Damage to/or loss of facilities and assets • Contamination of supply • Loss of supply or treatment (quantity/ quality)	• Releases to environment • Risk to public / employee health & safety • Public property damage • Loss of cash, property • Stress on organisation & staff
Business consequences	• Loss of operational capacity & capability • Threat to safety of staff & public • Repair & restoration time & costs	• High cost of additional security measures • Loss of data / communications • Loss of revenue
Response	• Assess damage / level of threat to affected assets • Check welfare of staff & public, provide aid • Check functionality of affected business • Communicate & liaise with Police or other government authorities as required • Communicate & liaise with customers • Communicate and liaise with next-of-kin	• Provide emergency supplies where possible by activating contingency plans or reconfiguration • Increase security on critical assets & brief staff on security response • Assess staff morale • Conduct critical incident stress debrief – provide trauma counselling • Instigate public education program to restore confidence in the water business

FIGURE 7-8: CRIMINAL ACTS / SECURITY THREATS

Building / office problem

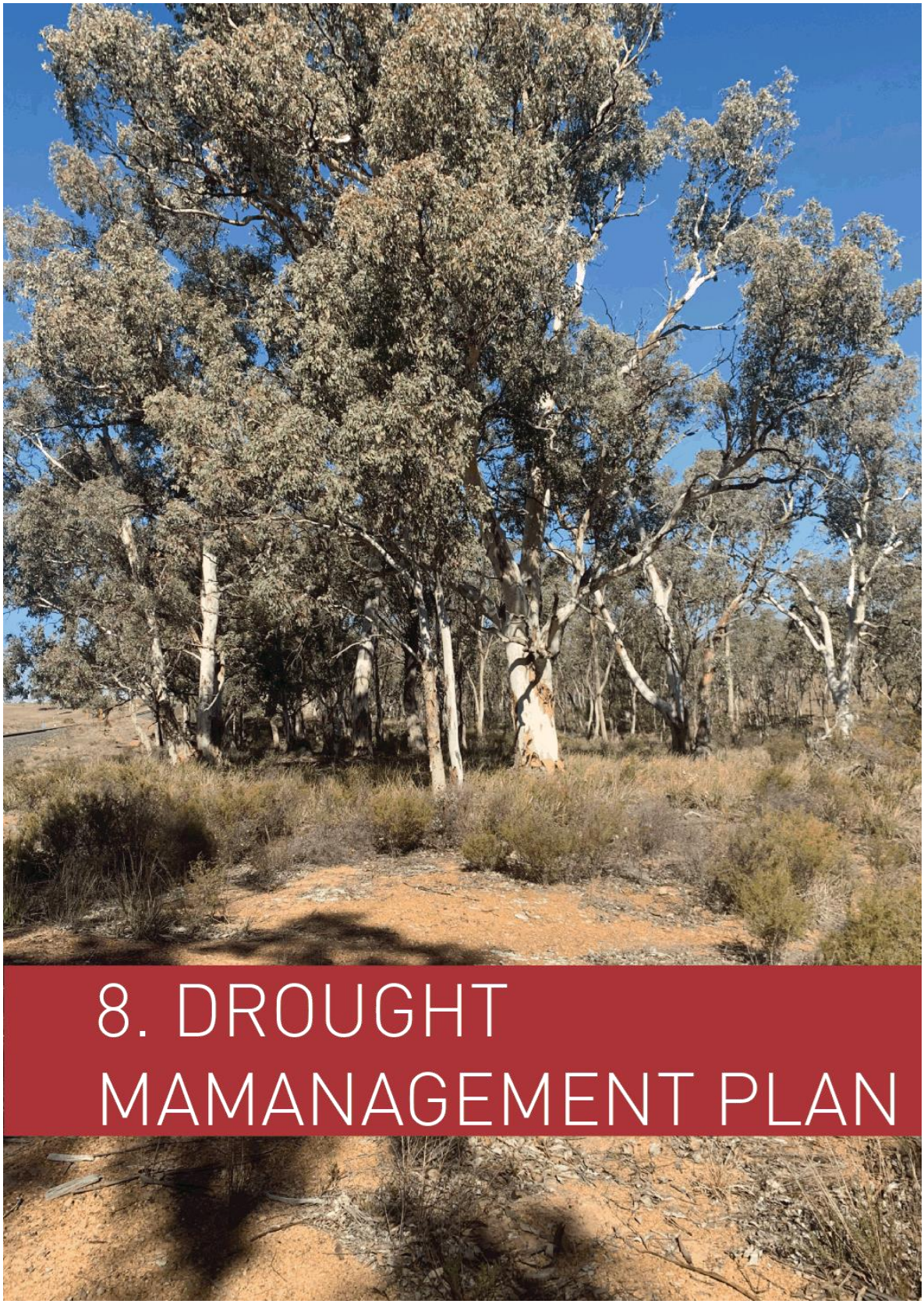
INCIDENT TYPE	Loss of key accommodation due to incident, lift problem, building collapse, fire / explosion	
Impacts	• Damage to / or loss of assets & adjoining property • Harm to employees or public • Stress to workers • Shut down of business area	• Media attention • Loss of accommodation • Loss of critical data / information / systems
Business consequences	• Lost time injuries / loss of key resources • Unplanned absences • Cost to lease alternate accommodation • Disruption due to loss of systems / data	• Loss of revenue due to inability to deliver service • WorkCover investigations • Cost to repair & replace damaged accommodation & equipment / systems
Response	• Make area safe • Check welfare of staff & public, provide aid • Communicate & liaise with police / Emergency Services & assist with investigation • Communicate & liaise with external authorities & assist with investigations • Deal with media	• Assess staff morale • Conduct critical incident stress debrief – provide stress & trauma counselling • Replace lost data where possible with back-up data • Ensure building problem is not repeated in other water business areas • Conduct repairs & begin planning for permanent repairs or replacement assets

FIGURE 7-9: BUILDING / OFFICE PROBLEM

Pressure group action

INCIDENT TYPE		
Impacts	• Pressure on water business to change activities • Loss of access to operating sites • Risk to health & safety of action group & staff	• Risk of public / private property damage • Risk of criminal action (e.g. sabotage) • Media attention
Business consequences	• Loss of operational capacity due to disruption from protests & actions • Time & cost to change systems & operating processes	• Loss of revenue due to inability to deliver service because of disruptions • Damage to image & reputation
Response	• Communicate & liaise with police if necessary • Ensure safety of staff is maintained • Communicate & negotiate with pressure groups • Establish water business position & counter arguments • Make concessions where possible	• Consider legal action against groups • Deal with the media & look to put the local water utility in positive light • Use public education program to manage image • Begin planning for permanent replacement of assets or systems if pressure group is successful in actions

