Our ref: 20/024/006:M2015/17459
Contact: Andrew Barton
Office: McLachlan Street, Horsham

GWMWater

ABN 35 584 588 263

11 McLachlan Street
(PO Box 481)
Horsham Victoria 3402

Tel: 1300 659 961
Fax: 03 5381 9881
Email: info@gwmwater.org.au
Website: www.gwmwater.org.au

Certified to best practice standards
ISO 9001 / 14001 and AS/NZS 4801

30 November 2015

Mr Stuart Craven
Director Urban Water Corporations
Department of Environment, Land, Water and Planning

via email: stuart.craven@delwp.vic.gov.au

Dear Mr Craven

GWMWater 2015 Water Security Outlook

I am pleased to provide GWMWater's Water Security Outlook for 2015.

Although it is a very dry year, GWMWater's water resource situation is able to meet our entire urban customer and rural customer domestic needs for this year. The benefit of fully pipelined distribution systems is particularly evident this year and the mechanisms of water trade and carryover are also proving to be useful across our supply systems.

As the season continues GWMWater will keep DELWP informed of any changes. Should you have any queries regarding the Water Security Outlook or if GWMWater can further assist, please contact Dr Andrew Barton, Manager Water Resources on 1300 659 961.

Yours sincerely

Mark Williams
Managing Director

Water Security Outlook

1 December 2015

Executive Summary

There is no doubt that the 2015-16 year is now well recognised as one of the driest years on record, and certainly the driest year since the wet 2011 flood year. Although GWMWater has much experience with operating under dry conditions, there is little experience of operating under dry conditions with the full benefit of the Wimmera Mallee Pipeline and the associated water entitlement framework.

At this time, all GWMWater urban customers remain secure with permanent water saving rules being applied to ensure the responsible use of the regions water resources. No restrictions to water use are proposed for the 2015-16 year.

- Groundwater supplied towns remain relatively unaffected by the current dry conditions and the monitoring of the groundwater resources will continue as planned.

- Murray supplied systems remain secure will allocations on the Murray approaching and likely to reach 100%, even under continued dry conditions. This is expected to provide a useful volume of carryover to be taken into the 2016-17 period.

- GWMWater's East Grampians and minor supply systems are responding to the dry conditions, but have been able to consistently meet consumptive demands through previous dry seasons. Ongoing monitoring of these systems will continue.

- GWMWaters entitlement from the Wimmera-Glenelg system currently has just 7% allocation against its WMP product. Other products essentially remain at 0%. GWMWater is currently reliant on carryover from previous years to secure supplies for the 2015-16 period. Indeed, there is sufficient carryover to secure customers into 2016-17 if required and beyond, but the exact balance of water in headworks makes this difficult to confirm at this stage.

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1. Introduction

GWMWater supplies water to rural and urban customers across four supply regions (refer to Figure 1) over an area of 62,000 km^2, for the following purposes:

1. potable water (drinkable) to 52,000 urban properties in 29 towns.
2. regulated (not suitable for human consumption) to 42 towns and 11,000 rural properties including free-range stock and stock intensive (feedlots, poultry farms, piggeries).
3. recreation activities supplying 11 recreation lakes including the newly commissioned Walkers Lake near Donald.
4. compensation flow for stock and domestic purposes to the Glenelg River.
5. Water to "Supply by Agreement" commercial customers.

As the appointed Storage Manager and Resource Manager for the Wimmera-Glenelg and Willaura systems, GWMWater plays a significant role, in the allocation and management of both regulated and unregulated surface water resources.

GWMWater is also the delegated authority to manage groundwater resources, and determines water allocations for groundwater users and undertakes licencing and compliance activities.

As operator of the Wimmera-Glenelg headworks, Willaura system headworks, Wimmera-Mallee and Northern Mallee pipeline systems, GWMWater also plays an important role in the supply of water to both GWMWater retail customers and other entitlement holders, including:

.

1. Townships of Glenthompson (Willaura system), Balmoral and Hamilton (Wimmera-Glenelg System) in accordance with the Bulk Entitlements issued to Wannon Water.
2. Townships of Borung, Korong Vale and Wychitella (via Wimmera-Mallee Pipeline) in accordance with the Bulk Entitlement issued to.Coliban Water.
3. Environmental water direct from headworks to watercourses in the Wimmera and Glenelg River catchments, in accordance with the Environmental Entitlement issued to the Victorian Environmental Water Holder, and corresponding Seasonal Watering Plans.
4. Wetlands in the Wimmera, North Central and Mallee catchments (via Wimmera-Mallee Pipeline), in accordance with the Environmental Entitlement issued to the Victorian Environmental Water Holder, and corresponding Seasonal Watering Plans.

The security of supply from groundwater and unregulated watercourse sources is largely dependent upon licensed allocation, water level or available yield (seasonal flow or pumping capacity). The security of supply from headwork reservoirs and regulated watercourses is dependent upon a combination of the broader bulk entitlement arrangements, seasonal water allocations and the carryover managed by individual entitlement holders.

GWMWater's supply systems draw water from a complex array or sources and utilise a combination of groundwater, headwork reservoirs and regulated and unregulated watercourses including the River Murray.

Figure 1: GWMWater Operating area showing major water resource management areas.

This Water Security Outlook is an annual update to GWMWater's Water Supply Demand Strategy (WSDS). The most recent WSDS was completed in 2012 and assessesd long term water demands against supply under a range of future climate scenarios. The WSDS and WSO are submitted to the Department of Environment , Land, Water and Planning and stem from the statement of obligations issued by the Minister to GWMWater.

GWMWater's Water Supply Demand Strategy will undergo a full review and update between 2016 and early 2017.

This Water Security Outlook provides detail about immediate and continued water security for GWMWater's domestic and urban customers and covers the following:

1. the current water resource position;
2. a forward 12 month outlook;
3. whether or not agreed levels of service to rural domestic and urban customers are able to be met; and
4. lists actions to be undertaken to improve system performance should it be likely that agreed levels of service will not be met.

For the purposes of this Water Security Outlook, rural domestic and urban use is defined as the supply of water to towns (including that used for residential, industrial, non-residential and municipal purposes) and rural households. Rural use is defined as the supply of water from GWMWater's raw water pipeline distribution systems to rural properties for non-domestic purposes. Whilst water security is integral to the ability of GWMWater's to supply entitlement holders and customers with water, this Water Security Outlook does not provide detail about water security for:

1. towns outside of GWMWater's operational area (i.e. towns serviced by Wannon Water and Coliban Water).
2. compensation flow, environmental water or water delivered for recreation purposes.

Information on these matters may be found in respective entitlement holder water security outlooks, annual operating plans and seasonal watering plans.

2. Overview

An overview of the water security outlook and response for domestic, urban and rural customers supplied by headwork reservoirs, regulated and unregulated watercourses and groundwater sources is documented in Table 1 below.

Table 1: Water security outlook at 16 November 2015

Supply System	Available Water at 16 November 2015 (ML)	Anticipated 2015/16 Bulk Offtake (ML) [1]	Water Security Outlook for 2015/16
Murray & Goulburn *Northern Mallee Pipeline, Wimmera-Mallee Pipeline (SS 5), Quambatook township*	5,796	4,400	Can supply at anticipated level of demand for this water year with some carryover of unused water into 2016/17 expected. No water restrictions planned with Permanent Water Savings rules to remain in place.
Grampians *Wimmera Mallee Pipeline (SS 1,2,3,4,7), Stawell, Ararat & Great Western systems*	74,347	16,500	Can satisfy water supply requirements for greater than 2 years at anticipated level of demand. No water restrictions planned with Permanent Water Savings Rules to remain in place.
Groundwater Supplied Towns	3,232 [2]	1,100	Can supply at anticipated level of demand for this water year. No water restrictions planned with Permanent Water Savings Rules to remain in place.
Minor Systems *Pyrenees & Eastern Grampians*	686 [3]	340	Can supply anticipated level of demand for this water year, contingent on physical supply constraints. No water restrictions planned with Permanent Water Savings Rules to remain in place.

Notes to Table 1:

[1] Anticipated bulk offtake is assumed to be 10% greater than 2014/15 due to increased consumption resulting from drier conditions.

[2] Excludes 1,200 groundwater entitlement available for supplementing Horsham supply.

[3] Includes volume of groundwater supplement available.

2.1 WSDS Predicted Demands vs Actual Demand

The 2012 WSDS predicted urban and domestic and rural demands for each supply system are listed in Table 2.

