



February  
2016

## Drought Response Plan: Part B

### A Water Sharing Plan for Licenced Water Users in the:

# Woori Yallock Creek catchment

To be read in conjunction with Part A: A Water Sharing Plan for all Licensed Water Users 2016

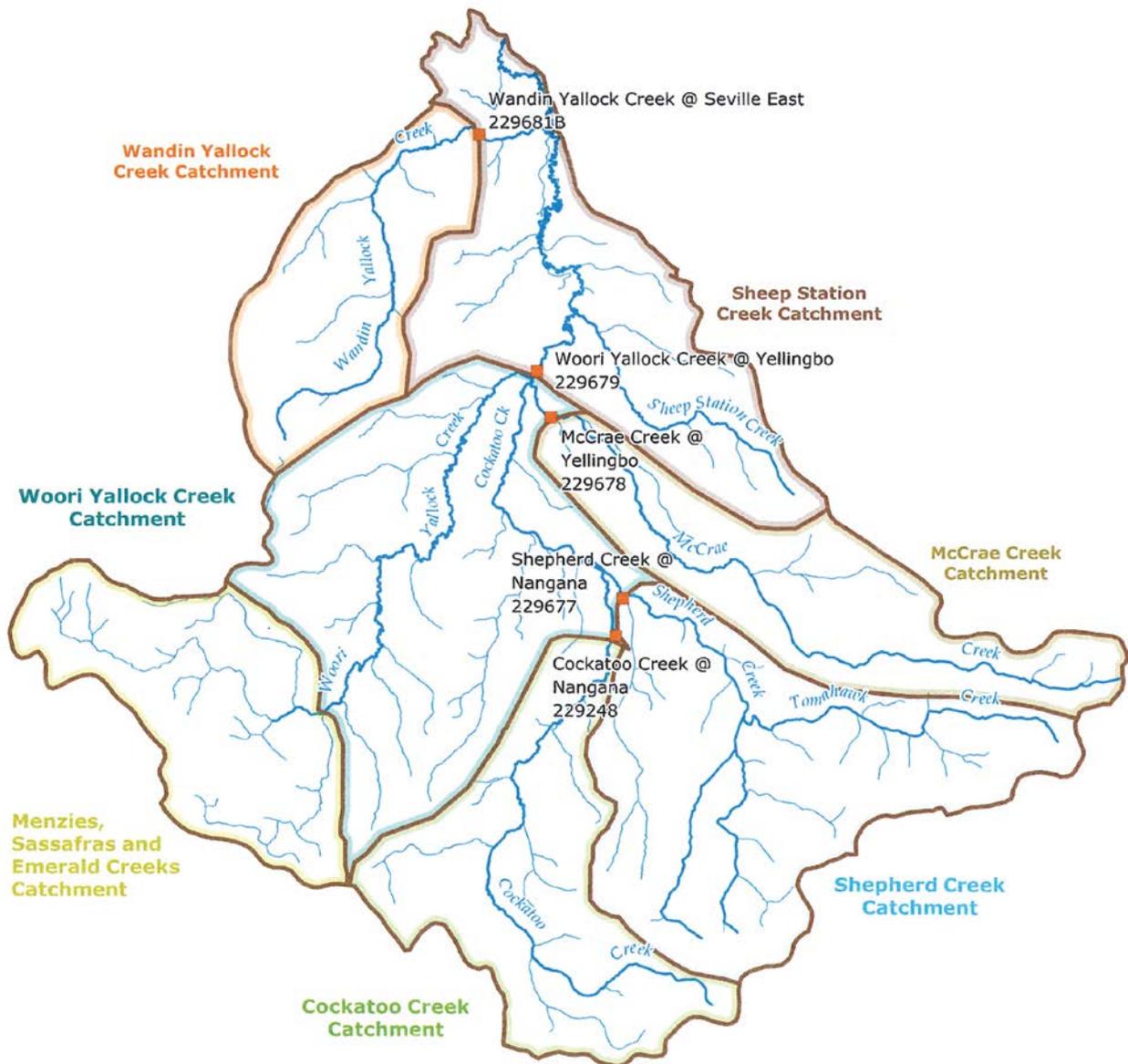
## 1. Catchment Description

The Woori Yallock Creek rises on the eastern slopes of the Dandenong ranges flowing in a generally northerly direction before joining the Yarra River northeast of the town of Seville. Major tributaries include the Wandin Yallock, Emerald, Sassafra, Menzies, Cockatoo, Macclesfield, Wattle, Gembrook, Shepherd, McCrae, Tomahawk and Sheep Station Creeks.