FIGURE 7-10: PRESSURE GROUP ACTION


8. DROUGHT
MAMANAGEMENT PLAN

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 1 : PRIORITISE HUMAN HEALTH NEEDS

COORDINATED RESPONSE	GOALS	IMMEDIATE RESPONSE ACTIONS 2019	ONGOING DROUGHT MANAGEMENT 2020	PERFORMANCE MEASURES	RECOVERY AND FUTURE PROGRAMS 2021-2023
PROGRAM MANAGEMENT	1. Report on program management actions and status to ensure human health needs are prioritised for actions. 2. Alert high level risks	Program management of over all drought considerations.	Timely communication with ELT of projects, budget allocations, risks and issues. Generate risk register of hazards, threats to life, threats to property, mitigation options in emergency	Minimum weekly meetings with Executive regarding current actions and issues. Reports to ELT, CEO and Council members.	Review and facilitation of improved communication with community and programs/grants or rebates available.
		Management of issues and risks that can impact on water security	Funding availability managed for ongoing management of drought activities.	Risk strategic planning undertaken and complete. Weekly feedback with project managers delivering projects.	Review and evaluation of any risks that could have impacted human health. Review of program management office activities.
EXECUTIVE SERVICES: COMMUNICATION	3. Communications to raise awareness 4. Communication to include needs groups such as aged, indigenous and accessible groups	Delivery of a communication strategy to cover: • Website development and communication campaigns. • Support options for individuals and communities. • Council style and branding for drought awareness.	Increase community awareness and education during drought events. Seek opportunities to engage with community groups, communicate messages to wider groups, accessible information broadcast. Delivery of messages to schools, aged, community for Water Week, Dream festival and other identified events. Communication with Indigenous community.	Drought Hub online and updated weekly with current information. Timely communication of community messages and restrictions to agreed service levels with ELT/CEO Delivery of branded messages at events.	Review and evaluate effectiveness of various communications delivered.
CULTURE & ECONOMY	5. Ensure business functions and services maintain human health and safety standards.	Delivery of business functions, services, tourism and engagement priorities health and safety standards.	Timely communication to all business services and tourism destinations and venues regarding hazards, threats and messages. Action to maintain high standards of health at all facilities.	Reports to ELT, CEO and Council on continued monitoring of venues, facilities and services.	Review processes and facilitate improved management .

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DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 1 : PRIORITISE HUMAN HEALTH NEEDS

COORDINATED RESPONSE	GOALS	IMMEDIATE RESPONSE ACTIONS 2019	ONGOING DROUGHT MANAGEMENT 2020	PERFORMANCE MEASURES	RECOVERY AND FUTURE PROGRAMS 2021-2023
INFRASTRUCTURE: ENGINEERING, WATER AND SEWER	6. Ensure there is always enough water to satisfy the basic needs of the community.	Effective management of water supply for immediate use during the current drought. Monitoring of water supply sources are appropriate and activated	Daily monitoring of : • Water supply • Demand usage • Triggers and restrictions required to meet water security.	Water supply available for human needs. Project managers are reporting to Drought management coordinated team with timely information.	Additional water supply secure for ground water and surface water solutions.
		Smart Water- Automatic Meter Reading installed across 70 locations.	Smart Water systems installation, education and demand reduction targets monitored	Tenders complete and 70 Smart meters delivered. Monitoring of meters active and available.	Review of smart meter locations and additional meters installed where needed.
LIVEABILITY: OPEN SPACE AND RECREATION	7. Ensure community have access to open space and recreation for health and wellbeing during drought periods. 8. Consider liveability during heat and drought conditions.	Water is available for community use areas. Sports and community events are able to proceed with as little disruption as possible.	Community land is available to maintain liveability during extended periods of drought. Water needs of parks and recreational areas identified and prioritised. Availability of swimming pools remains for as long as is possible.	Community groups are able to use parks and recreational spaces with minimal disruption. Not less than 20% loss of tree on the public domain.	Evaluation of the effectiveness of park closures and costs associated with park repair post drought.
DEVELOPMENT AND ENVIRONMENT: PLANNING, REGULATION AND ENVIRONMENTAL CONTROL	9. Ensure that regulatory actions required for water security are met.	Effective management of compliance teams including Ranger education and enforcement of water restrictions.	Ongoing Ranger communication with community. Enforcement of water restrictions as needed.	Rangers understand rationale for water restrictions and current needs relating to the plan.	Review of Ranger experiences, challenges and future opportunities.

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 2: SECURE BUSINESS COMMUNITY NEEDS

COORDINATED RESPONSE	GOALS	IMMEDIATE RESPONSE ACTIONS 2019	ONGOING DROUGHT MANAGEMENT 2020	PERFORMANCE MEASURE	RECOVERY AND FUTURE PROGRAMS 2021-2023
PROGRAM MANAGEMENT	1. Drive support to business community programs to ensure that they are equitable.	Provide timely stakeholder consultation that inform management responses. Facilitation of access to NSW State and Commonwealth funding sources such as grants and rebates for business.	Ongoing meetings to ensure business needs will be met by project managers. Generate risk register of hazards, threats to life, threats to property, mitigation options in emergency	Minimum weekly meetings with Executive regarding current actions and issues. Reports to ELT, CEO and Council members.	Review of process delivery to business community. Evaluation and update to future plans.
EXECUTIVE SERVICES: COMMUNICATION	2. Communicate regarding drought actions required by Council and offer active feedback avenues.	Communication strategy to support communication with the business community and large water users, institutions and industries. Communication through: • Drought Hub • WSAP process and timings • Industry sessions • Branding for specific groups, such as tourism.	Active communication of water restrictions to the business community. Websites and FAQs updated. Communication strategies actively reviewed and improved. Implementation of restrictions to reduce demand well communicated in advance of changes.	Timely communication of feedback to ELT, CEO of issues and future risks to the business community. Fortnightly updates of business focused correspondence undertaken. Communicate WSAP Branding packs distributed to specific and agreed businesses.	Review of strategy delivery and effectiveness of communication. Revise and update communication strategy to meet business needs of the community.
CULTURE & ECONOMY	3. Ensure businesses are able to function for as long as is possible. 4. Support tourism economy	Provide timely stakeholder consultation regarding current and future actions that may have impact to the business community and functions of Council facilities and services.	Ongoing meetings to ensure business needs are communicated to the Water and Sewer teams Alert ELT of risks to the business community	Regular (monthly or more frequent) meetings with business community and Council facilities to monitor impacts.	Review process of increased restrictions to determine least impact processes for future.