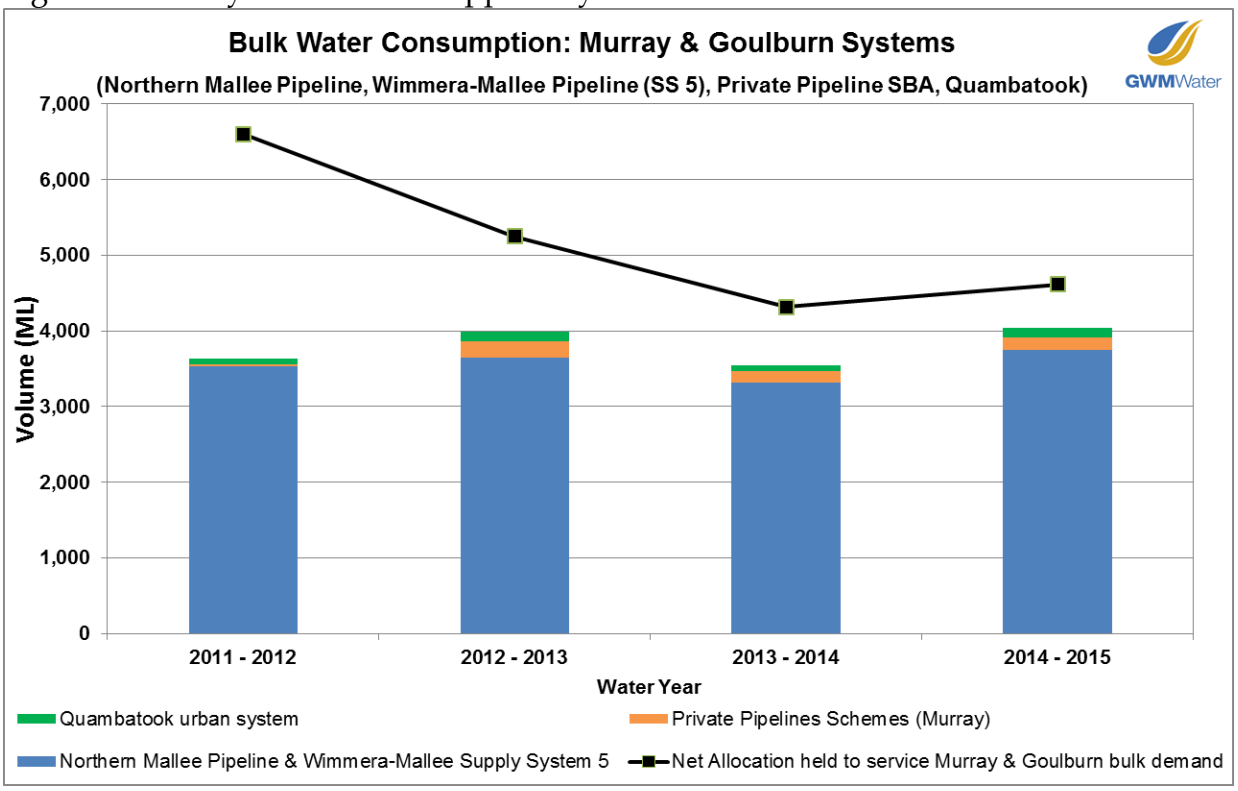
Note: WSDS demands relate to the volume consumed at the customer meter, and do not represent the total volume of bulk water allocation consumed. Losses within the rural pipeline systems, urban reticulation systems and from the water treatment process mean that a greater volume of bulk water is consumed than what is supplied at the customer meter.

Table 2: WSDS urban and domestic demands per supply system source.

Supply System	WSDS urban and domestic demand (ML)
Murray & Goulburn System *Northern Mallee Pipeline, Wimmera Mallee* Pipeline (SS5), Quambatook town	2,864
Wimmera-Glenelg System *Wimmera-Mallee Pipeline (SS 1,2,3,4,6,7), Horsham, Stawell, Ararat, Great Western urban systems*	13,777
Groundwater supplied towns	1,103
Pyrenees & Eastern Grampians Systems	361

Figures 2 to 5 below detail the volume of bulk water consumed in supplying urban, rural domestic and rural non-domestic demands for the water years 2011/2012 to 2014/2015. The volume of allocation available to service the bulk demand is shown for comparison.

Figure 2: Murray & Goulburn supplied systems.



The net allocation values shown in Figure 2 reflect how allocations have been managed each year through the sale of unused allocation on the temporary water market. Approximately 1,100 ML will be sold during the 2015/16 year while still retaining a useful volume of carryover into the 2016/17 period.

Figure 3: Wimmera-Glenelg supplied systems.

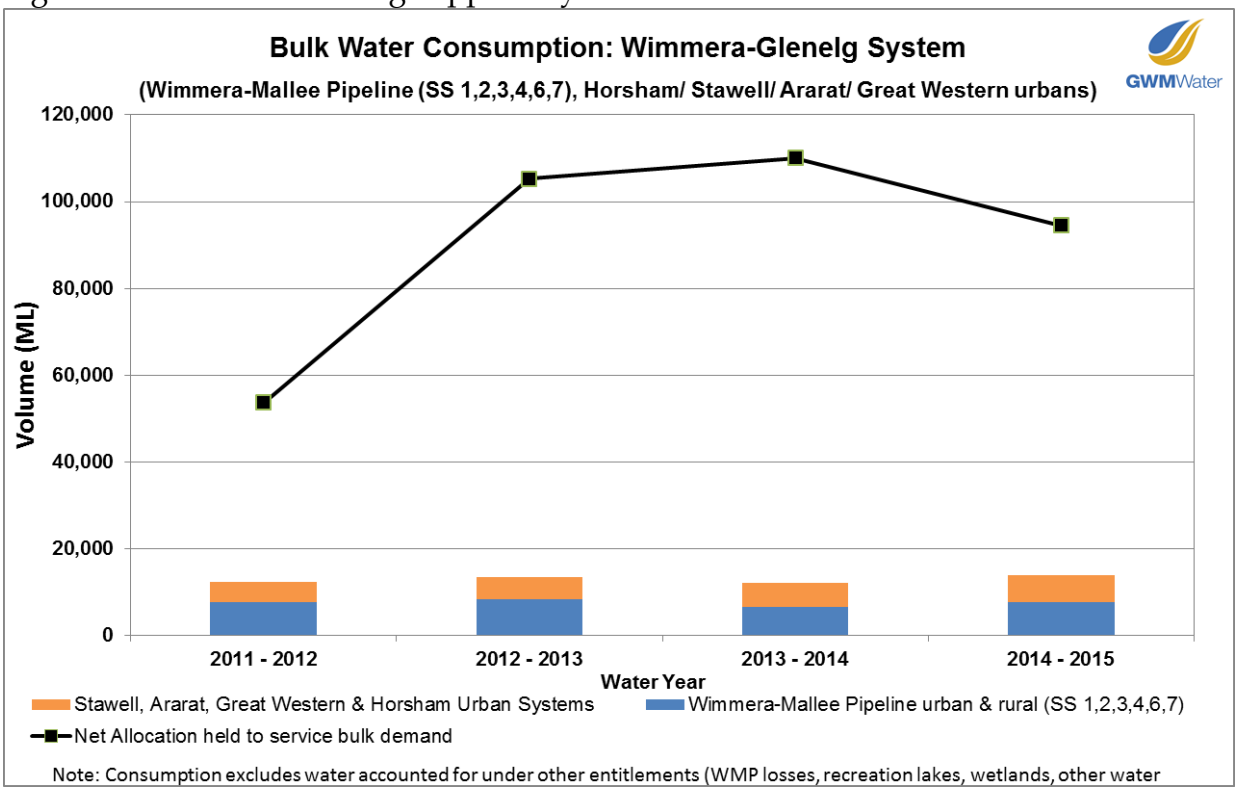


Figure 3 shows a large volume of carryover available under GWMWater's bulk entitlement. At least two years of supply is available to GWMWater without any action being taken to secure that supply. Beyond 2 years, the management of the spread of the water resource across the headworks system will become more important to ensure that the correct volumes are available at the correct time. Future water security outlooks will contain more information on this if conditions become more critical.

Figure 4: Groundwater supplied towns.

