

# **DROUGHT RESPONSE PLAN**

Licensed Water Users



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## GLOSSARY

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<b>All-year licence:</b>	A licence that allows taking of water from a waterway any time during the licence year.
<b>Authorised person:</b>	A person authorised in writing appointed under the Act.
<b>Average Stream Flow:</b>	The mean daily average Stream-flow calculated over any consecutive 7-day period.
<b>Catchment:</b>	The area of land above a particular point from which rainfall will contribute to runoff to that point.
<b>Dam – Off-stream:</b>	A dam, that is not constructed across a river, creek, stream, watercourse or waterway but is licensed to take water diverted, or pumped, from one of these sources.
<b>Dam – On-stream:</b>	A dam, constructed on, in or across a river, creek, stream, watercourse or waterway and licensed to take water from that source.
<b>Domestic and stock use:</b>	Water that can be used for household purposes including watering of pet animals, cattle or other stock and irrigation of a kitchen garden, but does not include use for dairies, piggeries, feed lots, poultry or any other intensive or commercial use.
<b>Drought:</b>	A period during which there is insufficient available water supply to meet expected demands for water.
<b>Environmental flow:</b>	A regime of designated flows in a stream or river needed to satisfy specified ecological requirements.
<b>Ephemeral:</b>	Seasonally flowing waterway where flows are usually intermittent.
<b>Farm dam:</b>	A dam filled from catchment runoff only and used for irrigation and / or commercial use.
<b>Flow Rate:</b>	The amount of water past a specific point at a particular time, usually measured in megalitres per day.
<b>High-flow Period:</b>	Historically, 1 May to 30 October or as defined in a Stream-flow management plan or under local management rules.
<b>Instantaneous Flow:</b>	The rate of flow at a given location at a given point in time.
<b>Licensee:</b>	A person who holds a Water Licence.
<b>Low-flow Period:</b>	Historically, 1 November to 30 April the following year or as defined in a Stream-flow management plan or under local management rules.
<b>Megalitre (ML):</b>	One million litres of water. An Olympic size swimming pool contains approximately one million litres.

<b>Minimum flow:</b>	A minimum flow to be maintained in a stream or river to minimise environmental risk. This flow also protects remnant pool habitat in ephemeral streams.
<b>ML/d:</b>	Water flow measured in megalitres per day.
<b>Non-consumptive use:</b>	Where 100% of water taken from a waterway is returned to the waterway e.g. cooling water, fish farms, and hydropower generation.
<b>Perennial:</b>	A waterway where flows are usually continuous throughout the year.
<b>Reliability of supply:</b>	A percentage chance of being able to fully use a water entitlement in any year.
<b>SFMP:</b>	Stream-flow Management Plan
<b>The Act:</b>	The <i>Water Act 1989</i> .
<b>Water Licence:</b>	A licence to take water in accordance with the <i>Water Act 1989</i> .
<b>Winter-fill licence:</b>	A licence to fill On-stream or Off-stream dams during the winterfill period. The licence is limited to the volume of the storage.

## CHARTER

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Melbourne Water is owned by the Victorian Government. Our operating area extends from Melbourne's water supply catchments high up in the Yarra Ranges, to the Mornington Peninsula and Western Port, north to Yan Yean and west to Werribee.

We are a significant business, managing \$7.1 billion of natural and built assets. Our annual operating revenue of more than \$510 million is earned from water supply, sewage treatment and drainage rates. This is used to fund dividends and equivalent taxes to the Government, our operations and our capital program, and to pay off debt.

We invest about \$145 million a year on our infrastructure including reservoirs, sewage treatment plants, pumping stations, sewers and drains to help ensure we meet our objectives. We are committed to decision-making based on economic, social and environmental considerations.

An independent Board of Directors is responsible for the governance of Melbourne Water. The responsible Minister is the Minister for Environment and Water.

Our people have diverse skills and expertise, and range from environmental scientists to engineers and research and technology specialists, and we place a high priority on building strong partnerships and relationships in the government, industry and community sectors.

We have a significant role as environmental managers, and we manage Melbourne's water resources in a way that aims to ensure that future generations enjoy one of the best urban environments in the world.

## BACKGROUND

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The Act requires Melbourne Water, as the Minister's delegate, to protect the environment and consider the needs of water users. This is being achieved by a number of different mechanisms that include the Drought Response Plan (DRP), Stream-flow Management Plans (SFMPs) and Local Management Rule (LMRs). The DRP and LMRs aim to maintain *minimum* flows to protect the environment. Minimum flows are those that minimise risks to instream health. This includes the need to ensure protection of remnant pool habitat in many of our ephemeral rivers and streams from extraction when instream biota are under stress.

SFMPs aim to implement *environmental* flows, but only after specific, targeted, community consultation has occurred. Environmental flows aim to protect, maintain and improve river health. SFMPs are scheduled to be developed for 10 subcatchments of the Yarra basin over the next 5 years.

## **INTRODUCTION**

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The Minister for Water has delegated Melbourne Water with the responsibility for managing the waterways and major drainage systems of the Yarra catchment and unregulated waterways of the lower Maribyrnong River, Stony, Kororoit, Laverton and Skeleton Creek catchments. Located within these catchments are approximately 2000 licensed water users. Water use is primarily for agricultural, industrial, commercial and domestic and stock purposes. The total volumetric water allocation held on licences within these catchment areas is approximately 36,000 megalitres, excluding water taken for commercial or irrigation use from farm dams.