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 2: SECURE BUSINESS COMMUNITY NEEDS

COORDINATED RESPONSE	GOALS	IMMEDIATE RESPONSE ACTIONS 2019	ONGOING DROUGHT MANAGEMENT 2020	PERFORMANCE MEASURE	RECOVERY AND FUTURE PROGRAMS 2021-2023
INFRASTRUCTURE: ENGINEERING, WATER AND SEWER	5. Ensure businesses are able to function for as long as is possible. 6. Ensure water availability for large water users. 7. Increase certainty in ongoing drought periods	Identification of: • Major business users, requirements, short and long term needs. • Monitoring of business, institutional, industrial use figures.	Ongoing improvement and monitoring of water supply to business users. Implementation of Smart Meters as needed and management of institutional needs.	Business users water supply is secure. Issues and Risks reported by project managers to ELT, CEO in a timely manner.	Delivery of improved water supply sources to meet business needs. Prioritisation of water needs for essential and core business users updated into service modelling for future changes to supply/demand systems.
LIVEABILITY: OPEN SPACE AND RECREATION	8. Support business users of sports and recreation and use of open space areas	Review of businesses and paid use of community facilities, salesyards, showgrounds, parks and recreation areas to manage use and ensure availability for as long as is possible.	Update and communication of changes to facilities with advance notice.	Impacts to businesses due to loss of available Council asset reduced. Issues communicated to ELT, CEO by project managers and operational maintenance teams to agreed service standards.	Review of practicality of actions taken and effectiveness. Improvements to service business users considered for future events.
DEVELOPMENT AND ENVIRONMENT: PLANNING, REGULATION AND ENVIRONMENTAL CONTROL	9. Ensure clarity and governance and uniform rules for licence holders 10. Educate and enable Rangers and Compliance staff	Business users are clearly communicated by compliance teams. Compliance teams have clear education to enable their communication with community.	Communication and audit of restrictions ongoing.	Compliance teams equipped to manage drought events.	Review of experiences, challenges and future opportunities.

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 3: OPERATE EFFICIENT COUNCIL SYSTEMS

COORDINATED RESPONSE	GOALS	IMMEDIATE RESPONSE ACTIONS 2019	ONGOING DROUGHT MANAGEMENT 2020	PERFORMANCE MEASURE	RECOVERY AND FUTURE PROGRAMS 2021-2023
PROGRAM MANAGEMENT	1. Drought Coordinated Response Team (DCRT) perform to agreed roles and deliverables. 2. Efficient escalation of issues and risks to efficient council operation.	Defined roles within the Drought Management Team: • Consistent reporting and management of key projects, issues and risks management. • Facilitate grants and funding to address Council needs. • Defined protocols of drought restriction activation and escalation	Communication between projects and areas of Council managed to ensure project success. All minor projects supported within management structure with review of scope, timeframes and budgets across all projects undertaken.	Program office managed to best practice standards and clearly communicated to ELT, CEO and all project managers with deliverables. Project administration kept up to date, issues and risk registers used and activated in a timely manner.	Review of strategic actions and revision of essential tasks. Review of program office activities (the Drought Coordinated Response Team) and its roles and responsibilities updated.
EXECUTIVE SERVICES: COMMUNICATION	3. Facilitate proactive staff commitment to deliver outcomes	Internal communications are clear and correct feedback channels are understood. Internal protocols and changes are communicated and managed.	Continued management of internal communication processes and reporting	Delivery of internal communication and feedback of drought concerns on a fortnightly basis.	Council efficiency of communication evaluated and strategies updated.
CULTURE AND ECONOMY	4. Ensure Council facilities and services are efficient. 5. Reduce impacts of restrictions to business community.	Define risks and hazard to operational efficiency. Seek improved water usage.	Continued improvements to water usage at major facilities such as Showgrounds & Sales yard, Tourist sites and Airport	Improvements are implemented. Future improvements are identified.	Improvements to water efficiency are scoped and delivered.
INFRASTRUCTURE: ENGINEERING, WATER AND SEWER	6. Ensure water systems are available and usable.	Projects to deliver water supply infrastructure improvements are designed, tendered and implemented with priority. Water supply integrity is checked across the system. Monitoring and data inaccuracies are isolated quickly. Government funding expended. Integrated Water Cycle Management Plan delivered.	Projects are implemented to improved water systems by Council without delay. Delays are immediately reported to the Drought Coordinated Response Team for escalation if required.	Ensure water supply integrity achieved. Efficient operation of water supply systems achieved. Appropriate system operating rules are adopted. Regular system monitoring to provide baseline data available at daily, weekly, monthly and annual reporting.	Evaluation of water systems undertaken for supply and demand. Future improvements identified.

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 3: OPERATE EFFICIENT COUNCIL SYSTEMS

COORDINATED RESPONSE	GOALS	IMMEDIATE RESPONSE ACTIONS 2019	ONGOING DROUGHT MANAGEMENT 2020	PERFORMANCE MEASURE	RECOVERY AND FUTURE PROGRAMS 2021-2023
LIVEABILITY: OPEN SPACE AND RECREATION	7. Community assets are managed efficiently.	Appropriate water saving projects are undertaken such as: • Water Re-use at Pioneer Park Hockey Field, Dubbo. • Rainwater tanks for the Dubbo Aquatic Leisure Centre and Wellington Aquatic Leisure Centre. Requirements for water across assets defined and register formed.	Ongoing management of water requirements to maintain assets. Education of water saving measures by maintenance teams undertaken.	Reduced impacts to assets and minimal repairs to assets. Council employees follow protocols and priorities as set by DCRT, ELT and CEO. Efficient management of DRC Facilities and Depots	Review of Council employee manuals for clarity during drought. Evaluation of service levels required during drought.
DEVELOPMENT AND ENVIRONMENT: PLANNING, REGULATION AND ENVIRONMENTAL CONTROL	8. Educate and enable Compliance staff	Communication of effects of drought restrictions within Council roles and teams. Teams able to proactively undertake changes to regular planning and regulations to suit drought restrictions: DA process changes and extensions to compliance timelines e.g. for turf and swimming pools	Ongoing updates and changes to drought restrictions communicated clearly to teams and staff.	Proactive staff management.	Evaluation of processes and improvements to best practice.