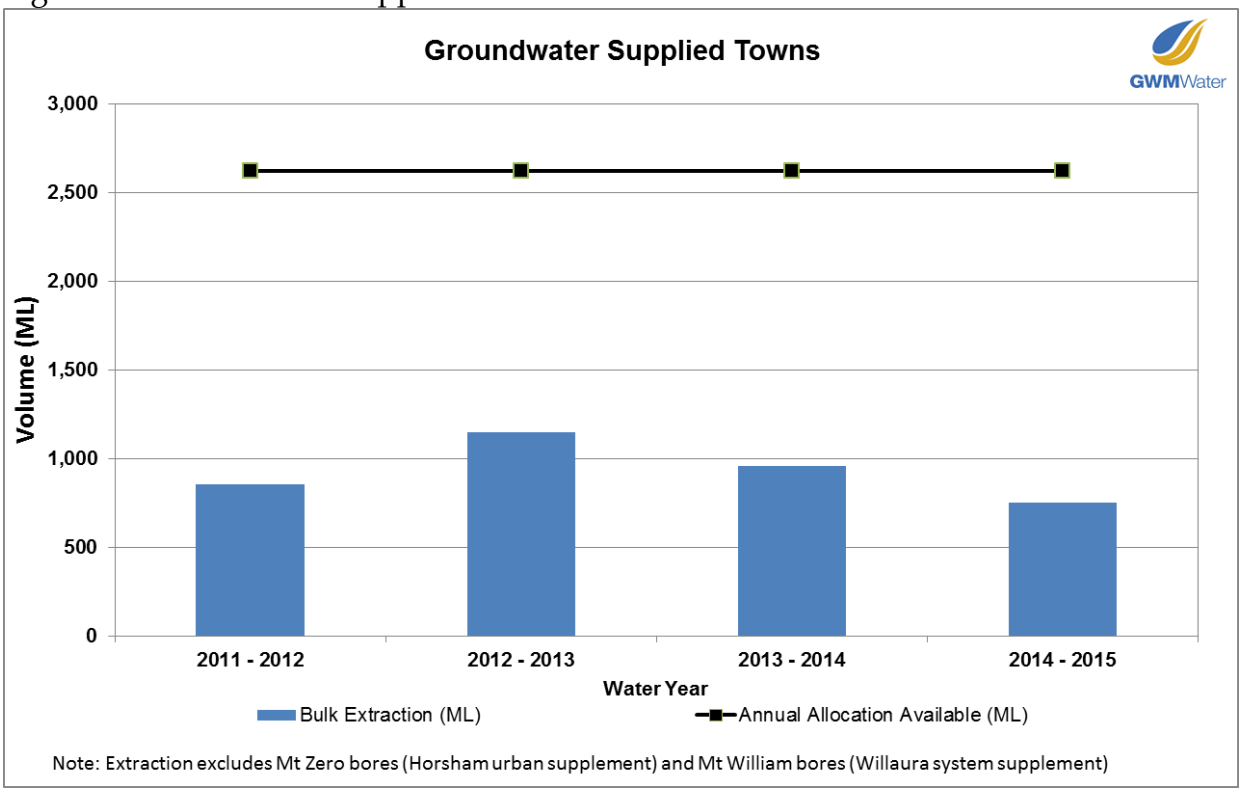
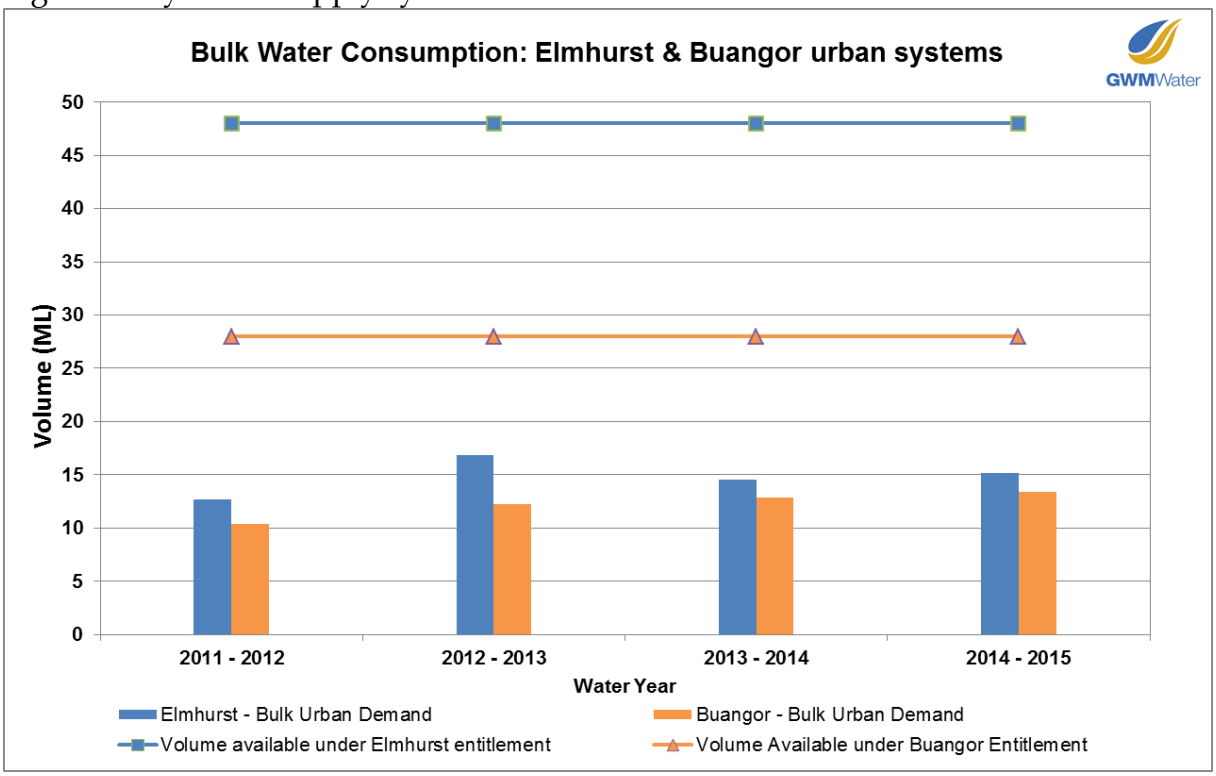


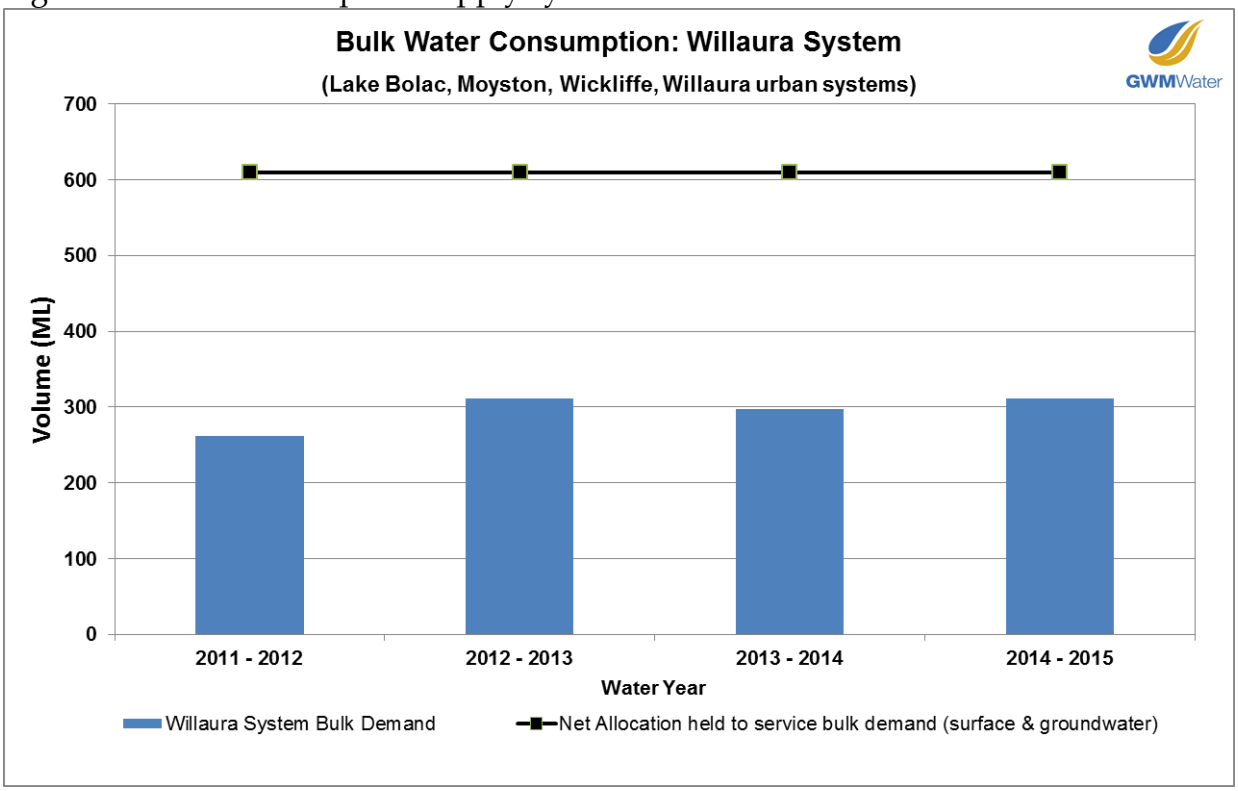
Figure 4 shows that the level of water allocated from GWMWater's groundwater systems is well in excess of the bulk volumes used. GWMWater continually monitors groundwater levels across its area of operations and administers various local and groundwater management plans to ensure the sustainable use of these resources.

Figure 5: Pyrenees supply systems.



The Pyrenees located supply systems of Elmhurst and Buangor are small and do not have well defined reliabilities of supply. The *volumes available under the entitlement* shown in Figure 5 represents the maximum capacity to divert water and does not show the actual water available for each year. These systems also suffer from a lack of streamflow monitoring and so there is not a lot of historic catchment or streamflow information available to undertake detailed analyusis of these systems. As such, continual monitoring is undertaken of storages, diversion weirs and bulk usage to ensure that supply continues to meet expected levels of service.

Figure 6: Eastern Grampians supply system.



The *net allocation* reflects the combined maximum volumes able to be diverted from surface weirs and groundwater pumps. It does not reflect the actual water that was available for each year. Limited stream flow monitoring also prevents a detailed understanding of the reliability of supply from the Willaura headworks system. Another known issue with the Willaura headworks system is the fixed hydraulic capacity to move water around in the system. This sometimes creates limitations to how much water to be supplied to customers, particularly during peak demand periods. Monitoring of supply is continually undertaken to ensure requirements are met and the groundwater component of the system augments supply well.

