

Independent Assessment of the Northern Basin First Flush Event

Submission by the Lower Darling Horticulture Group

June 2020

The Lower Darling Horticulture Group

The Lower Darling Horticulture Group (LDHG) was established in 2014 to represent the interest of 10 families operating 7 family farms on the Lower Darling River. Until this year the LDHG included all irrigated high value commercial plantings (citrus, stone fruit, wine grapes and table grapes) on the Lower Darling River between Weir 32 at Menindee and the upstream influence of the Murray River.

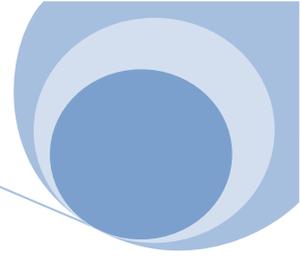
Security of water supply in the Lower Darling River has reduced over the past two decades, mostly as a consequence of increased irrigation development upstream of the Menindee Lakes reducing inflows and changed management of the Menindee Lakes to meet environmental outcomes under the Basin Plan.

As a consequence of these changes, the continued irrigation of high value permanent plantings in the Lower Darling has become increasingly unviable. In 2020 the LDHG agreed to remove all permanent plantings and transition their respective farming practices to agribusinesses not reliant on high security entitlements and a continuous supply of water.

Members of the LDHG who live on properties adjacent to the Lower Darling River are now reliant on the supply of water for domestic and stock purposes and use licensed general security water entitlements for opportunistic irrigation.

The priority for the LDHG and the basis of this submission is to ensure that the water needed to maintain the health and productivity of the river and the communities that depend on this is a priority for water managers. Further, this submission stresses that the critical human needs of towns and the domestic and stock water needs of riparian landowners are provided for before access to irrigation is allowed in the Barwon-Darling, northern tributaries and the Lower Darling River.

The LDHG submits that it is the protection of, and the management of the first flows that follow a dry period in the Barwon-Darling River and Lower Darling to the River Murray, that is essential to achieving and maintaining a healthy and productive river.



LDHG reliance on river flows

Members of the LDHG have relied on flows in the Lower Darling River for many generations. Up until 2002-03 our irrigation businesses enjoyed one of the most secure supplies of water in regulated rivers in NSW. Horticulture development commenced in the Lower Darling in the 1920's and up until 2002-03 there had been continuous flow in the Lower Darling other than for a short period in 1943. This is despite extended periods of drought during the past century.

The completion of the construction of the Menindee Lakes water storage scheme in 1963 and the management rules that were introduced to provide two years of drought security increased security of water supply and enabled further development of high value horticulture in the Lower Darling. Successive water management agencies in NSW actively promoted irrigation development up until the mid 1990's, seeking to foster economic development in rural NSW.

However, since 2002-03 the LDHG has been most affected by reduced security of water supply, having experienced four extended periods of no flow in the Lower Darling since 2002-03.

How the LDHG was affected by first flush events

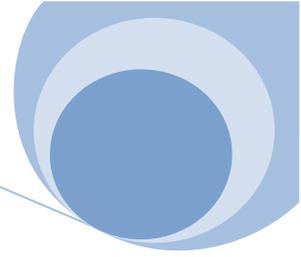
Up until 2020 the LDHG was arguably the water users most impacted by irrigation development upstream of the Menindee Lakes that has reduced inflows to the lakes and management of environmental entitlements that have included higher releases from the Menindee Lakes.

Clearly, reduced inflows and the quicker reduction in water storage within the Menindee Lakes have reduced security of water supply and water availability in the Lower Darling.

After four extended periods of no flow, the management of first flush events has been critical to the LDHG and to the health of the Lower Darling River.

Up until 2016 it was the practice of the NSW water management agency to impose administrative restrictions on the extraction of water for irrigation upstream of the Menindee Lakes until security of water supply for Broken Hill was guaranteed for 18 months. In so doing this provided for the health of the river and met high priority water needs in the Lower Darling, particularly following a dry period of reduced river flow.

This management arrangement has been long opposed by northern (cotton) irrigators who argue that this has had a significant economic impact on the northern basin. Subsequently, the water supply for Broken Hill has been secured by a pipeline from the River Murray and northern irrigators argue there is no need to protect the first flush.