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 4: EFFECT LONG TERM WATER SECURITY

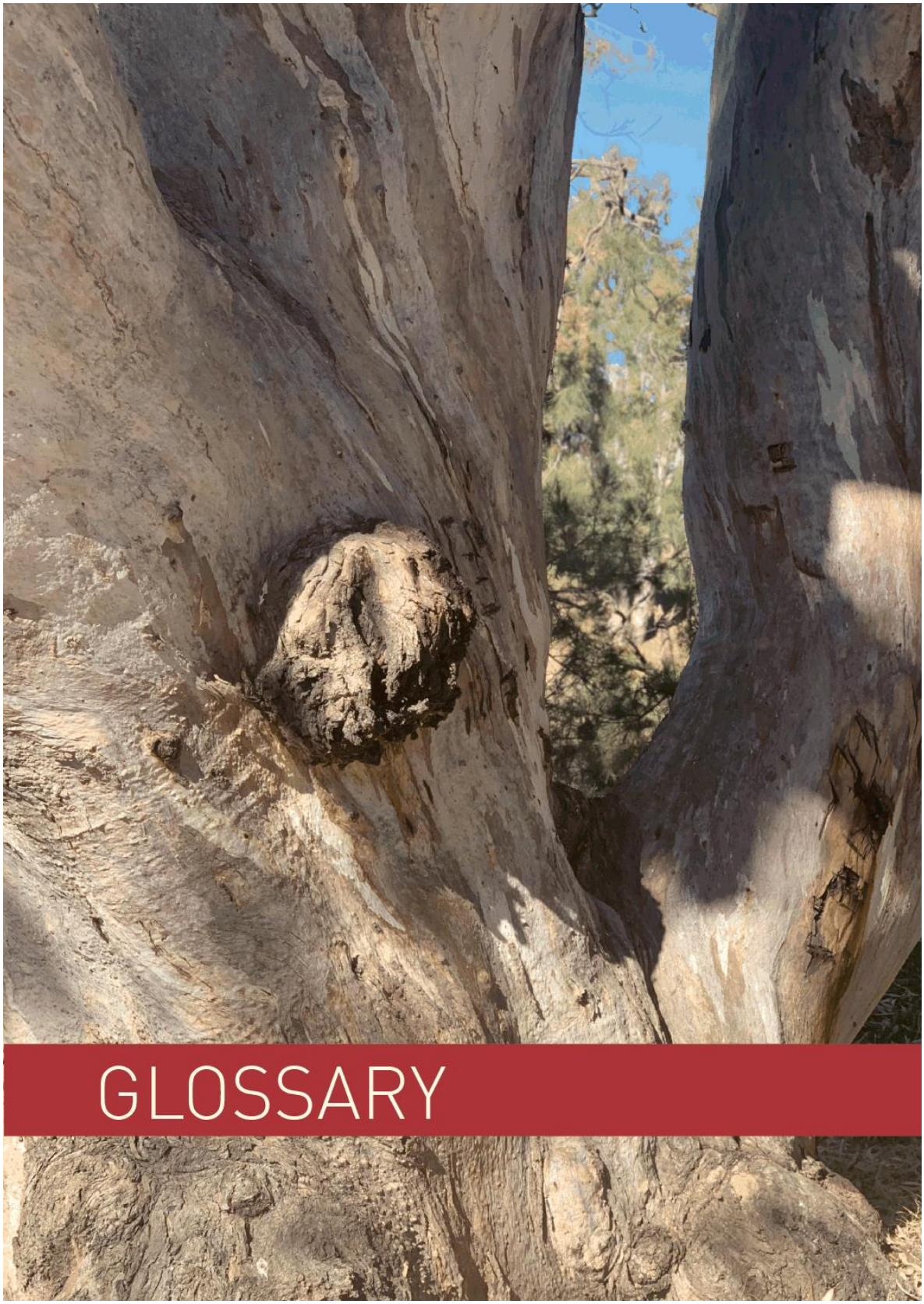
COORDINATED RESPONSE	GOALS	CURRENT DROUGHT ACTIONS 2019 - 2020	PERFORMANCE MEASURE	RECOVERY AND FUTURE PROGRAMS (YR 3 - 8)
PROGRAM MANAGEMENT	1. Facilitate informed programs of activities for long term water security. 2. Facilitate funding strategy to ensure system is capable of supplying future demands.	Project management of funding requirements for future projects. Identification of systems gaps and current and future needs. Changing NSW policy and guidelines are incorporated into DCRT practices.	Grant applications for funding of projects completed	NSW Guidelines incorporated into future DCWERP review.
EXECUTIVE SERVICES: COMMUNICATION	3. Build capacity of the community to cope with the consequences of long term drought events.	Review and evaluate DCWERP effectiveness via community feedback to strategic directions taken	Review communications by Council.	Update and improve communication effectiveness.
CULTURE AND ECONOMY	4. Build capacity of business functions and services to adapt to drought restrictions and continually improve water efficiency	Determine immediate water efficiency and non essential water use areas. Review water usage at major facilities such as Showground and Sales yards, Airport, Wellington Caves and other tourism destinations.	Review monitoring data on usage for improvements to current water requirements. Implement metering and recycling projects if possible.	Review facilities for improvements such as recycling, rain tanks or more efficient ground watering regimes. Seek emergency bore licences if required.
INFRASTRUCTURE: ENGINEERING, WATER AND SEWER	5. Funding strategies to assist in management of cost associated with drought. 6. Minimise risks of community running out of water. 7. Long term supply strategies.	Pre-determined and agreed list of long term projects to: • Reduce future risks. • Minimise disruption to community and business. • Identify options for innovation, recycling and improvements.	Funding allocated and project commenced.	Investigate: • Regional pipelines • Effluent Credits • Effluent Reuse • Stepped Tariffs • Operation of Burrendong Dam