Melbourne Water has an obligation under the State Environment Protection Policy, Schedule F7, Waters of the Yarra catchment 1999, to protect the health of the Yarra River by attempting to maintain a minimum environmental flow rate of 245 megalitres per day in the Yarra River downstream of the Yering Gorge diversion. Minimum flow rates have similarly been determined for the smaller sub catchment waterways feeding into the Yarra River mainstem and are individually detailed in Appendices 3 & 5.

## **PURPOSE**

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To provide Melbourne Water with an effective, systematic and integrated framework for planning and responding to the impacts of drought or low-flow conditions on licensed water users in the Yarra and lower Maribyrnong basins. The plan is designed to enable the identification and implementation of appropriate actions in response to expected or worsening low-flow conditions. It also aims to provide a means of sharing water at times when flows are insufficient to meet user needs.

The plan is intended to complement the ongoing development and implementation of Stream-flow Management Plans and Local Management Rules on sub-catchments throughout the greater Yarra and lower Maribyrnong catchments.

## **OBJECTIVES**

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- Manage access to water by all users and the environment
- Define the conditions under which restrictions or bans on use will be required for drought and the process by which these will be implemented
- Outline obligations of both Melbourne Water and water users
- Enable Melbourne Water to meet statutory obligations.

## **OBLIGATIONS**

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### Melbourne Water

- Comply with relevant statutory and legislative obligations, including the need to protect the environment
- Manage drought in accordance with relevant Stream-flow Management Plans where applicable
- Maintain and implement the drought response plan as required
- Communicate openly with licensed water users, industry groups and stakeholders

- Install, monitor and maintain flow-recording meters as necessary on licensed water users' properties
- Plan, implement, monitor and maintain the hydrographic network that provides accurate and timely Stream-flow data.

## Water Users

- Comply with licensed volume and conditions
- Understand and comply with the Drought Response Plan
- Comply with applicable Stream-flow Management Plans and/or Local Management Plans where they exist
- Observe minimum Stream-flows
- Proactively seek and monitor information about drought status
- Prepare individual drought contingencies and manage own water use during times of drought conditions<sup>1</sup>
- Contact Melbourne Water for clarification and/or advice if uncertain about any aspect of water resource management.

## APPLICATION

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This Drought Response Plan is used by Melbourne Water to qualify rights to water in conjunction with licence conditions. The Plan provides information on the application of bans and rosters or restrictions on individual catchments. It is used by Melbourne Water to make informed decisions when Melbourne Water is of the opinion that the volume or quality of water available to satisfy any rights to water is, or is likely to be, inadequate for any reason.

Melbourne Water may choose to vary the application of this plan or qualify rights to water in a manner different to that outlined in this plan at its discretion and in accordance with the Water Act.

The plan applies to all Melbourne Water licensed water users within the Yarra catchment and unregulated waterways of the lower Maribyrnong River, Stony, Kororoit, Laverton and Skeleton Creek catchments. The Plan does not apply to farm dams existing prior to April 2002. Rules prepared under a catchment specific Stream-flow Management Plan, Local Management Rule or Water Resource Management Plan take precedence over this general drought response plan in those catchments.

This plan allows Melbourne Water enough flexibility to address situations where strict adherence to, or reliance on, a specific warning level would be inappropriate. It also aims to ensure that this flexibility does not weaken a proactive approach to the management of water resources by preventing timely responses that warn water users of a forthcoming shortage.

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<sup>1</sup> Advice on how to prepare a drought management plan, and what it should contain, may be obtained from the Department of Sustainability & Environment on 136 186 or via e-mail to [customer.service@dse.vic.gov.au](mailto:customer.service@dse.vic.gov.au)

In order to make this plan as valuable and effective as possible, it recognises the following:

- 1) The plan is always a document in progress. As technologies change and new programs are developed, the document needs to be continually revised
- 2) The plan must make information available to the largest possible audience in both the private and public sectors.

## **WARNINGS**

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This plan includes three warning levels (Low, Moderate and High) to provide licensed water users with an indication of the potential risk of a ban or restriction being placed on the taking of water in their catchment. A description of each of the warning levels is provided in Appendix 1.

The aim of each warning level is to advise users of the likelihood of a reduction in Stream-flows. The advice should help water users plan for, and manage, their watering and business requirements should drought conditions lead to the need for restrictions or bans.

The determination of low, moderate and high warning levels will be based upon key catchment information including 7-day average Stream-flow conditions, Bureau of Meteorology rainfall predictions and Melbourne Water's overall assessment of catchment conditions. Continuous monitoring of catchments will take place, based upon key catchment information, with warning levels updated as conditions change. A flow chart incorporating this key catchment information has been developed for Melbourne Water's use. Refer to Appendix 2.

All waterway catchments are subject to an associated level of warning.

## **RESTRICTIONS**

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Prior to the introduction of bans on the taking of water, a staged level of water use restriction will be implemented for the following:

- The Yarra River including all tributary catchments **not** listed in Appendix 5 as having a specified flow trigger.
- Little Yarra River catchment
- Woori Yallock Creek catchment (excluding Wandin Yallock Creek catchment)

All other catchments will be placed directly onto bans once specified trigger levels are reached.