3. Climate

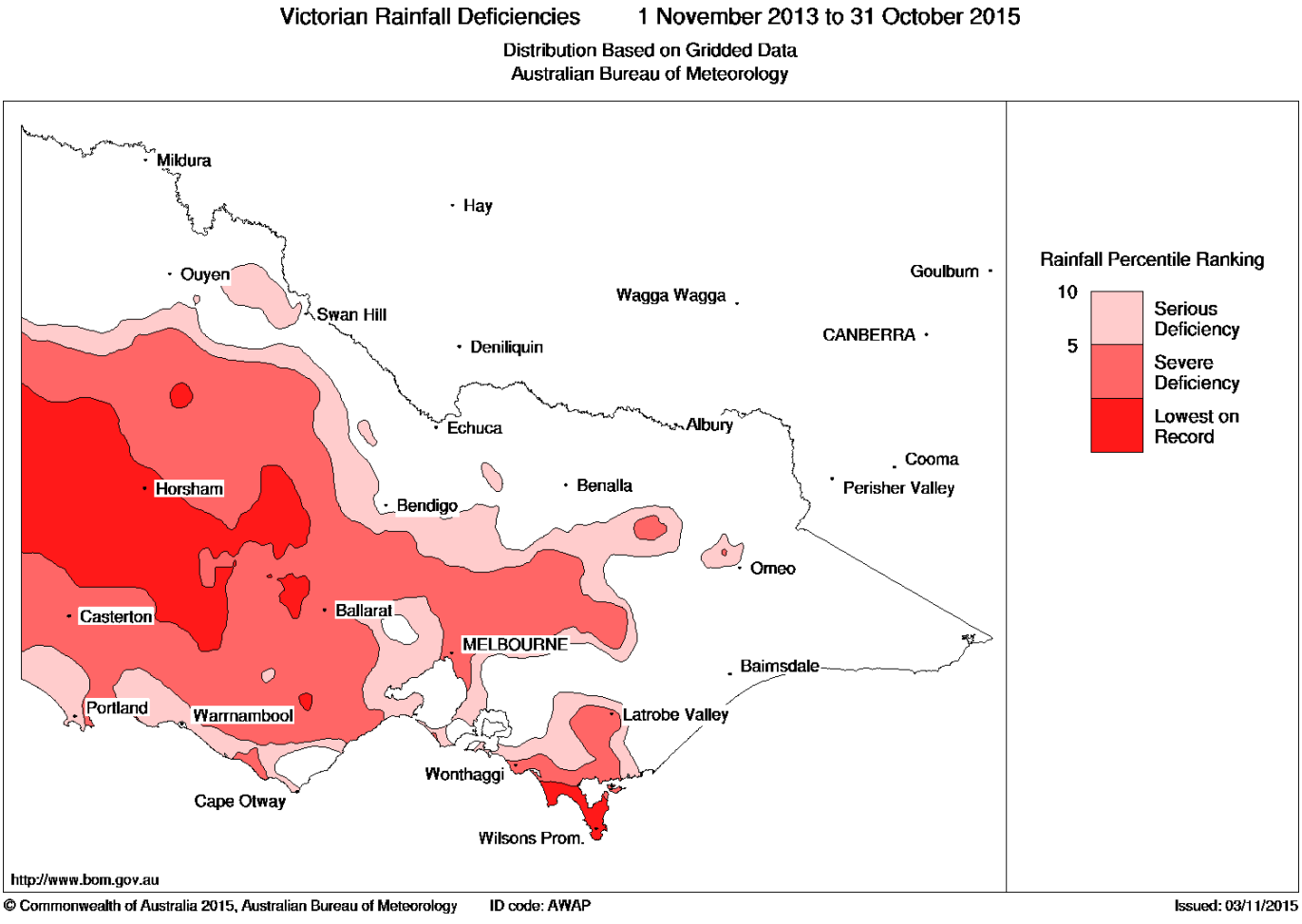
Climate, in particular rainfall and temperature, has a large influence on inflows to and evaporative losses from water storages, and also on the demand from consumptive users. It is often during drier seasons when rainfall and inflows to storages have been low, that consumptive demands are the highest. During dry climatic conditions, urban and other domestic users increase consumption as a result of greater evaporative cooling and outdoor water use for gardens and recreation. Rural consumption increases as other sources of water, such as farm dams and rainwater tanks are depleted.

GWMWater incorporates seasonal outlooks provided by the Bureau of Meteorology for rainfall, temperature and global climate events such as El Nino to guide short term (0-2 year duration) water resource planning. Analysis of historical data is used to identify longer term trends and guide multi-year water resource planning and outlooks.

3.1 Recent Weather

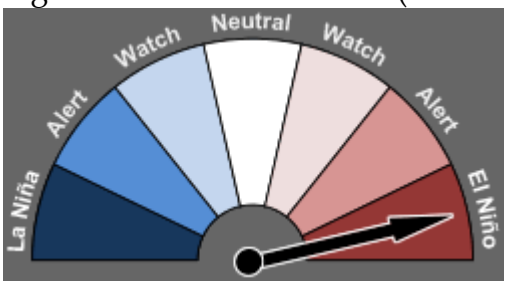
For much of Victoria, including GWMWater's operational area, winter and spring rainfall has below average, resulting in severe rainfall deficiencies over the past 3 years (Figure 7).

Figure 7: Victorian rainfall deciles; 1 November 2013 to 31 October 2015.



The current El Ninõ event has been reported by the Bureau of Meteorology to be one of the strongest since the 1997-98 event. El Ninõ events are often associated with below average Winter-Spring rainfall for eastern and south-eastern Australia, with nine of the ten driest winter–spring periods on record for eastern Australia occurring during El Niño years (Bureau of Meteorology, 2015).

Figure 8: El Niño indicator (Courtesy of Bureau of Meteorology)



For the Wimmera-Glenelg System headwork storages in particular, the effect of the current El Niño event has been prominent, with inflows from 1 July 2015 to 1 November 2015 being approximately 15% of the historic average, and the fifth consecutive year of below average inflow.

Figure 9: Historic system inflows to the Grampians headworks system.

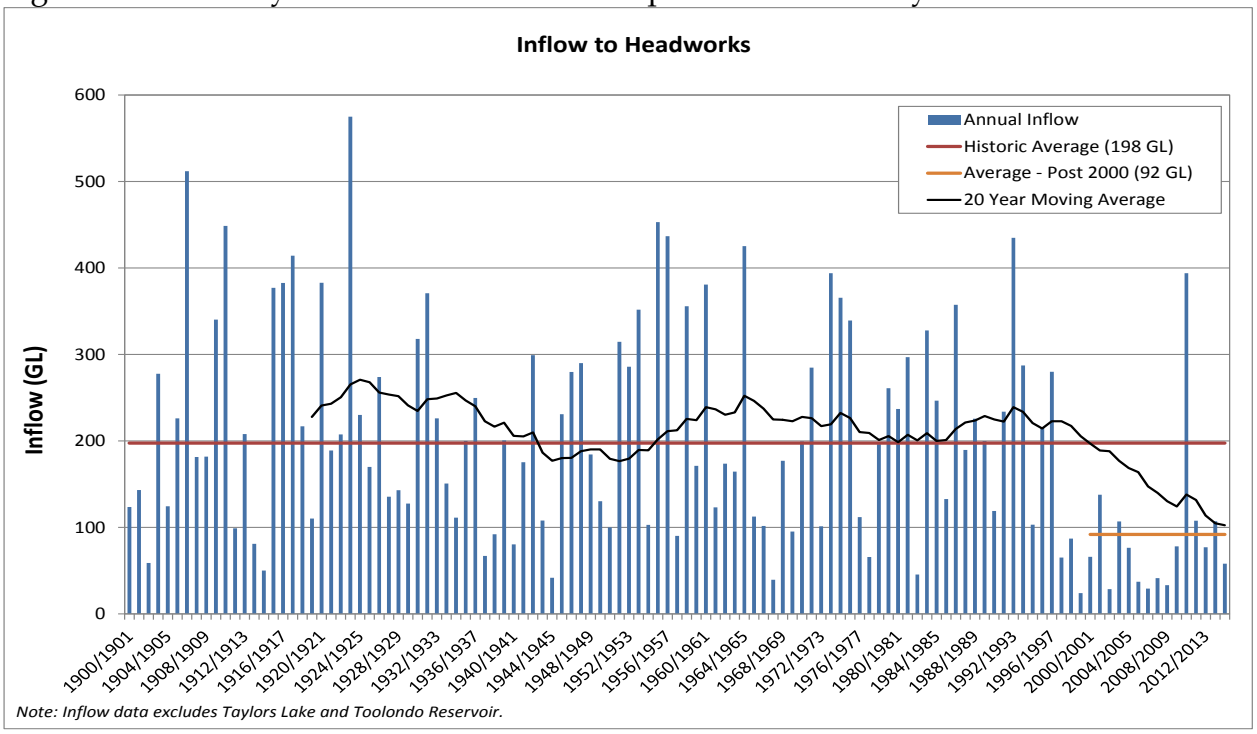
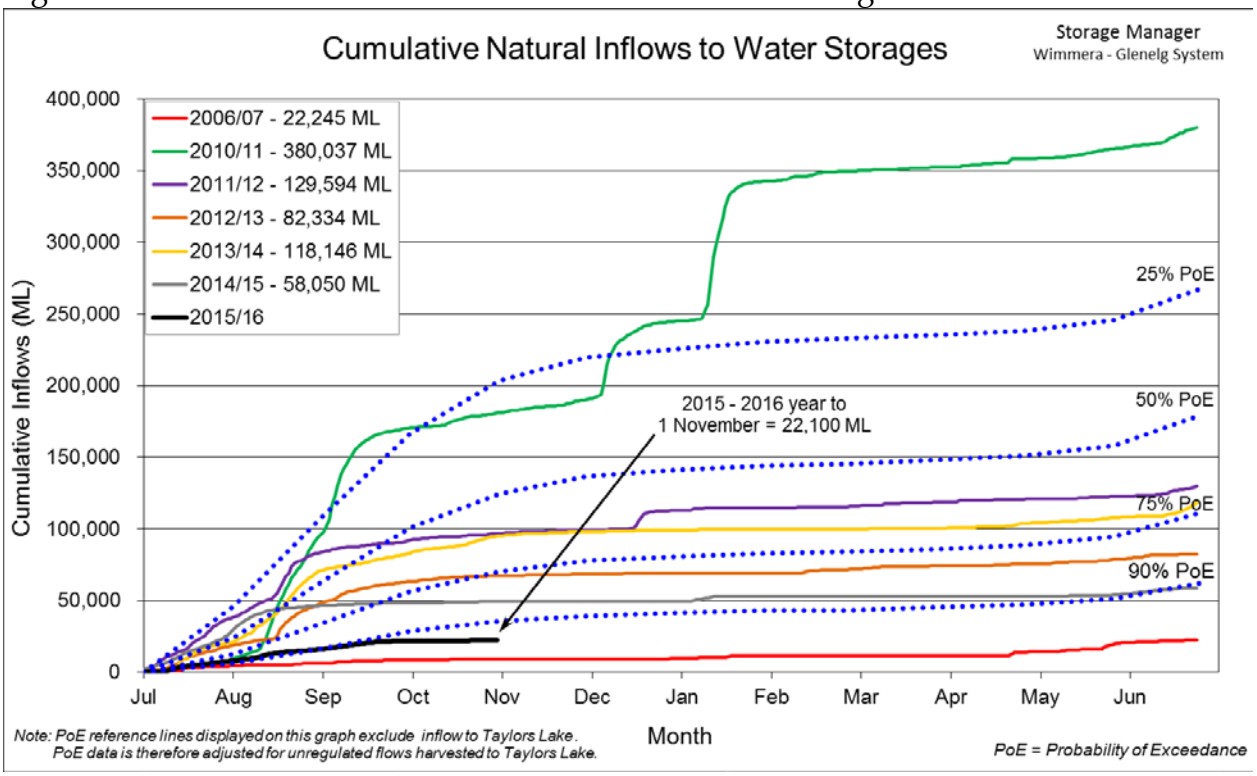
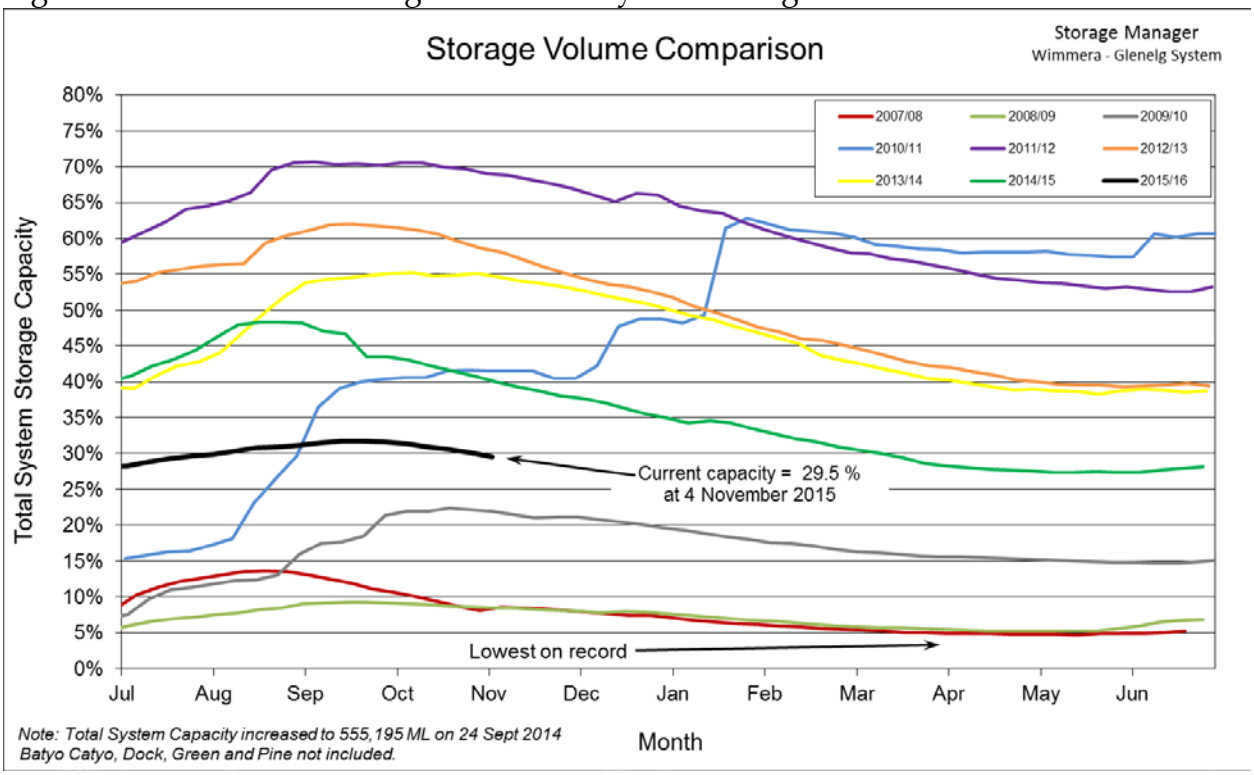