DROUGHT MANAGEMENT PLAN

BE WISE WITH OUR WATER

DIRECTION 4: EFFECT LONG TERM WATER SECURITY

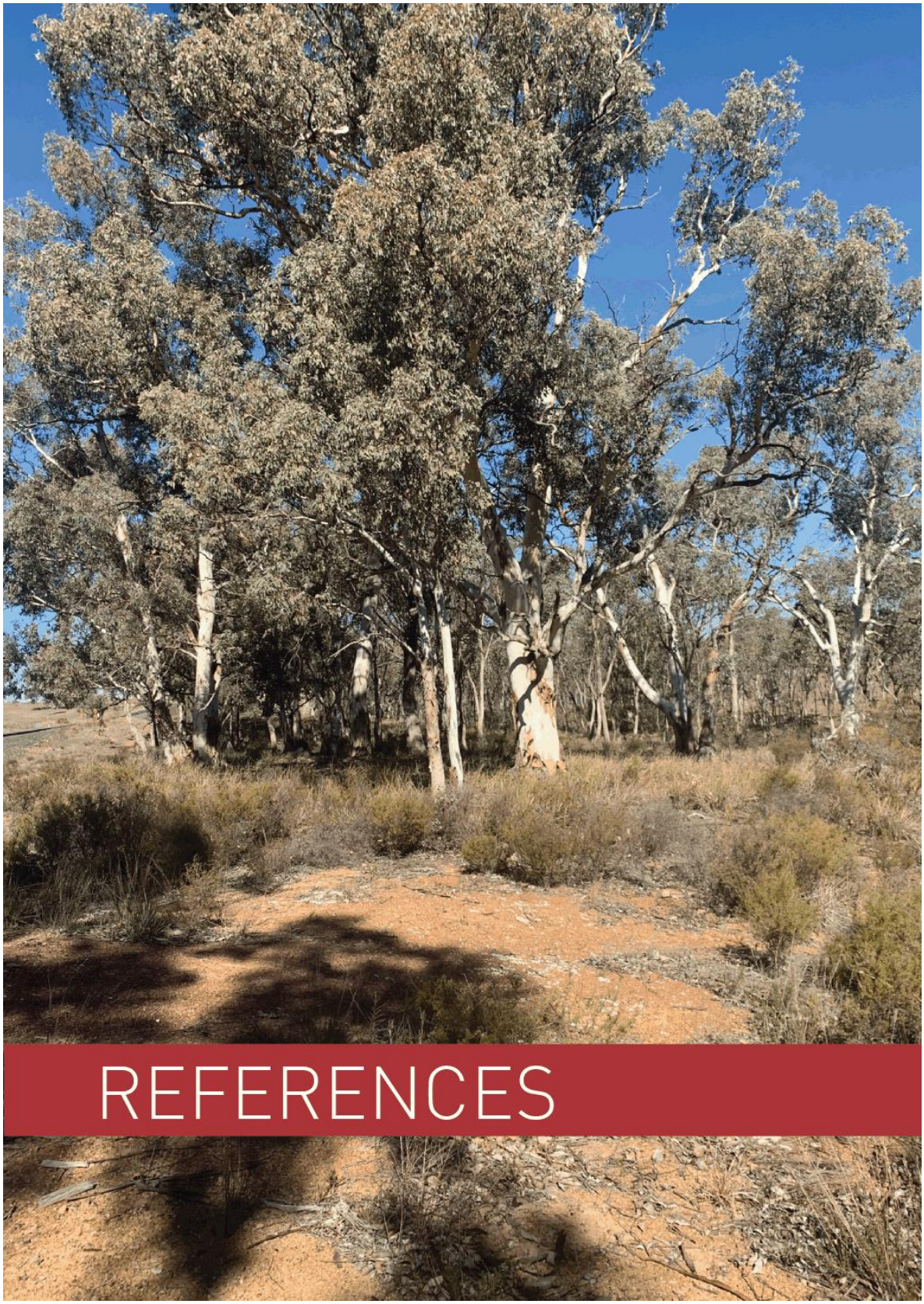
LIVEABILITY: OPEN SPACE AND RECREATION	8. Innovate and build capacity to sustain availability of open space and recreation for as long as possible.	Long term innovation to improve sports surfaces, including improved tolerance of turf to drought. Installation and improvement to assets so they are better equipped to deal with drought incidents.	Projects identified and commenced.	Project completed and reviewed prior to future drought event.
DEVELOPMENT AND ENVIRONMENT: PLANNING, REGULATION AND ENVIRONMENTAL CONTROL	9. Engage planning for grant development to address identified needs	Keep register of compliance team incidents and responses to changes in the community due to drought restrictions.	Register identifies guides for responses to future events.	Internal review prior to future events.


GLOSSARY

GLOSSARY

FREQUENTLY USED TERMS

TERM	DEFINITION
Basin	Murray- Darling Basin
CCP	Critical Control Points
CEO	Chief Executive Officer
Day Zero	A phrase related to the Cape Town, South Africa running out of water. This term related to the count down in days until there was no water supply left. It is now a common term that describes a worst case scenario.
DCWERP	Drought Contingency and Water Emergency Response Plan
DPIE	NSW Department of Planning, Industry and Environment
DRC	Dubbo Regional Council
Drought Incident	The drought event that triggers operation of the Drought Coordinated Response Team
DWMS	Drinking Water Management System
ELT	Executive Leadership Team
HBT	Health Based Target
IWCM	Integrated Water Cycle Management
MDBA	Murray-Darling Basin Authority
LGA	Local Government Area (Dubbo Regional Council area)
NRW	Non Revenue Water
STP	Sewerage Treatment Plant
WMA 2000	*Water Management Act 2000* (NSW legislation)
WSAP	Water Saving Action Plan
WTP	Water Treatment Plant
WSP	Water Saving Plant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REPORT: 2019/2020 Financial Assistance Program - Round Two

AUTHOR: Director Liveability
REPORT DATE: 17 February 2020
TRIM REFERENCE: ID20/94

EXECUTIVE SUMMARY

The purpose of this report is to consider applications for financial assistance under Council's 2019/2020 Financial Assistance Fund programme.

Advertising for the second round of 2019/2020 funding was conducted from 13 February 2020 to 13 March 2020, with twenty-two (22) applications received, requesting a total of $87,353.80.

It is recommended that $15,000 be funded from the $30,000 allocated in 2019/2020 budget, for the second round of the financial assistance program, with allocations being provided for ten (10) differing community groups.