Only one level of restriction will apply within the specified catchments before the introduction of bans. Restrictions will be introduced when catchment specific triggers have been met based upon 7-day rolling average Stream-flows and may apply both before the introduction of, and after, the lifting of bans.

A staged level of restriction is deemed beneficial for the particular catchments listed, as they are perennial in nature. Historical flow data indicates that flows in these catchments normally decline over a more prolonged period than the other more ephemeral waterways, and therefore provide opportunity for a staged level of restriction to be implemented. The restrictions in this plan are intended to help share water amongst licensed users by attempting to prolong stream-flows, and water availability, before the introduction of bans.

Trigger levels for the implementation of restrictions within the above catchments are tabled in Appendix 3. Water use restrictions to be applied to different licence types are tabled in Appendix 4.

## **BANS**

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All waterway catchments are subject to the implementation of bans once specified trigger levels are reached.

The implementation of bans will occur when the applicable ban trigger levels are met, based upon 7-day rolling average stream-flows except for the Yarra River mainstem which will be based on an instantaneous flow. Also **note** that bans will apply when the daily flow of any waterway equals 0 ML. Details on the trigger levels for the implementation of bans are tabled in Appendix 5.

The impact of bans on licence holders is recognised as severe, however, the implementation of bans within a catchment is necessary to protect base environmental flows and maintain where possible river health and associated flora and fauna.

## **EXEMPTIONS**

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Bans do not apply for genuine emergencies, such as water required for fire fighting purposes and water taken for domestic and stock purposes where no alternative supply is available. For Domestic and Stock licences where no alternative supply exists, pumping is banned except for essential household use (does *not* include watering of gardens)-and watering of stock.

Bans do not apply to the take and use of stored water from dams. In the case of on-stream dams all streamflow entering the dam during the ban period must be passed downstream through appropriate mechanisms in order to satisfy this requirement. Licence holders unable to pass all inflows and draw from stored reserves must abide by the bans or restrictions that are in place.

Melbourne Water may consider exemptions or modification to restrictions upon written application by licence holders. Exemptions will only be granted where it can be demonstrated by the applicant that efficient watering practices are in place, a reduction in water demand will be achieved compared to normal usage and the proposal put forward is consistent with the level of restrictions being applied within the catchment to other similar licence types. Any exemption to restrictions will apply only for the financial year in which it is granted.

Exemptions from bans, other than those specified in this section, are not available.

## TRIGGERS

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The implementation or lifting of bans or restrictions will occur when catchment specific triggers have been met based upon 7-day rolling average stream-flows<sup>2</sup>, except for the Yarra River mainstem which will be based on an instantaneous flow. Melbourne Water will determine both the instantaneous and 7-day average stream-flow for each catchment.

Melbourne Water has set trigger levels using historical stream-flow data for both the implementation and subsequent lifting of bans or restrictions on the taking and use of water from waterways managed under this plan. Not all trigger levels have been determined using detailed and comprehensive research and therefore may not necessarily provide for adequate environmental flows in some waterways. Where detailed research has not been available, flow triggers have been set to minimise impacts on licensed water users. A comprehensive listing of these trigger levels is tabled in Appendices 3 and 5.

Melbourne Water has installed stream flow monitoring gauges on key waterways affected by this plan. These data logging stations provide continuous flow readings and are the basis for monitoring trigger flow levels.

## COMMUNICATION

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Licensed water users will be provided a copy of the Drought Response Plan upon its implementation, after any significant changes or revision of the plan and at regular periodic intervals. In addition the plan will be available for download on the Melbourne Water website and copies will be provided to any licence holder upon request.

The Plan is active at all times in conjunction with licence conditions and requires licence holders to proactively seek and monitor information about drought status prior to taking any water.

The status of restrictions, bans and warning levels for individual catchments along with catchment specific stream-flow data will be posted on the Melbourne Water website at [www.melbournewater.com.au/diverters](http://www.melbournewater.com.au/diverters) and be available by calling Melbourne Water on **131 722**. Both the website and call centre will communicate the applicable status of bans, status of restriction if applicable, current catchment warning level, daily stream-flow and 7-day average stream-flow. Out of hours the call centre will communicate the status of bans and restrictions only.

Catchments will be monitored on a continuous basis with the status of warning level, restriction and ban being updated as conditions change.

Newsletters and other information will be forwarded to licence holders at periodic intervals to remind them to check the status of flows before taking water. Information will also be provided on current catchment conditions. These newsletters will be provided as information only and do not replace the need for licence holders to check their catchment status each time before taking water.

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<sup>2</sup> The Diamond Creek Water Supply Protection Area Stream Flow Management Plan 2003 specifies that the trigger flow for lifting of bans (7-day rolling average) must be observed over 3 consecutive days.

Melbourne Water contact details are provided below for licensed water users affected by this plan who have any queries.

**Postal address:** PO Box 4342  
Melbourne VIC 3001

**Telephone:** 131 722 or 9783 6373

**E-mail:** [diversions@melbournewater.com.au](mailto:diversions@melbournewater.com.au)

## **PENALTIES**

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Licensed water users must comply with any roster, ban or other arrangement prepared and implemented by Melbourne Water. Melbourne Water will undertake random audits of licence holders to check compliance.