Figure 10: Cumulative inflow for Wimmera headwork storages.



Reduced rainfall and below average inflows for the past four inflow seasons have contributed to the present volume of the Wimmera-Glenelg headwork storages being the lowest since 2010 (Figure 11).

Figure 11: Wimmera-Glenelg Headworks system storage.



3.2 Weather Outlook

The Bureau of Meteorology weather outlook for the early summer period November 2015 to January 2016 over much of western Victoria is for an equal likelihood of exceeding median rainfall (Figure 12) and a below average likelihood of achieving above median maximum and minimum temperatures (Figure 13 and Figure 14).

Whilst an outlook beyond January is difficult to determine, rainfall into late summer and early autumn may be low whilst a declared El Ninõ event continues. The Bureau of Meteorology reports that "International climate models suggest the peak in El Niño sea surface temperatures is likely to occur before the end of the year, then gradually ease in the first quarter of 2016." This could result in dry conditions gradually easing during 2016, as the El Ninõ event deteriorates.

Figure 12: Chance of exceeding median rainfall.

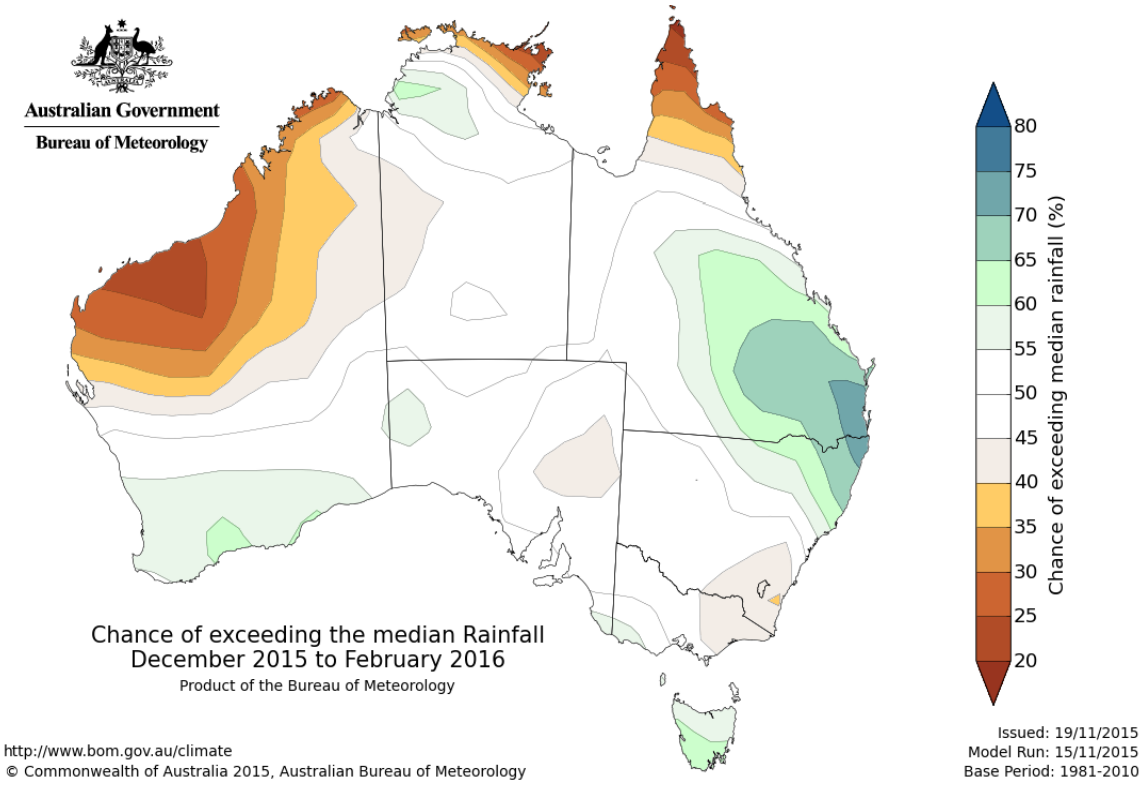


Figure 13: Chance of exceeding median minimum temperature.