The Woori Yallock Creek catchment has an average rainfall of around 1,100 to 1,200 mm which falls mainly over the winter period. A permanent flow is maintained throughout the year on most creeks, with a base flow provided by groundwater inputs. Groundwater and surface water interaction occurs within the catchment. The total catchment area is about 272 km<sup>2</sup>.

The Woori Yallock Creek catchment is subject to a Stream Flow Management Plan which commenced in 2012. Further information on the establishment of ban and restriction levels for this catchment can be found within the plan. The map on the following page shows the catchment, major waterways and compliance gauge points.





Woori Yallock Creek Catchment with compliance gauge sites

## 2. Ban & Restriction Triggers

Flow levels are monitored by gauges (data logging stations) that provide continuous flow readings. The catchment has five nominated compliance points for the introduction of bans and restrictions as shown in the map above and in the table below:

Gauge number	Gauge name	Compliance point for the following reaches:
229248 plus 229677	Cockatoo Creek at Nangana plus Shepherd Creek at Nangana	Cockatoo Creek catchment and Shepherd Creek catchment. Compliance will be based on combined flows from these two gauges
229678	McCrae Creek at Yellingbo	McCrae Creek catchment
<a href="#">229681</a>	Wandin Yallock Creek at Seville East	Wandin Yallock Creek catchment
<a href="#">229679</a>	Woori Yallock Creek at Yellingbo	Woori Yallock Creek catchment upstream and downstream of the stream flow gauge at Yellingbo including all tributaries not already covered by other compliance gauges

### 2.1 Ban Trigger Levels

Bans will be introduced and lifted when catchment specific triggers occur based upon 7-day rolling average stream flows. The trigger levels for bans are as shown in ML in the table below:

Compliance Gauge	Low Season (1 Dec to 31 May)	High Season (1 July to 31 Oct)	Shoulder (June and Nov)
Combined flow of 229248 Cockatoo Creek at Nangana and 229677 Shepherd Creek at Nangana	20	33	30
229678 McCrae Creek at Yellingbo	8	13	12
229681 Wandin Yallock Creek at Seville East	1	10	4
229679 Woori Yallock Creek at Yellingbo	34	105	50



McCrae Creek at Yellingbo

## 2.2 Restriction Trigger levels

Restrictions will be introduced and lifted when catchment specific triggers occur based upon 7-day rolling average stream flows. The trigger levels for restrictions are as shown in ML in the table below:

Compliance Gauge	Low Season (1 Dec to 31 May)	High Season (1 July to 31 Oct)	Shoulder (June and Nov)
Combined flow of 229248 Cockatoo Creek at Nangana and 229677 Shepherd Creek at Nangana	30	50	40
229678 McCrae Creek at Yellingbo	12	20	17
229681 Wandin Yallock Creek at Seville East	N/A	N/A	N/A
229679 Woori Yallock Creek at Yellingbo	50	120	85

For the Wandin Yallock Creek sub-catchment restrictions are not implemented as at lower flow conditions the historic flow data and management demonstrates that there is limited benefit or impact on stream conditions when introducing restrictions.



### 3. Application of Restrictions

Irrespective of anything in this section, users must not exceed their annual allocation on their licence or take water outside of their authorised take period.

Active licence holders in the Woori Yallock Creek with allocations greater than 5ML are metered by Melbourne Water. Both volumetric and /or time based restrictions will apply within the Woori Yallock Creek catchment (excluding Wandin Yallock Creek) depending on if a licensee is metered or not.

#### 3.1 Metered Licences:

For all metered licenses access to water during restrictions will be based on a percentage of the Maximum Daily Volume (MDV) shown on the licence. The MDV will be set at no greater than two percent of the total annual volume.