Penalties for non-compliance with this Drought Response Plan will apply during times of water shortage. Failure to comply with restrictions or ban levels as detailed in this plan may lead to the enforcement of penalties such as permanent licence cancellation and/or prosecution under the Water Act (up to a \$4000 fine and/or three months jail for a first offence).

If a water licence is cancelled due to non-compliance but still required, an application for a new licence will need to be submitted and payment of a reapplication fee will apply. Renewal of the licence will be at the discretion of Melbourne Water and may be subject to other assessment criteria. Depending on water availability, it may not be possible to renew a licence other than by trading of a water entitlement.

## Appendix 1 TRIGGER LEVELS FOR BANS

### WARNING LEVEL

## LOW RISK

- Reliability of access to water HIGH
- Ban or restriction on the taking of water unlikely in short to medium term (4-6 weeks)
- Licensed water users must comply with licensed conditions and allocations

### WARNING LEVEL

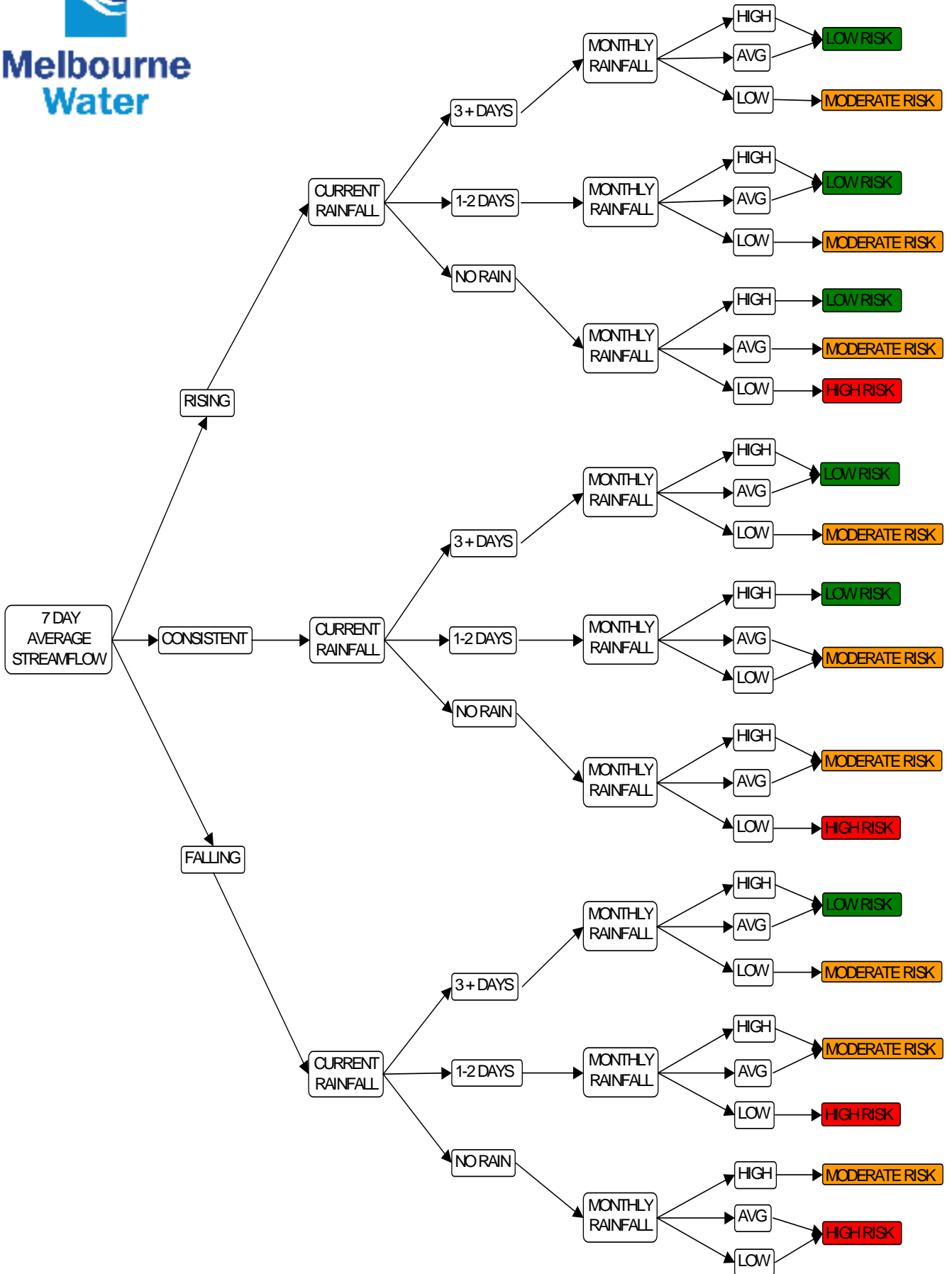
## MODERATE RISK

- Reliability of access to water MODERATE.
- Ban on the taking of water unlikely in short term (2-4 weeks) but likely in the medium term if conditions prevail.
- Restrictions to be implemented on designated catchments.
- Licensed water users must comply with licensed conditions and allocations.