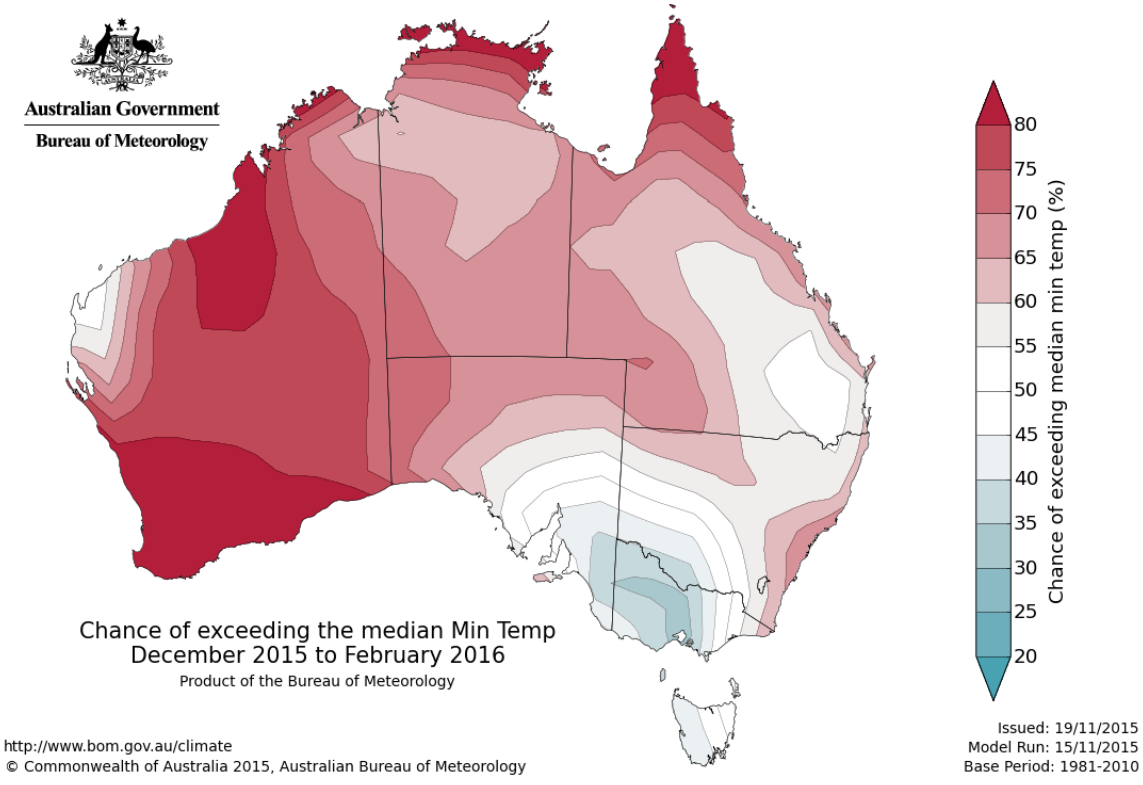
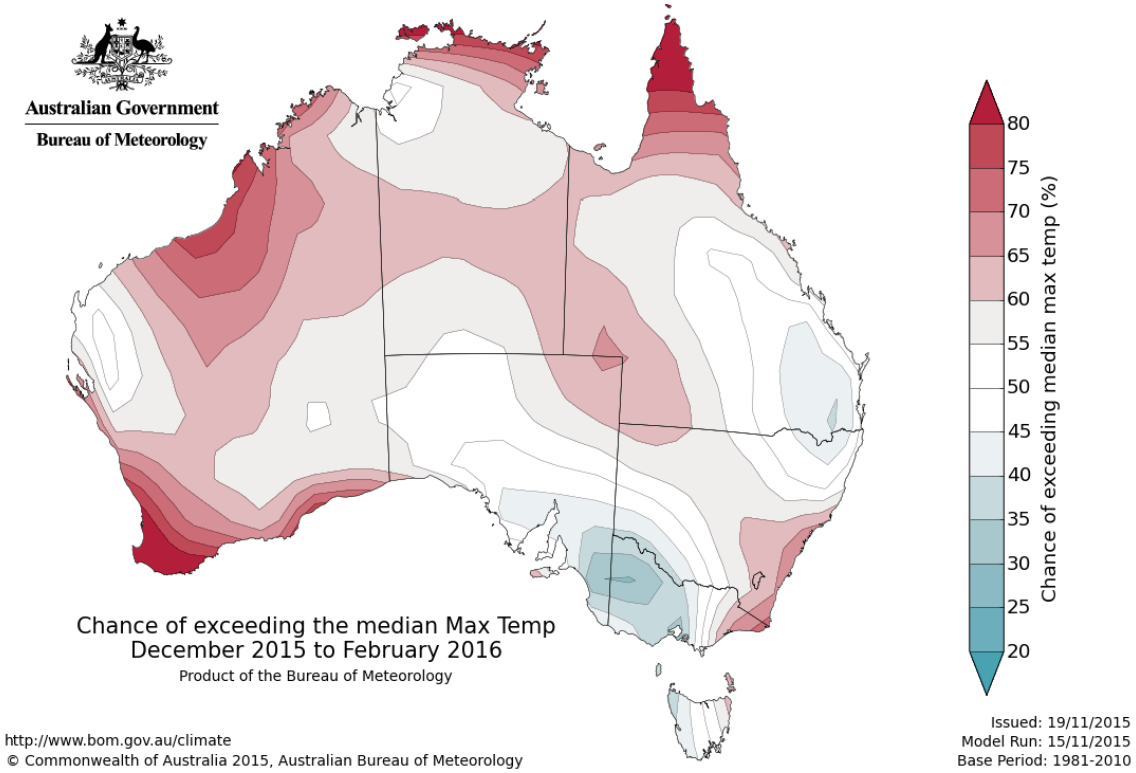


Figure 14: Chance of exceeding median maximum temperature



4. Water Security Outlook

Water security outlook for each supply system is detailed below. It should be noted that methodologies to determine water security vary between supply systems, as different supply systems derive water from different (or mixed) sources with varying reliability. This requires an adaptive approach to the management of urban and rural supplies.

4.1 Murray and Goulburn Supplied Systems– NMP, WMP SS5 & Quambatook township

Under the *Bulk Entitlement (River Murray – Grampians Wimmera Mallee Water) Order 1999*, GWMWater holds a high reliability entitlement of 3,486 ML that services Northern Mallee Pipeline and Murray supplied component of the Wimmera-Mallee Pipeline (SS5). In addition to this Bulk Entitlement, GWMWater holds 2,923 ML of high reliability water shares, which provide additional security for both these supply systems and Quambatook urban system (via water trading).

Under the *Bulk Entitlement (Quambatook – Grampians Wimmera Mallee Water) Order 2006*, GWMWater holds a very high reliability entitlement of 100 ML which services the supply to Quambatook township from the Normanville Pipeline system. Water available under this entitlement is able to be supplemented via water trading from GWMWater's Murray Bulk Entitlement or water share holdings.

Water allocations to these entitlements are determined by Goulburn Murray Water, as the appointed Resource Manager for Northern Victorian river systems.

As detailed in Table 1, GWMWater presently holds a total net allocation volume (including carryover) of over 5,790 ML to service the expected 4,400 ML combined bulk demand from the Northern Mallee Pipeline, Wimmera-Mallee Pipeline supply system 5, and the Quambatook urban system. The volume of bulk water available to GWMWater to service these supply systems can be supplemented with purchases of temporary allocation from the water market. This provides a further mechanism by which security for these systems can be managed and maintained, even during times of reduced bulk water allocations.

4.1.1. Urban and Domestic Water Restrictions

Permanent Water Saving Rules (PWSR) are applicable in Quambatook township and all townships serviced by the Northern Mallee Pipeline and Wimmera-Mallee Pipeline supply system 5. Rural domestic users suppled from these systems are also asked to abide by PWSR.

It is not anticipated that water restrictions will be imposed in these supply systems during 2015/16 water year, as current allocation holdings exceed the anticipated bulk demand.

4.2 Grampians – Wimmera-Glenelg Water Supply System

Under the *Bulk Entitlement (Wimmera and Glenelg Rivers – GWMWater) Order 2010*, GWMWater holds a bulk entitlement of 44,720 ML. Of this entitlement, 32,720 ML is for the supply of urban and rural demands (including smaller users supplied by agreement), as outlined in Table 3, below. The remaining 12,000 ML is held by large commercial users, and supplied direct from headworks storages.

Water allocations to all entitlements in the Wimmera-Glenelg system are determined by GWMWater, in its capacity as the appointed Storage Manager for the Wimmera-Glenelg system.

As detailed previously in Table 1, GWMWater presently holds over 74,000 ML of allocation (including carryover) to service the expected bulk demand (urban and rural) of 16,500 ML.

The headwork reservoirs that predominately supply water for urban and domestic purposes are detailed in Table 3 below:

Table 3: Main headwork storages supplying urban and rural users.

Headwork Reservoir	**Contents at November 2015**	**Supply System and Townships supplied**
Lake Bellfield	51,570 ML	Wimmera-Mallee Pipeline Supply Systems 1, 2, 3, 4 & 7. *Antwerp, Beulah, Birchip, Brim, Charlton, Dimboola, Donald, Dooen, Glenorchy, Hopetoun, Jeparit, Jung, Lascelles, Marnoo Minyip, Murtoa, Nhill, Pimpinio, Rainbow, Rupanyup, St Arnaud, Tarranyurk, Warracknabeal, Watchem, Woomelang, Wycheproof, Yaapeet.*
Moora Moora Reservoir	800 ML	Wimmera-Mallee Pipeline Supply System 6. *Clear Lake & Noradjuha.*
Lake Wartook	21,850 ML	Horsham urban system (inc. Natimuk) & seconadry source for Wimmera-Mallee Pipeline Supply System 6 . *Clear Lake & Noradjuha.*
Lake Fyans	14,220 ML	Ararat, Great Western, Stawell & Supply By Agreement rural users.
Mt Cole	800 ML	Ararat & Supply By Agreement rural users.

Whilst it is recognised that the other reservoirs and a bore field located at Mt Zero are able to supply or supplement urban and domestic needs, it is the volumes held in the headwork reservoirs listed in Table 3 that are most directly linked to the reliability of urban and rural domestic supply.

4.2.1. Water Planning

A combination of factors including low rainfall and the resultant low inflows to Wimmera and Glenelg headwork storages (see Figure 10) has resulted in the total system storage volume reaching its lowest November level since 2009 (Figure 11). Individual storages range from 77% of operating capacity at Lake Fyans to 18% of operating capacity at Rocklands Reservoir and Lake Lonsdale being dry.