FINANCIAL IMPLICATIONS

Funding has been allocated in 2019/2020 budget for $30,000 in total, with $15,000 for each of two grant rounds.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

1. That the report from the Director Liveability dated 17 February 2020, be noted.
2. That funds from the 2019/2020 Financial Assistance Fund round two be allocated as follows:

a)	**Cerebral Palsy Alliance Dubbo (CPA)**	**$2,000**
b)	**Young Life Dubbo**	**$1,000**
c)	**Mid Macquarie Landcare Inc**	**$1,500**
d)	**Girl Guides Association of NSW Dubbo**	**$1,000**
e)	**Wellington Amateur Theatrical Society (WATS)**	**$1,000**
f)	**LeaderLife Limited**	**$2,000**
g)	**LeaderLife Limited**	**$2,000**
h)	**Ballimore Progress Association**	**$4,500**

3. That all applicants be advised of funding application outcomes.

Skye Price
Director Liveability

BACKGROUND

Council's Financial Assistance Program operates in accordance with Section 356 of Local Government Act 1993. Council's policy is to seek applications for Financial Assistance on two (2) occasions each financial year, each grant round totalling $15,000. Criteria for applying for funding is included as a part of application forms (**Appendix 1**). This is the second round of funding for 2019/2020. Future rounds of funding will comply with Council's Assistance Policy, as resolved at 26 November 2018 Ordinary Council Meeting.

REPORT

A copy of the application form including funding criteria is appended to this report (**Appendix 1**). Council allocated $30,000 during 2019/2020 financial year, for financial assistance. $15,000 is allocated to each of two rounds of applications.

The following table itemises applications received for the second round of 2019/2020 funding. All amounts listed are exclusive of GST.

Some organisations have not received an allocation because they are a commercial entity; they have received significant grant funding previously; they receive alternative income sources (for example, membership fees), or they do not offer a unique community service/ activity.

Since there is only $15,000 available for the grant round, objective decisions needed to be made pertaining to recommendations, to ensure the greatest possible return on investment/ positive community outcomes.

Council officers independently assessed grant applications and final recommendations were collectively arrived at.

Upcoming grant rounds, refinement and potential upper financial limits will be introduced for applications, to ensure financial assistance can be extended to a reasonable quantity of community groups, benefiting the broader community; without diminishing the quality or capacity of projects and initiatives which are proposed.

SUMMARY

Community Group	Funding Proposal and previous funding successes	Monies Sought	Monies recommended
Songwriters and Original Musicians Association of Dubbo Inc. (SOMAD)	Purchase Point of Sale equipment to enable them to operate more easily Received funding 2018 - $1,000 sponsorship UWS2019 2019 - $2,000 sponsorship	**$1,214**	

Community Group	Funding Proposal and previous funding successes	Monies Sought	Monies recommended
Cerebral Palsy Alliance Dubbo (CPA)	Purchase a range of therapeutic equipment and resources to offer first-class speech, occupational and physiotherapy to children, teenagers and adults with disability at the Dubbo centre. Received funding 2017 - $1,500	**$4,688.95**	**$2,000**
Young Life Dubbo	Purchase Scooter Board Complete games set plus freight, to purchase a portable basketball system, to purchase super soft ball set and to purchase folding gym mats x 4. No prior funding from DRC	**$1,988.90**	**$1,000**
Drama Club Dubbo	Defray the cost of the Dubbo Regional Theatre and Convention Centre for their musical Ella. No prior funding from DRC Received from various businesses and family donations 2019 - $3,000	**$4,360**	
Saints Netball Club Dubbo	Purchase good quality sporting bags with wheels that will last longer and be more practical for the teams to store their provided equipment. No prior funding from DRC	**$3,875**	
Crown Lands – Eurimbla Public Hall	Repair the Hall so the local community can use it – Christmas Carol service and BBQ, training for RFS, pasture and cropping field days, RFB meetings, upholstery group and school age agricultural camps. No prior funding from DRC	**$15,000**	
Geurie Lions Club Inc	Upgrade catering van bench space with stainless steel, new rubber flooring and purchase of a glass door fridge. Received reimbursement of park fees for Wise Park Geurie from DRC 2019 - $150	**$1,000**	

Community Group	Funding Proposal and previous funding successes	Monies Sought	Monies recommended
Wellington Local Aboriginal Lands Council	Purchase a 6x4 trailer, lawn mower and line trimmer. This equipment to be lent out to tenants to maintain their yards. No prior funding from DRC	**$4,000**	
Mid Macquarie Landcare Inc	Purchase and install portable toilets for use by Work for the Dole participants located at the Community Garden on the Scout Hall property. Received prior funding from DRC 2017 - $1,000	**$5,600**	**$1,500**
Outback Writers Centre	To provide a Western Plains Writers' Festival with workshops, venue hire and advertising. Received prior funding from DRC as a MOU with WPCC – West Words Fest 2019 - $3,000	**$7,000**	
Girl Guides Association of NSW Dubbo	Create a herb and vegetable garden at the West Dubbo Guide Hall. Support outdoor activities and active lifestyle at the main annual Guide camp - consumables and equipment, food and transport costs/fuel. Received prior funding from DRC 2019 - $1,500	**$2,530**	**$1,000**
Delroy High P&C Association	Provide a co-contribution to the acquisition of two (2) filtered and chilled drinking fountain and bottle refill stations. No prior funding from DRC	**$657**	
Wellington Amateur Theatrical Society (WATS)	Purchase four (4) wireless microphone sets, so all performers can be equipped with microphones. Received prior funding from DRC in 2018 - $4,768.37	**$1,516**	**$1,000**