### WARNING LEVEL

## HIGH RISK

- Reliability of access to water LOW
- Ban on the taking of water likely in short term (Next 2 weeks)
- Licensed water users must comply with licensed conditions and allocations





# TRIGGER LEVELS FOR RESTRICTIONS

(LITTLE YARRA RIVER, WOORI YALLOCK CREEK  
& YARRA RIVER (MAINSTEM) ONLY)

Licensed Water Users

Waterway	Location	Site ID	LOW-FLOW PERIOD			HIGH-FLOW PERIOD (Winter-fill)		
			Applicable Dates	RESTRICTION Trigger (ML/day)	RELIEF Trigger (ML/day)	Applicable Dates	RESTRICTION Trigger (ML/day)	RELIEF Trigger (ML/day)
<b>Yarra River Lower<sup>3</sup></b> (incl all tributary catchments not listed in Appendix 5)	Chandler Hwy	229143	01 Nov – 30 Apr	300.0	300.0	01 May – 31 Oct	300.0	300.0
<b>Yarra River Upper<sup>4</sup></b> (incl all tributary catchments not listed in Appendix 5)	Yarra Glen	229206	01 Nov – 30 Apr	300.0	300.0	01 May – 31 Oct	300.0	300.0
<b>Little Yarra River</b>	Yarra Junction	229214A	01 Nov – 30 Jun	60.0	60.0	01 Jul – 31 Oct	60.0	60.0
<b>Woori Yallock Creek</b> (Excluding Wandin Yallock Ck catchment)	Yellingbo	229679	01 Nov – 30 Jun	45.0	45.0	01 Jul – 31 Oct	120.0	120.0

<sup>3</sup> All Yarra River mainstem diverters downstream of Kangaroo-Ground Warrandyte Road Bridge Warrandyte. Based on daily instantaneous flow

<sup>4</sup> All Yarra River mainstem diverters upstream of Kangaroo-Ground Warrandyte Road Bridge Warrandyte. Based on daily instantaneous flow



# WATER USE RESTRICTIONS

(LITTLE YARRA RIVER, WOORI YALLOCK CREEK  
& YARRA RIVER (MAINSTEM) ONLY)

Licensed Water Users

(Applicable when catchment specific restriction trigger level is met. Refer to Appendix 3)

LICENCE TYPE	LOW-FLOW PERIOD	HIGH-FLOW PERIOD (Winter-fill)
<b>IRRIGATION, INDUSTRIAL OR COMMERCIAL USE DIRECT FROM WATERWAY</b>	<p><b>ALL USERS EXCEPT AS SHOWN</b>                      MAX. 7 HOURS BETWEEN 6AM &amp; 9AM AND 6PM &amp; 10PM ON ALLOTTED GROUP DAYS, AS AGREED WITH MELBOURNE WATER                      GROUP A MONDAYS, WEDNESDAYS AND FRIDAYS                      GROUP B TUESDAYS, THURSDAYS AND SATURDAYS  <b>COMMERCIAL FLOWER GROWERS AND NURSERIES</b>                      MAX. 3 HOURS BETWEEN 6AM &amp; 8AM AND 7PM &amp; 8PM ANY DAY.  <b>GOLF COURSES AND INDUSTRIAL</b>                      VOLUME DIVERTED TO BE REDUCED BY 50%. RECORDS TO BE KEPT OF ACTUAL USE FOR AUDIT PURPOSES.</p>	<p><b>ALL USERS EXCEPT AS SHOWN</b>                      MAX. 7 HOURS BETWEEN 6AM &amp; 9AM AND 6PM &amp; 10PM ON ANY DAY  <b>GOLF COURSES AND INDUSTRIAL</b>                      VOLUME DIVERTED TO BE REDUCED BY 25%. RECORDS TO BE KEPT OF ACTUAL USE FOR AUDIT PURPOSES.</p>
<b>IRRIGATION OR COMMERCIAL LICENCE USED WITH AN ON-STREAM DAM</b>	<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% - 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>	<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% - 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>
<b>ON-STREAM DAM – WINTERFILL</b>	<p>REFILLING OF STORAGES IS BANNED. NO RESTRICTIONS ON WATER USE PROVIDED WATER SUPPLY IS DRAWN FROM RESERVES OF STORED WATER.</p>	<p>NO RESTRICTIONS ON WATER USE PROVIDED WATER IS DRAWN FROM RESERVES OF STORED WATER. UNDER RESTRICTION CONDITIONS, DAM-FILLING LIMITED TO MAXIMUM FOUR HOURS PER DAY, BETWEEN 8.00 AM &amp; 12.00 PM.</p>



# WATER USE RESTRICTIONS

(LITTLE YARRA RIVER, WOORI YALLOCK CREEK  
& YARRA RIVER (MAINSTEM) ONLY)

Licensed Water Users

(Applicable when catchment specific restriction trigger level is met. Refer to Appendix 3)