With the expectation of low inflows for the remainder of this water year, GWMWater is using a 'dry inflow' scenario for planning purposes. Modelled multi-year storage level projections for the main headwork reservoirs supplying urban and rural demands are shown below. Modelling assumptions consistent with those used for the 2015 – 2016 Annual Operating Plan have been utilised for these projections. Inputs to the models include projected demands from the reservoirs, evaporation, inflow based on historic probability and where applicable, planned transfers to downstream reservoirs.

Figure 15: Lake Bellfield 18 month outlook.

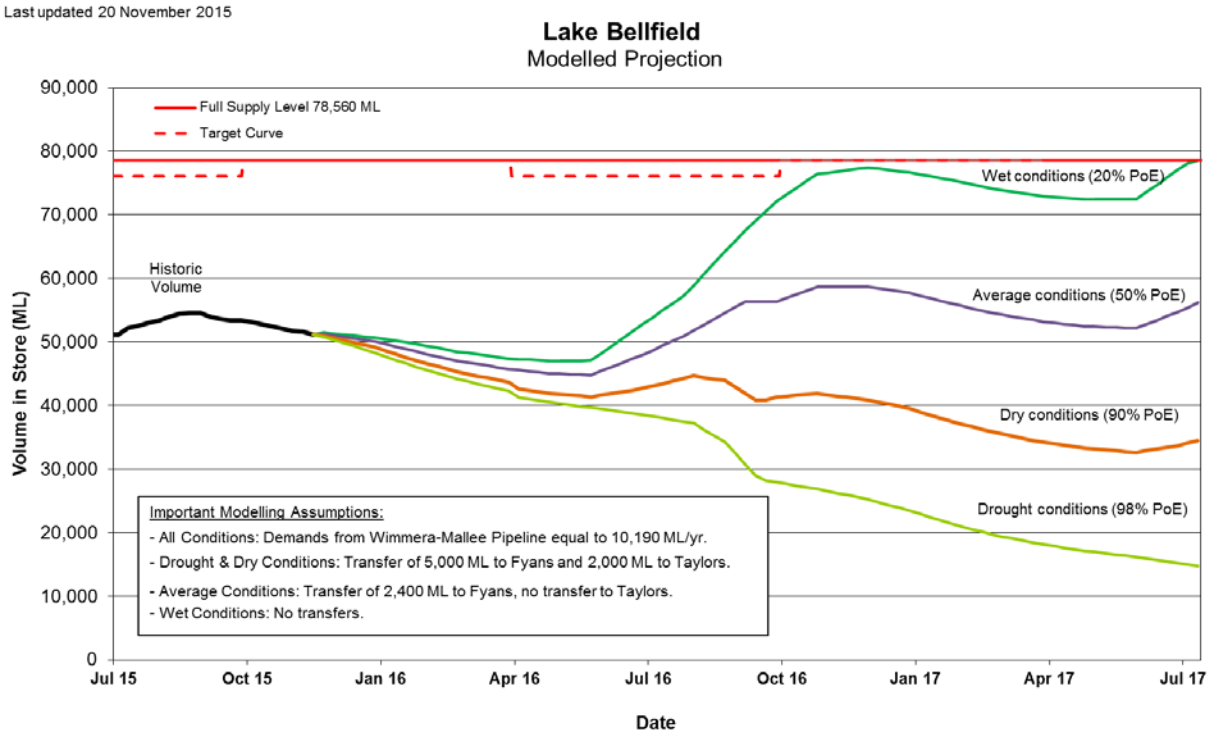


Figure 16: Lake Wartook 18 month outlook.

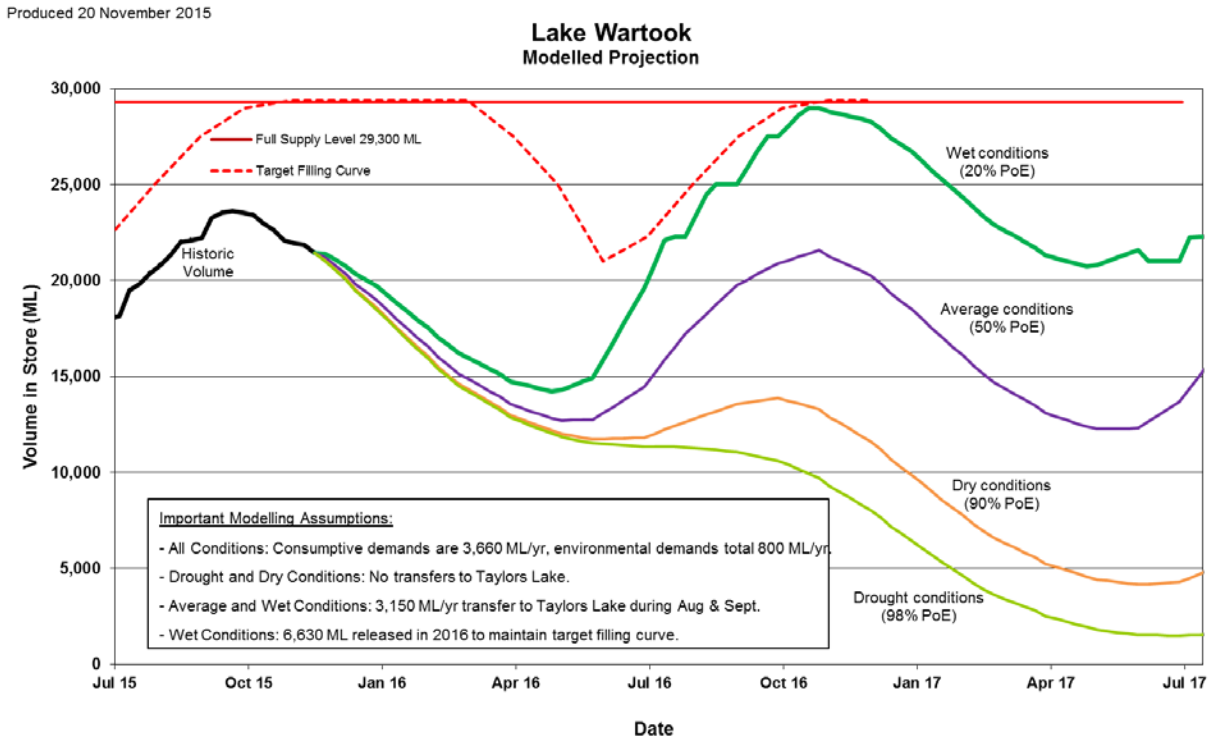


Figure 17: Moora Moora Reservoir 18 month outlook.

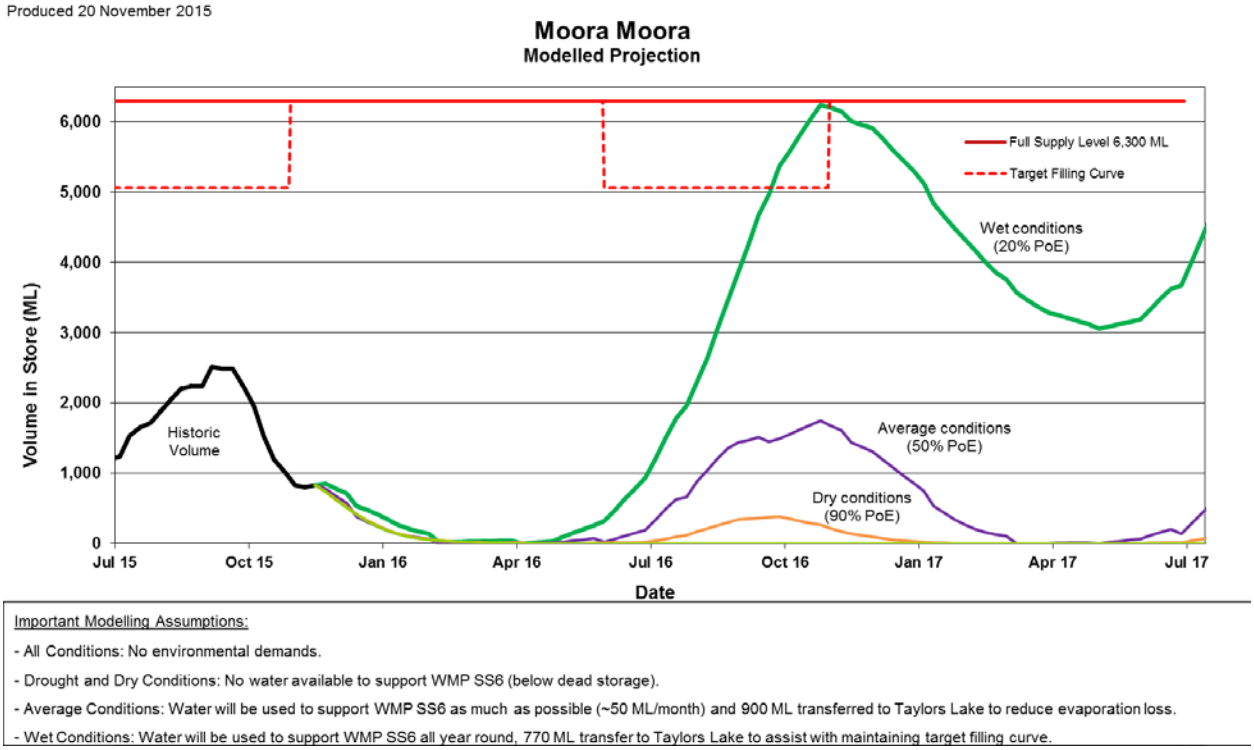
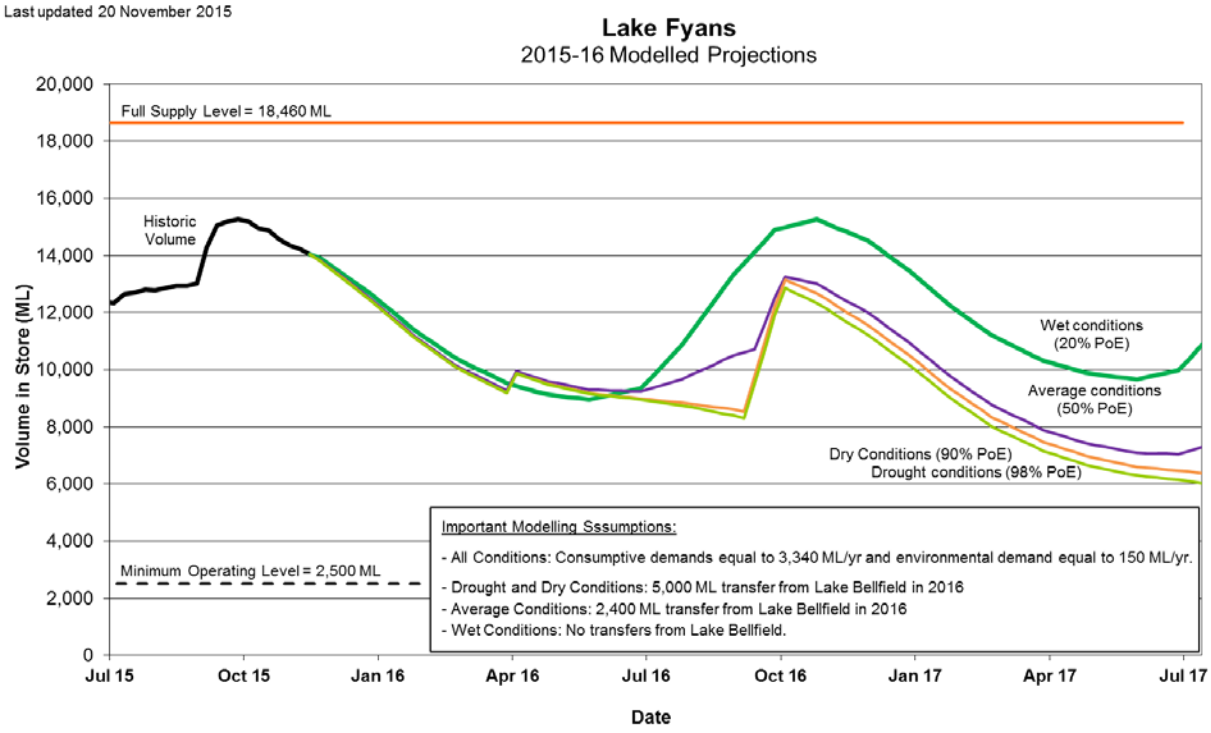