During restriction periods a licensee will be entitled to take and use only 50% of their MDV. Conversely, during nominated high flow conditions when excess water is available, a licensee may take greater than their MDV and take up to 250% of their MDV. The percentage of MDV available under corresponding flow conditions is as shown in the table below. All water used under these conditions must be passed through and recorded on the authorised MW meter.

Metered water users are required to keep a record of daily diversions during ban and restriction periods, to be made available to MW upon request.

Detailed restriction triggers/ flows for the **Cockatoo and Shepherd and Cockatoo Creek catchments**, using the combined flows from the two gauges at Nangana (229258 and 229677)

Maximum Daily Volume (MDV)	Low Flow Period	High Flow Period	Shoulder Period
	(1 Dec – 31 May)	(1 Jul – 31 Oct)	(Jun and Nov)
	Flow (ML/ day)	Flow (ML/ day)	Flow (ML/ day)
250 %	> 56	> 91	> 76
100 %	31 – 55	51 - 90	41 - 75
Restrictions: 50 %	21 – 30	34 - 50	31 - 40
Ban: 0 %	< 20	< 33	< 30

Detailed restriction triggers/ flow for **McCrae Creek catchment** at the Yellingbo gauge (229678)

Maximum Daily Volume (MDV)	Low Flow Period	High Flow Period	Shoulder Period
	(1 Dec –31 May)	(1 Jul – 31 Oct)	(Jun and Nov)
	Flow (ML/ day)	Flow (ML/ day)	Flow (ML/ day)
250 %	> 20	> 40	> 30
100 %	13 - 19	21 - 39	18 - 29
Restrictions: 50 %	9 - 12	14 - 20	13 - 17
Ban: 0 %	< 8	< 13	< 12

Detailed restriction triggers/ flows for the **Woori Yallock Creek catchment** including all tributaries not already covered by other compliance gauges (229679)

Maximum Daily Volume (MDV)	Low Flow Period (1 Dec – 31 May)	High Flow Period (1 Jul –31 Oct)	Shoulder Period (Jun and Nov)
	Flow (ML/ day)	Flow (ML/ day)	Flow (ML/ day)
250 %	> 115	> 200	> 150
100 %	51 – 115	121 - 200	86 - 150
Restriction: 50 %	35 – 50	106 - 120	51 - 85
Ban: 0 %	< 34	< 105	< 50



*Irrigation meter being read by Melbourne Water*

## 3.2 Unmetered Licences:

For all unmetered licenses access to water during restrictions will be based on allotted days and hours designed to reduce demand and focus watering on the beginning and end of the day to promote watering efficiency and reduce losses. Unmetered licence holders who wish to have their restrictions based on a percentage of maximum daily volume as per section 3.1 above may apply to purchase and install a Melbourne Water meter. Following meter installation they will be eligible for volumetric based restrictions to be applied.

During restriction periods the following limitations on accessing water will apply for unmetered licences:

Licence Type: Irrigation, industrial or commercial use direct from waterway	
Low Flow and Shoulder Period (1 Nov– 30 Jun)	<p><b>All users except as shown</b></p> <p>Max. 7 hours between 6am &amp; 9am and 6pm &amp; 10pm on allotted group days, or as agreed with Melbourne Water</p> <p>Group A: Mondays, Wednesdays and Fridays</p> <p>Group B: Tuesdays, Thursdays and Saturdays</p> <p><b>Commercial flower growers, nurseries,</b></p> <p>Max. 3 hours between 6am &amp; 8am and 7pm &amp; 8pm any day.</p> <p><b>Berry growers</b></p> <p>Max. 3 hours between daylight hours any day. Records to be kept of actual use for audit purposes</p> <p><b>Industrial and golf courses</b></p> <p>Volume diverted to be reduced by 50%. Records to be kept of actual use for audit purposes</p>
High Flow Period (1 Jul – 31 Oct)	<p><b>All users except as shown</b></p> <p>Max. 7 hours between 6am &amp; 9am and 6pm &amp; 10pm on any day</p> <p><b>Industrial and golf courses</b></p> <p>Volume diverted to be reduced by 25%. Records to be kept of actual use for audit purposes.</p>
Licence Type: Irrigation or commercial licence used with an on-stream dam	
All Periods	<p>If diverters share of water held in on-stream dam is:</p> <ul style="list-style-type: none"> <li>• <b>Greater than 50% of licensed entitlement</b> No restrictions apply provided all water used is drawn from reserves of stored water and all natural stream-flow passes downstream</li> <li>• <b>20% to 50% of licensed entitlement</b> Stored water may be used but diverters must consult with other affected diverters to ensure that a Melbourne Water agreed environmental flow is maintained</li> <li>• <b>Less than 20% of licensed entitlement</b> Restrictions apply as per use direct from waterway as above</li> </ul>
Licence Type: Irrigation or commercial licence used with an off-stream dam	
All Periods	<p>Stored water in the off-stream dam may be used at any time but refilling of the dam from the waterway may only occur in accordance with the restrictions applied as per use direct from waterway above.</p>
Licence Type: Winter-fill On-stream dam	
Low Flow and Shoulder Period (1 Nov– 30 Jun)	<p>Refilling of storages is banned (outside of take period).</p> <p>No restrictions on water use provided water supply is drawn from reserves of stored water.</p> <p>All natural streamflow must be passed downstream.</p>
High Flow Period (1 Jul – 31Oct)	<p>No restrictions on water use provided water is drawn from reserves of stored water.</p> <p>Under restriction conditions, dam-filling is limited to a maximum of four hours per day, between 8.00 am &amp; 12.00 pm.</p>

Licence Type: Winter-fill Off-stream dam	
Low Flow and Shoulder Period (1 Nov– 30 Jun)	Refilling of storages is banned (outside of take period). No restrictions on water use provided water supply is drawn from reserves of stored water.
High Flow Period (1 Jul – 31Oct)	No restrictions on water use provided water is drawn from reserves of stored water. Under restriction conditions, dam-filling is limited to a maximum of four hours per day, between 8.00 am & 12.00 pm.
Licence Type: Domestic & Stock use	
Low Flow Period (1 Dec– 31 May)	Pumping is banned if an alternative water supply is available (e.g. mains supply). If no alternative supply is available then water may only be taken for the following purpose: <ul style="list-style-type: none"> <li>• Essential household use</li> <li>• Watering of stock</li> </ul> Individual drought contingency plans should be implemented.
High Flow Period (1 Jun – 30 Nov)	Not restricted
Licence Type: Non-consumptive use	
All Periods	Provided 100% of water is returned in accordance with EPA discharge licence, no more than the lesser of 25% of the assessed stream-flow or 75% of the daily flow as indicated on the licence may be diverted
Licence type: farm dams	
All Periods	Not restricted

All licence holders within the catchment must adhere to the restrictions and bans introduced in response to the flow conditions specified. Melbourne Water will consider exemptions or modification to the restrictions contained above upon written application by licence holders and in accordance with Section 12 of the Drought Response Plan for Licensed Water Users.

## 4. Roster Groups and Allotted Days

The following table defines the roster group allocation and allotted pumping days for waterways within the Woori Yallock catchment. To be used in conjunction with the unmetered licences restriction tables above

WOORI YALLOCK CREEK catchment	
Restriction Roster Group A waterways (including tributaries) Allotted days – Monday, Wednesday, Friday	
Boggy Creek	Nathania Springs Creek
Desmond Creek	Stoney Creek
Emerald Creek	Wattle Creek
Ferndale Creek	Woori Yallock Creek
Restriction Roster Group B waterways (including tributaries) Allotted days – Tuesday, Thursday, Saturday	
Avonsleigh Creek	Mc Crae Creek
Bob Mann Creek	Menzies Creek
Cassells Creek	Pancake Creek
Club Creek	Perrins Creek
Cockatoo Creek	Rundells Creek
Flannigans Creek	Sassafras Creek
Gembrook Creek	Sheep Station Creek
Lone Star Creek	Shepherd Creek
Lyrebird Creek	Ti Tree Creek
Macclesfield Creek	Tomahawk Creek



Woori Yallock Creek flow gauge at Yellingbo

## Document Versions

Revision	Date Issued	Issued To	Issued By
<b>Version</b>	2016	Melbourne Water Diversion Customers	Melbourne Water Diversion Team