LICENCE TYPE	LOW-FLOW PERIOD	HIGH-FLOW PERIOD (Winter-fill)
<b>IRRIGATION OR COMMERCIAL LICENCE USED WITH AN OFF-STREAM DAM</b>	<p>STORED WATER IN THE DAM MAY BE USED AT ANY TIME BUT REFILLING OF THE DAM FROM THE WATERWAY MAY ONLY OCCUR IN ACCORDANCE WITH THE FOLLOWING HOURS</p> <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, 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 AND NURSERIES</b></p> <p>MAX. 3 HOURS BETWEEN 6AM &amp; 8AM AND 7PM &amp; 8PM ANY DAY.</p> <p><b>GOLF COURSES AND INDUSTRIAL</b></p> <p>VOLUME DIVERTED TO BE REDUCED BY 50%. RECORDS TO BE KEPT OF ACTUAL USE FOR AUDIT PURPOSES.</p>	<p>STORED WATER IN THE DAM MAY BE USED AT ANY TIME BUT REFILLING OF THE DAM FROM THE WATERWAY MAY ONLY OCCUR IN ACCORDANCE WITH THE FOLLOWING HOURS</p> <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>GOLF COURSES AND INDUSTRIAL</b></p> <p>VOLUME DIVERTED TO BE REDUCED BY 25%. RECORDS TO BE KEPT OF ACTUAL USE FOR AUDIT PURPOSES.</p>
<b>OFF-STREAM DAM – WINTERFILL</b>	<p>REFILLING OF STORAGES IS BANNED. NO RESTRICTIONS ON WATER USE PROVIDED WATER SUPPLY IS DRAWN FROM RESERVES OF STORED WATER.</p>	<p>NO RESTRICTIONS ON WATER USE , PROVIDED WATER IS DRAWN FROM RESERVES OF STORED WATER. UNDER RESTRICTION CONDITIONS, DAM-FILLING LIMITED TO MAXIMUM FOUR HOURS PER DAY, BETWEEN 8.00 AM &amp; 12.00 PM.</p>
<b>DOMESTIC AND STOCK</b>	<p>PUMPING BANNED IF ALTERNATIVE SUPPLY AVAILABLE. IF NO ALTERNATIVE SUPPLY THEN PUMPING IS BANNED EXCEPT AS FOLLOWS:</p> <ul style="list-style-type: none"> <li>• ESSENTIAL HOUSEHOLD USE</li> <li>• WATERING OF STOCK</li> </ul> <p>INDIVIDUAL DROUGHT CONTINGENCY PLANS SHOULD BE IMPLEMENTED</p>	<p>NOT RESTRICTED</p>

# APPENDIX 4



## WATER USE RESTRICTIONS

(LITTLE YARRA RIVER, WOORI YALLOCK CREEK & YARRA RIVER (MAINSTEM) ONLY)

Licensed Water Users

(Applicable when catchment specific restriction trigger level is met. Refer to Appendix 3)

<b>NON-CONSUMPTIVE USE</b>	PROVIDED 100% OF WATER IS RETURNED IN ACCORDANCE WITH EPA 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	PROVIDED 100% OF WATER IS RETURNED IN ACCORDANCE WITH EPA 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
<b>FARM DAMS</b>	NOT RESTRICTED	NOT RESTRICTED

The following tables define the roster group allocation and allotted pumping days for waterways within those catchments subject to water restrictions. To be used in conjunction with restriction tables above.

Woori Yallock Creek catchment. Site ID 229679			
Low-Flow Period: 1 Nov-30 June		High-Flow Period: 1 Jul – 30 Oct	
<i>Restriction Roster Group A waterways</i>		<i>Restriction Roster Group B waterways</i>	
Allotted days – Monday, Wednesday, Friday		Allotted days – Tuesday, Thursday, Saturday	
Boggy Creek		Avonleigh Creek	McCrae Creek
Desmond Creek		Bob Mann Creek	Menzies Creek
Emerald Creek		Cassells Creek	Pancake Creek
Ferndale Creek		Club Creek	Perrins Creek
Nathania Springs Creek		Cockatoo Creek	Rundells Creek
Stoney Creek		Flannigans Creek	Sassafras Creek
Wattle Creek		Gembrook Creek	Sheepstation Creek
Woori Yallock Creek		Lone Star Creek	Shepherd Creek
			Lyrebird Creek
		Macclesfield Creek	Tomahawk Creek



# WATER USE RESTRICTIONS

(LITTLE YARRA RIVER, WOORI YALLOCK CREEK  
& YARRA RIVER (MAINSTEM) ONLY)

Licensed Water Users

(Applicable when catchment specific restriction trigger level is met. Refer to Appendix 3)

<b>Yarra River and tributary catchments <u>not</u> listed in Appendix 5 as having a specified flow trigger.</b>		
<b>Low-Flow Period: 1 Nov-30 April</b>		<b>High-Flow Period: 1 May – 30 Oct</b>
<b><i>Restriction Roster Group A Waterways</i></b>		<b><i>Restriction Roster Group B Waterways</i></b>
<b>Allotted days – Monday, Wednesday, Friday</b>		<b>Allotted days – Tuesday, Thursday, Saturday</b>
Yarra River upstream of Warrandyte gauging station		Yarra River downstream of Warrandyte gauging station
Armstrong Creek	Frenchmans Creek	Chirnside Park Drain
Badger Creek	Little Mick Creek	
Big Pats Creek	McMahons Creek	
Boggy Creek (Healesville)	Mississippi Creek	
Brisbane Creek	Platts Creek	
Cement Creek	Rocky Creek	
Dee River	Ythan Creek	
Four Mile Creek		