Figure 18: Lake Fyans 18 month outlook.



Whilst storage levels will oscillate, it is expected that storage volumes will remain at sufficient levels to ensure continued supply for all urban and domestic rural demands.

4.2.2. Urban and Domestic Water Restrictions

It is noted that the WSDS combined urban and rural demand for the Wimmera-Glenelg supply system is 13,777 ML per year. Actual demand was consistent with this during the 2014/15 season, however, demand has been increasing annually, as dry climatic conditions continue across the region. With extensions being made to the Wimmera-Mallee Pipeline and new connections occurring (e.g. Landsborough pipeline), it is likely that further increases in annual demand will be observed, particularly if dry conditions continue.

As detailed in Figures 15 to 18, it is anticipated that reservoir volumes will remain at a level sufficient to satisfy all demands, including urban and rural users, for the remainder of this and well into the next water year.

Permanent Water Saving Rules are applicable in all urban supply systems, including groundwater supplied towns. GWMWater is not anticipating the introduction of water restrictions to any town during the remainder of the water year.

4.3 Groundwater Supplied Towns

A number of bores supply water to 14 towns in GWMWater's operational area. GWMWater holds take and use licences authorising the take of groundwater to service the commercial, municipal and residential needs of each township. Details about each are in Table 4 below:

Table 4: Ability to service groundwater supplied towns.

Groundwater Management Unit	Sub - zone	Township	Licence Volume (ML)	Total 2014/15 Use (ML)[1]	Physical supply capacity (ML/yr)[2]
West Wimmera	Northern	Kaniva	600	230	1,200
		Kiata	40	2.7	22
		Lillimur	32	9.0	45
		Miram	7	1.0	33
		Nhill[3]	1,000	220	605
		Serviceton	25	8.5	36
	Southern	Apsley	40	23.8	46
		Edenhope[4]	150	261	134
	Gymbowen	Goroke	86	55.4	265
		Harrow	29	36.9	104
Murrayville	Murrayville	Cowangie	40	9.2	36
		Murrayville	475	124	167
Eastern Grampians	Eastern Grampians	Streatham& Westmere	60	40	28

[1] For the 2014 – 2015 water year; industrial, municipal and residential purposes.
[2] Over 4,000 hrs (~ 6 months) continuous pumping.
[3] Connected to Grampians – Wimmera Mallee Pipeline Supply System in October 2013 but with dual supply and groundwater being used for irrigation of community and recreational assets.
[4] Consumption above entitlement supported by carryover from previous year. Supply capacity does not include "Foreshore bore" which was used to satisfy non-urban demands during 2014/15.

4.3.1. Urban and Domestic Water Restrictions

Permanent Water Saving Rules are applicable to use water for urban and domestic purposes for all groundwater supplied towns. Present available supply volumes and supply capacity are considered adequate to meet existing and immediate future demand. It is not anticipated that water restrictions will be introduced in any groundwater supplied town for the foreseeable future.

4.4 Pyrenees & Eastern Grampians Supply System

Water to these supply systems is managed by GWMWater. Under the *Bulk Entitlement (Willaura, Elmhurst and Buangor Systems - GWMWater) Order 2012*, GWMWater may take up to a maximum annual volume of:

a. 390 ML from the weirs located on Mt William Creek, Stoney Creek and Mason's Creek between June to December inclusive to supply Willaura.
b. 48 ML from Hickmans Creek to supply Elmhurst.
c. 28 ML from McLeods Creek to supply Buangor.

GWMWater also holds a take and use licence authorising the take of up to 220 ML per year of groundwater to supplement the Eastern Grampians (Willaura) supply system.

Willaura Water Supply

This system supplies 4 townships (Moyston, Willaura, Wickliffe and Lake Bolac) via weirs located on Mt William Creek, Stoney Creek and Mason's Creek, generally between June and December with additional capacity from 4 bores between January and April or when low watercourse flows occur between late autumn and mid-summer. Water is harvested into 5 off stream storages of 146 ML capacity. An entitlement of 58 ML held by Wannon Water for Glenthompson township is also supplied from the Willaura system.

The combination of watercourse flow, bore yield and off stream storages have been able to meet rural, urban and domestic demand, including a supply to Wannon Water to service the demands of Glenthompson.

Table 5 Water sourced for Willaura supply system

	2012/13	2013/15	2014/15	3-Year Average
Diversion Weirs (ML)	193.6	244.1	231.0	222.9
Groundwater (ML)	117.7	73.9	80.2	90.6
Total	**311.3**	**318.0**	**311.2**	**313.5**

On 11 November 2015, the volume in the Willaura system off stream storages was approximately 115 ML (79% full). With a dry season expected for 2015-16 season, a larger groundwater supplement will need to be provided as water storages are drawn down. There is sufficient allowance within the existing groundwater licence to accommodate this, however, the limited hydraulic capacity within the Willaura system may at times constrain the rate at which water can be moved from the headworks and bores into the town storages.

Monitoring of supply rates and storage levels will continue, and no shortfall in supply is anticipated at this time. Ongoing negotiations with Wannon Water will be required to ensure equitable sharing of the available supply rates between GWMWater towns and Wannon Water's Glenthompson system.

4.4.1. Elmhurst Water Supply

This system is supplied by a weir located on Hickmans Creek that typically flows during winter and spring where water is harvested into a 34 ML capacity off stream storage to meet summer and autumn demands. The combination of watercourse flow and the off stream storage have been able to consistently meet rural, urban and domestic demands.

As at 1 November 2015, the off stream storage was at full capacity, holding 34 ML.

4.4.2. Buangor Water Supply

This system is supplied by a weir located on McLeods Creek that typically flows during winter and spring where water is harvested into a 30 ML capacity off stream storage to meet summer and autumn demands. The combination of watercourse flow and the off stream storage have been able to consistently meet rural, urban and domestic demands.

As at 1 November 2015, the volume in the off stream storage was 22 ML (75% capacity). The annual bulk urban demand for Buangor is 12-14 ML.

4.4.3. Urban and Domestic Water Restrictions

Permanent Water Saving Rules are applicable to use water for urban and domestic purposes within the Pyrenees & Eastern Grampians supply systems.

It is not anticipated that water restrictions will be imposed in this supply system for the remainder of the water year under normal operating conditions.

5. Action Plan

GWMWater supplies urban water to 71 towns in which permanent water saving rules apply, and raw water to over 11,000 rural customers. The outlook status (Table 1) for each supply system provides a summary of whether the imposition of restrictions greater than permanent saving rules is necessary or likely.

At this time GWMWater does not consider it necessary to impose a restriction regime greater than permanent water saving rules as there is sufficient bulk water allocation, storage volume, and/or licence entitlement to meet anticipated demands for this water year and into the next water year. GWMWater however will continue to monitor the status of all supply systems and may implement restrictions in the event that circumstances change.