However, recent reports including the Matthews Report, MDBA response to the Matthew's report, the Vertessy report into the Menindee fish kills, the Academy of Science report into the Menindee fish kills and the NSW Natural Resources Commission Review of the Barwon-Darling Water Sharing Plan all recognise the importance of the protection of first flush events for the health of the river.

The 2020 first flush event

How it affected the LDHG

In January and February 2020 when northern NSW and southern Queensland experienced first rainfall events following an extended drought, the LDHG was pleased with the imposition of temporary restrictions on the take of water for irrigation, including by floodplain harvesting works.

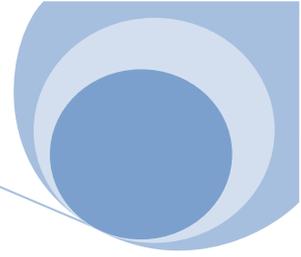
However, we were extremely disappointed by the (almost) immediate lifting of these temporary water restrictions by the NSW Water Minister, seemingly in response to the lobbying by the northern NSW irrigators. This was at a time when the volume reaching the Menindee Lakes and Lower Darling River was not known.

This left downstream water users and landowners adjacent to the Lower Darling, not knowing whether water would in-fact reach the Lower Darling, and rather that the government was prioritising water for the irrigation of cotton over downstream critical human needs.

What was done well

When volumes had been assessed and that there was sufficient to recommence flows to the Lower Darling, the LDHG recommended to NSW water management agencies that water should be captured in the Menindee Lakes until such time that a significant release could be made that would minimise the potential for fish kills and enable the 'slug' of highly saline, poor quality to be managed through the downstream system.

The LDHG was pleased that this strategy was adopted. In a previous first flush event in 2016 this advice was not acted on and a highly saline slug of very poor quality water was moved into the Lower Darling and remained at the upstream influence of the Murray River for months.



What could be done better in the future

The LDHG believes it important that flow triggers in the Barwon-Darling and Lower Darling, and storage volumes in the Menindee Lakes be determined that will ensure that the protection of the health of the river is made a priority before access to water for irrigation is allowed.

There have been a number of previous targets recommended for this purpose in NSW, including the 'Interim north-west flow rules' developed in the early 1990's and the environmental contingency included in the Murray-Lower Darling Water Sharing Plan. The flow targets included within these strategies provided for turning over water in weir pools, providing for fish passage and providing for the dispersal of blue-green algae. Current flow targets seem arbitrary and not linked to any outcomes.

Similarly, a volume target for Lake Wetherell and Lake Pamamaroo in the Menindee Lakes Scheme should be set to provide for up to two years security of supply for the Lower Darling to prevent the potential for future fish kills. Such a volume would be consistent with the original intent of the management of the Menindee Lakes to provide two years drought reserve for far-west NSW.

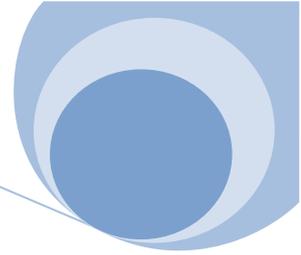
Importantly, there is a need to improve the dissemination of information and communication during the management of a future event. This was a deficiency of the recent event with landowners and water users on the Lower Darling not knowing about how this event was being managed, what water users were allowed access to flows and how this would affect flows reaching the Menindee Lakes and Lower Darling.

Other considerations

The LDHG considers it important that the panel considers, and recommends, how management arrangements for future flow events be instituted.

The embargo of the extraction of water through Section 324 orders should be linked to targets (see above) determined to protect the health of the river and should not be subject to the discretion of the Minister as this is perceived to be influenced by industry lobbying.

The LDHG believes that flow and storage volume targets be included within respective Water Sharing Plans so that the river is managed as a river system, with connectivity throughout and not as administrative units.



Further information

The Lower Darling Horticulture Group appreciates the opportunity to provide a submission to the Independent assessment of the management of the Northern Basin first flush event and would welcome further consultation for and on the draft report.

If you require any further information regarding this submission please contact me on 0428 279209.

Yours sincerely,

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