<b>Little Yarra River catchment.</b>		
<b>Low-Flow Period: 1 Nov-30 June</b>		<b>High-Flow Period: 1 Jul – 30 Oct</b>
<b><i>Restriction Roster Group A Waterways</i></b>		<b><i>Restriction Roster Group B Waterways</i></b>
<b>Allotted days – Monday, Wednesday, Friday</b>		<b>Allotted days – Tuesday, Thursday, Saturday</b>
Little Yarra River		Barrier Creek
		Fir Tree Creek
		Blakes Creek
		Hackett Creek
		Boys Camp Creek
		Kobecke Creek
		Brittania Creek
		Learmonth Creek
		Condon Creek
		Slaty Creek

## APPENDIX 5



# TRIGGER LEVELS FOR BANS

## YARRA BASIN ONLY

### Licensed Water Users

Waterway	Location	Site ID	LOW-FLOW PERIOD			HIGH-FLOW PERIOD (Winter-fill)		
			Applicable Dates	BAN Trigger (ML/day)	RELIEF Trigger (ML/day)	Applicable Dates	BAN Trigger (ML/day)	RELIEF Trigger (ML/day)
Darebin Creek	Bundoora	229612	01 Nov – 30 Jun	4.0	4.0	01 Jul – 31 Oct	4.0	4.0
Diamond Creek*	Hurstbridge	229619	01 Nov – 31 Dec 01 Apr – 30 Jun	1.5	9.5	01 Jul – 31 Oct	13.0	13.0
Don River	Yarra Junction	229214	01 Nov – 30 Jun	35.0	35.0	01 Jul – 31 Oct	35.0	35.0
Gardiners Creek	Gardiners	229624	01 Nov – 30 Jun	3.0	3.0	01 Jul – 31 Oct	5.0	5.0
Hoddles Creek*	Launching Place	229224	01 Dec – 31 May After 31 July 04	4.0 5.0	4.0 5.0	01 Jun – 31 Oct 01 Nov – 30 Nov	10.0 6.9	10.0 6.9
Little Yarra River	Yarra Junction	229214	01 Nov – 30 Jun	35.0	35.0	01 Jul – 31 Oct	35.0	35.0
Merri Creek	Somerton	229603	01 Nov – 30 Jun	2.0	2.0	01 Jul – 31 Oct	2.0	2.0
Moonee Ponds Creek	Flemington	229643	01 Nov – 30 Apr	4.0	4.0	01 May – 31 Oct	4.0	4.0
Mullum Mullum Creek	Doncaster East	229648	01 Nov – 30 Jun	2.0	2.0	01 Jul – 31 Oct	3.0	3.0
Olinda Creek **	Mt Eveyln	229690	01 Nov – 30 Jun	4.5	4.5	01 Jul – 31 Oct	6.0	6.0
Pauls Creek **	Tarrawarra	229245	01 Dec – 30 Jun	0.0	0.0	01 Jul – 30 Nov	5.0	5.0
Plenty River **	Mernda	229616	01 Nov – 30 Apr	1.5	1.5	01 May – 31 Oct	2.0	2.0



# TRIGGER LEVELS FOR BANS

## YARRA BASIN ONLY

### Licensed Water Users

Waterway	Location	Site ID	LOW-FLOW PERIOD			HIGH-FLOW PERIOD (Winter-fill)		
			Applicable Dates	BAN Trigger (ML/day)	RELIEF Trigger (ML/day)	Applicable Dates	BAN Trigger (ML/day)	RELIEF Trigger (ML/day)
Steels/Dixons Creek **	Yarra Glen	229246	01 Dec – 30 Jun	0.0	0.0	01 Jul – 30 Nov	7.0	7.0
Stringybark Creek **	Mt Evelyn	229401	01 Dec – 31 May	1.0	1.0	01 Jun – 30 Nov	2.0	2.0
Wandin Yallock Creek	Seville	229681	01 Nov – 30 Jun	1.0	1.0	01 Jul – 31 Oct	9.0	9.0
Watsons Creek	Kangaroo Ground	229608	01 Nov – 30 Jun	0.0	0.0	01 Jul – 31 Oct	1.0	1.0
Watts River	Healesville	229144	01 Nov – 30 Jun	1.0	1.0	01 Jul – 31 Oct	3.0	3.0
Woori Yallock Creek	Yellingbo	229679	01 Nov – 30 Jun	31.0	31.0	01 Jul – 31 Oct	103.0	103.0
Yarra River (Lower) <sup>1</sup>	Chandler Hwy	229143	01 Nov – 30 Apr	150.0	150.0	01 May – 31 Oct	150.0	150.0
Yarra River (Upper) <sup>2</sup>	Yarra Glen	229206	01 Nov – 30 Apr	150.0	150.0	01 May – 31 Oct	150.0	150.0



# TRIGGER LEVELS FOR BANS

## MARIBYRNONG BASIN ONLY

Licensed Water Users

Waterway	Location	Site ID	LOW-FLOW PERIOD			HIGH-FLOW PERIOD (Winter-fill)		
			Applicable Dates	BAN Trigger (ML/day)	RELIEF Trigger (ML/day)	Applicable Dates	BAN Trigger (ML/day)	RELIEF Trigger (ML/day)
Arundel Creek	Flemington	229643	01 Nov – 30 Apr	4.0	4.0	01 May – 31 Oct	4.0	4.0
Kororoit Creek	Brooklyn	231107	01 Nov – 30 Jun	2.0	2.0	01 Jul – 31 Oct	2.0	2.0
Maribyrnong River (REGULATED)	Keilor	230105	01 Nov – 30 Jun	5.0	5.0	01 Jul – 31 Oct (winter-fill only)	5.0 50.0	5.0 50.0