Community Group	Funding Proposal and previous funding successes	Monies Sought	Monies recommended
Wellington Aboriginal Co-operative Society	Install a sheltered yarning circle for the elderly flats, so the elders can come together to meet No prior funding from DRC	**$5,000**	
Central West Leadership Academy	Pay NASA team airfares and transfers from Sydney to Dubbo for 8 people and food for the NASA team for 3 days. Received prior funding from DRC – Community Services Fund 2018 - $5,300 and 2019 - $500	**$4,800**	
NSW Central West Muslims Association	Fund 'Celebrating Eid Festival' in Dubbo to cover the cost for kids' activities: Jumping Castle, Merry-go Round, Pony rides etc. No prior funding from DRC	**$5,000**	
LeaderLife Limited	Purchase program and activity resources for 10 weeks for CATALYST Delroy Campus. Received prior funding from DRC 2019 - $2,000	**$2,000**	**$2,000**
LeaderLife Limited	Purchase four (4) computes with software and Trend Micro Protection to assist in running their programs Received prior funding from DRC 2019 - $2,000	**$3,829.95**	**$2,000**
Dubbo Model Railway Club Inc	Improve disability access via improved flooring surface; and to vermin proof a cabinet in the kitchen area No prior funding from DRC	**$2,750**	
Ballimore Progress Association	Purchase an electric BBQ, installation of a concrete slab for BBQ and power connection for BBQ Received prior funding from DRC 2019 - $4,000 for BBQ purchase & install	**$10,544**	**$4,500**
Totals		***$87,353.80***	***$15,000***

Appendices:

1 ⇩ Financial_Assistance_Fund_Application_Form_interactive

2 ⇩ Financial Assistance Fund - Guidelines

Financial Assistance Program

DUBBO REGIONAL COUNCIL

FINANCIAL ASSISTANCE FUND

Two rounds: March and August annually

Intent: Support projects or programs that help create, enhance or build community well-being and amenity.

Applications Open: March and August annually

Only not-for-profit organisations based in the Dubbo Regional Local Government Area (LGA) are eligible to apply for funding under the Financial Assistance Fund. Please refer to the Financial Assistance Fund **Eligibility Criteria and Guidelines** prior to submitting an application.

Event information	
Owner of project or program	
Please provide an overview of your organisation (max 500 words)	
Please provide an overview of the project or program (max 300 words)	

Please submit to: council@dubbo.nsw.gov.au or PO Box 81, Dubbo NSW 2830
Deliver: Civic Administration Building, Church Street, Dubbo

DUBBO REGIONAL COUNCIL

Financial Assistance Program

DUBBO REGIONAL COUNCIL

What outcomes are you looking to achieve and how will residents of the Dubbo Regional LGA benefit? (max 300 words)	

Please list donations given to your organisation by Council over the last three (3) years	Date Purpose of funding Amount Received _____ _____ _____ _____ _____
Has your organisation made application for financial assistance from other bodies in the last 12 months? If yes, please provide details of funding sought	Date Funding Body Purpose Amount Granted Y/N _____ _____ _____ _____ _____
It is expected that all projects/programs/activities supported by Dubbo Regional Council (DRC) are covered by approvals and appropriate insurances. It is also expected that they are delivered in a safe and sustainable manner. Council may request a copy of plans as part of the assessment of your application.	Please indicate below approvals, insurances and plans in place to cover the project/program/activity: ☐ $20M Public Liability Insurance (please attach) ☐ Other insurance Please specify_____ ☐ Risk Management Plan

Please submit to: council@dubbo.nsw.gov.au or PO Box 81, Dubbo NSW 2830
Deliver: Civic Administration Building, Church Street, Dubbo

DUBBO REGIONAL COUNCIL

Financial Assistance Program

DUBBO REGIONAL COUNCIL

Application for financial support

Please note that in accordance with the **Eligibility Criteria and Guidelines** all organisations receiving funding are required to return benefits to the community commensurate with the level of funding approved. See the Benefits Matrix below.

Details (what will the funds be used for)	Amount
	$
	$
	$
	$
Total	**$**

Applicant's contact details	
Name	
Telephone	
Email address	
Project/program Owner's details	
Owner	
ABN	
Telephone	
Email address	
Postal address	
Is your organisation registered for GST	|

To be completed by applicant as part of initial application to streamline this process. Completing this section does not guarantee the success of your application.	
Banking Institution	
BSB	
Account name	
Account number	

Have you received any other forms of funding for this project / program / activity from Council?	| (If yes, you are ineligible to apply for funding under the Financial Assistance Fund.
Have you attached Certificate of Currency for $20M Public Liability Insurance?	| (if no, why not)
Have you attached a copy of your Certificate of Incorporation or a letter from the governing organisation?	| (if no, why not)

Please submit to: council@dubbo.nsw.gov.au or PO Box 81, Dubbo NSW 2830
Deliver: Civic Administration Building, Church Street, Dubbo

DUBBO REGIONAL COUNCIL

Financial Assistance Program

DUBBO REGIONAL COUNCIL

Outgoing Sponsorship Benefits Matrix

Return benefits to Dubbo Regional Council (DRC)

Value of sponsorship	Up to $5,000	$5,001 - $10,000	$10,001 - $15,000	$15,001 - $20,000	More than $20,001
DRC brand recognition on appropriate printed material	●	●	●	●	●
Distribute Regional marketing material such as Visitor Guides	●	●	●	●	●
Provide feedback to DRC via survey seeking outcomes	●	●	●	●	●
Images of the event to support destination marketing activity (on request from DRC)	●	●	●	●	●
Acquittal Form A	●	●	●	●	●
Acquittal Form B		●	●	●	●
Provide feedback to DRC via survey seeking outcomes		●	●	●	●
Acknowledge DRC support via digital platforms (website / social media)		●	●	●	●
Acquittal Report provided no later than 60 days from the completion of the event		●	●	●	●
PA announcement or signage at the activity / event			●	●	●
Acknowledge support via pro-active promotion or advertising (radio / tv / print)			●	●	●
Complimentary tickets / invites to launch, VIP function or an event				●	●
Naming right of an event / activity or space					●

Please submit to: council@dubbo.nsw.gov.au or PO Box 81, Dubbo NSW 2830
Deliver: Civic Administration Building, Church Street, Dubbo

DUBBO REGIONAL COUNCIL

Financial Assistance Program

DUBBO REGIONAL COUNCIL

FINANCIAL ASSISTANCE FUND

Eligibility and Guidelines

Intent: Support projects or programs that help create, enhance or build community well-being and amenity.

Applications Open: March and October annually

Only not-for-profit organisations based in the Dubbo Regional Local Government Area (LGA) are eligible to apply for funding under the Financial Assistance Fund. Please read these **Eligibility Criteria and Guidelines** prior to submitting an application.