**Important Notes**

\* Stream Flow Management Plan (SFMP) applies for this sub-catchment

\*\* Water Supply Protection Area (WSPA) applies for this sub-catchment

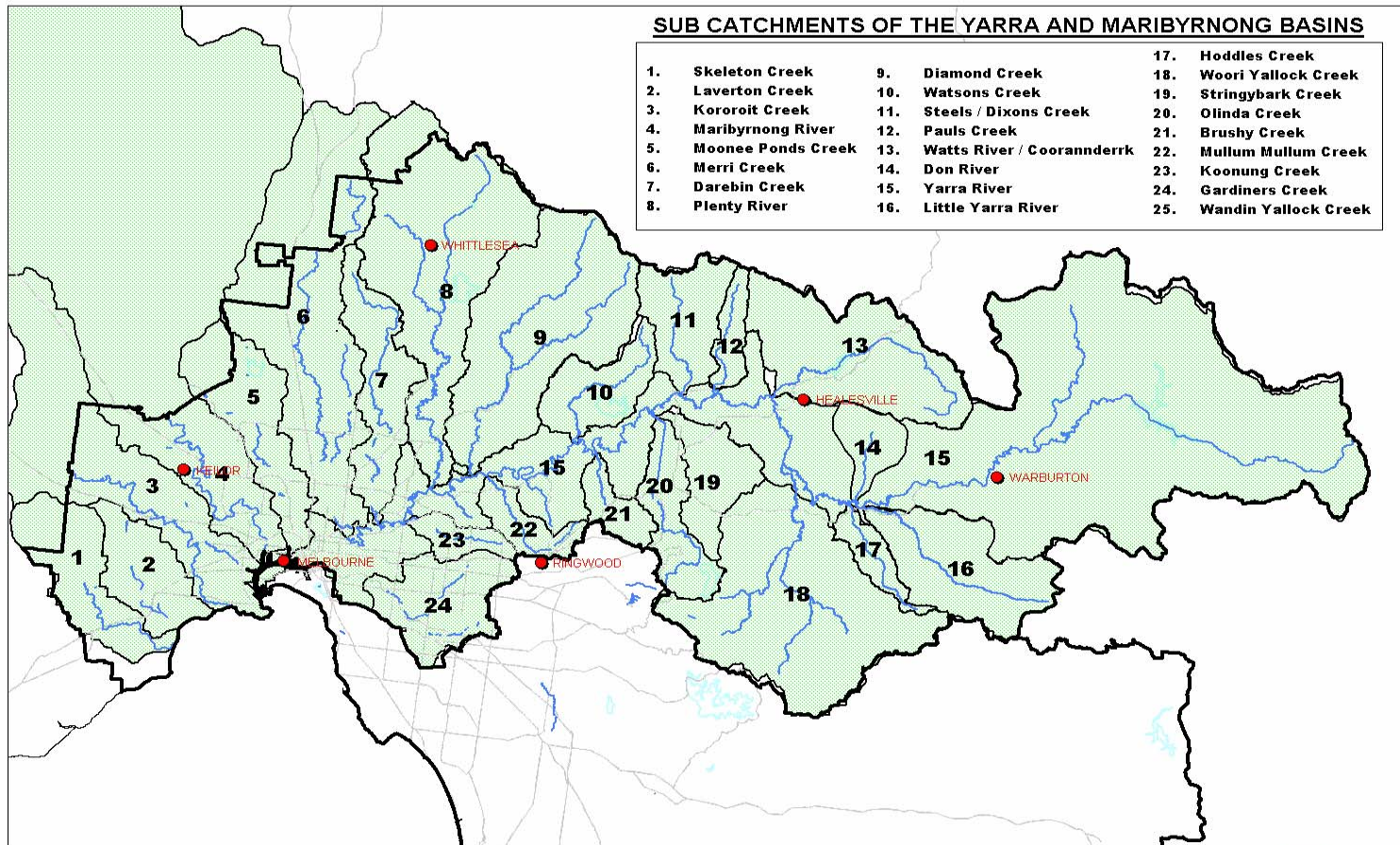
<sup>1</sup> All Yarra River mainstem diverters *downstream* of Kangaroo-Ground Warrandyte Road Bridge Warrandyte. Based on daily instantaneous flow

<sup>2</sup> All Yarra River mainstem diverters *upstream* of Kangaroo-Ground Warrandyte Road Bridge Warrandyte. Based on daily instantaneous flow

**Bans** will apply when the daily flow of any waterway equals 0 ML



# MAP OF YARRA AND MARIBYRNONG BASIN



Users of this data are advised to use Melbourne Water Corporation data for planning purposes only. This data is not intended for use in any other context, including, but not limited to, engineering, insurance, or other financial purposes. Melbourne Water Corporation makes no representation as to the accuracy or completeness of the information and data contained herein.



MAP OF YARRA AND MARIBYRNONG BASINS





# DIAGRAMMATIC PLAN YARRA RIVER CATCHMENT