Key criteria

- The project / program must be undertaken in the Dubbo Regional LGA
- Only not-for-profit organisations based in the Dubbo Regional LGA are eligible to apply

Ineligible activities/applications

- Project / program not staged in the Dubbo Regional LGA
- Payment of debt
- Payment of insurance premiums
- Political activities
- Items included in another funding application or to top-up funding for previous funding or any other funding
- Organisations with gaming machines and/or trade regularly with a liquor licence most days of the week
- Funding for prize money, prizes or trophies
- Events which occur as a matter of course (eg. school fetes)
- Day to day operational funding for the organisation
- Funding to assist expenses in relation to guests or VIPs or stallholders to attend the event
- Wages or payment to staff
- The proposal has safety and/or environmental hazards that are not managed by acts under a Risk Management Plan to mitigate risk
- Funding will not be provided retrospectively

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Financial Assistance Program

DUBBO REGIONAL COUNCIL

Conditions of funding

1. Organisations can not apply for funding via the Financial Assistance Fund if funding has already been provided by another funding stream of Dubbo Regional Council (DRC) for the same activity in the same year.
2. No financial assistance will be given to Government Departments or agencies, or for the support of Government-owned facilities.
3. No financial assistance will be given to sporting organisations or events (these organisations have other avenues for financial assistance).
4. Funds granted can only be used for the purpose as specified in the application, unless written permission for a variation is obtained from DRC.
5. DRC must be advised in writing if there are any significant changes to the activity as described in the application, or to the contact details of the recipient.
6. Should the project / program be cancelled, all funding received is to be repaid to DRC.
7. All DRC and other requisite permits, approvals, insurances etc relating to the event must be obtained or funding may be withdrawn.
8. Where possible, the organisation will source goods and services for the project / program from within the Dubbo Regional LGA.
9. All recipients of funding are required to return to DRC:
    a. Benefits as outlined in the Outwards Sponsorship Matrix (below).
    b. An Acquittal Report within 60 days of the completion of the project / program.
        i. Form A: Funding provided up to $5,000.
        ii. Form B: Funding provided over $5,000 (funding $10,000 or more requires an auditors statement)
    c. A completed survey providing DRC with top level data / insights.
10. DRC reserves the right, as part of the assessment process, to request further information or documentation.
11. Failure to provide an Acquittal Report will preclude future funding opportunities.
12. Recipients of financial assistance will be required to have a representative attend a civic ceremony at which cheques / remittances for the financial assistance will be presented.

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Financial Assistance Program

DUBBO REGIONAL COUNCIL

Outgoing Funding Benefits Matrix

Return benefits to Dubbo Regional Council

Value of sponsorship	Up to $5,000	$5,001 - $10,000	$10,001 - $15,000	$15,001 - $20,000	More than $20,001
DRC brand recognition on appropriate printed material	●	●	●	●	●
Distribute Regional marketing material such as Visitor Guides	●	●	●	●	●
Provide feedback to Council via survey seeking outcomes	●	●	●	●	●
Images of the event to support destination marketing activity (on request from Council)	●	●	●	●	●
Acquittal Form A	●	●	●	●	●
Acquittal Form B		●	●	●	●
Provide feedback to Council via survey seeking outcomes		●	●	●	●
Acknowledge DRC support via digital platforms (website / social media)		●	●	●	●
Acquittal Report provided no later than 60 days from the completion of the event		●	●	●	●
PA announcement or signage at the activity / event			●	●	●
Acknowledge support via pro-active promotion or advertising (radio / tv / print)			●	●	●
Complimentary tickets / invites to launch, VIP function or an event				●	●
Naming right of an event / activity or space					●

For more information

Dubbo Regional Council
Community and Recreation Division
6801 4000
council@dubbo.nsw.gov.au

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REPORT: Increase to Chaperone Subsidy for Sister City Student Exchange

AUTHOR: Sister Cities Officer
REPORT DATE: 4 March 2020
TRIM REFERENCE: ID20/153

EXECUTIVE SUMMARY

Each year Dubbo Regional Council recruits four (4) chaperones from the local community to accompany students on annual sister city student exchange visits to Asian sister cities. Successful applicants receive a subsidy towards their travel costs. There are increasing responsibilities in fulfilling the chaperone role and during recent years the number of suitably qualified applicants has declined. In order to reverse this trend, and in recognition of the level of responsibility associated with the role of sister city chaperone, it is recommended that Council increase the subsidy.

FINANCIAL IMPLICATIONS

A nominal $2,000 increase to the sister city budget, as an additional subsidy for the chaperones responsible for the welfare of the Dubbo students during annual sister city student exchange visits to Minokamo and Wujiang.

POLICY IMPLICATIONS

There are no policy implications arising from this report.

RECOMMENDATION

That the sister cities chaperone subsidy be increased from $1,000 to $1,500 per chaperone, resulting in an additional $2,000 budget allocation to the sister city budget.

Kylie Sutherland
Sister Cities Officer

BACKGROUND

Each year, Dubbo Regional Council seeks applications from local residents interested in chaperoning the Dubbo students who visit Wujiang and Minokamo, as part of the sister city student exchange. There are two chaperones, generally one male and one female, for each of the Minokamo and Wujiang student exchange delegations. Currently each chaperone receives a $1,000 subsidy from Council, to assist in covering the cost of travel. Each student also receives a $1,000 subsidy. The cost of visits for the chaperones who participated during the 2019 student exchange was approximately $2,800.

REPORT

During recent years, there have been fewer applicants interested in chaperoning sister city student exchange. It is a significant responsibility to escort a group of high school students overseas, particularly given the rigorous legislation around working with children and increased community expectations related to duty of care. Council ensures that at least one of the chaperones has experience in supervising students on overnight excursions, for a number of days. It is also preferable that the chaperones have previously travelled overseas. All chaperones must have current working with children checks.

If a student is homesick, becomes ill or has an injury, the chaperones are responsible for managing their wellbeing (this could include supervision of any medical treatment and hospitalisation) until such time as a parent or guardian arrives and takes responsibility for the student. They also need to ensure that the student's behaviour is exemplary as they are representing Dubbo Regional Council. Chaperones are required to manage a range of other matters including the travel itinerary and are often required to intervene to ensure that travel providers meet their obligations as set out in the tour itinerary.

SUMMARY

In order to continue to attract a high calibre of chaperone for Council's sister city student exchange with the required skills and experience, it is recommended that the subsidy per chaperone be increased from $1,000 to $1,500. This increase will be an additional $2,000 budget allocation for the sister cities activities budget. This proposed increased payment will also suitably recognise the level of responsibility associated with fulfilling the role of chaperone.