

# **Murrumbidgee Groundwater Inc (MGI)**

**Submission to the**

**Sustainable Diversion Limits Issues Paper**

**for the**

**Murray-Darling Basin Authority**

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## **Introduction:**

Murrumbidgee Groundwater Inc (MGI) represents approximately 270,000 megalitres of groundwater shared by approximately 250 groundwater users in the Murrumbidgee Valley which comprises a large agricultural area of approximately 84,000 square kilometres in the south west of NSW.

The main production categories are summer crops such as corn, sorghum, sunflowers and rice. The groundwater resource also provides irrigation for fat lamb production, beef cattle, wine grapes, citrus, almonds and wool.

We wish to have noted that our organisation is in full support of the responses submitted by the NSWIC and the National Irrigators Council.

MGI has noted issues surrounding the consultation process and a brief summary of key points that are specific to the organisation.

## **Consultation Process:**

MGI wishes to acknowledge that they were please to be given the opportunity to participate in the two day peak bodies stakeholder forum held in Canberra on the 14–15 December 2009. The format of the forum allowed ample opportunity for all participants to engage and convey their views and concerns. MGI suggests that this style of forum would be a constructive process for the authority to undertake in regional areas of the basin to allow all stakeholders the opportunity to provide their feedback. Whilst we are aware that the MDBA was under no obligation to consult with stakeholders at this point in time, the short timeframe provided for a response ( particularly so shortly after the forum), has not allowed sufficient time to provide a more comprehensive submission.

## **Key Points:**

- Any decision making in relation to SDL's being set for groundwater requires further scientific investigation that will be peer reviewed. *The lack of scientific knowledge was evident in the 2008 CSIRO, Murray Darling Basin Sustainability Yields Report.*
- The Lower Murrumbidgee region via the Achieving Sustainable Groundwater Entitlements Plan (ASGE) has already reduced its volume significantly from approximately 514,000 megalitres to 270,000 megalitres (Sustainable Yield). In 2003 when the last Water Sharing Plan for this water resource was written, there was 400,000 megalitres of recharge occurring, and 335,000 megalitres of this recharge passes through to the underlying deep groundwater source annually.
- MGI notes that the Lower Murrumbidgee has implemented management zones to reduce pumping in stressed areas and is already adhering to a Water Sharing Plan which has undergone significant cutbacks unlike other regions and zones.

- Knowledge of connectivity is not well understood and in its infancy in comparison to surface water. Therefore, MGI supports the separation of SDL's for surface and groundwater.
- MGI is of the firm opinion that where there is a Water Sharing Plan in place, it would be foolhardy to set a new SDL and that the WSP should be given the provision to run its course.
- The MDBA should ensure that WSP's are implemented in all States of the Basin and placed across all water sources and extractions methods, to ensure equitable SDL's being implemented. This action would ensure consistency with the NWI.

## **Summary:**

The National Water Initiative set in place plans for each State to implement Water Management Plans across all water sources. The level of achievement in this respect is not uniform across States and there are significant areas that are behind in the planning process. This is particularly evident in macro water sharing plans eg; in NSW or in more broader water sharing plans eg; in South Australia.

In addition, there are significant gaps in other aspects of consumption – eg mining in certain States. In SA for example, there is not a uniform approach to mining extraction and water planning. It appears that in SA not all mining activities require a license entitlement to extract.

In NSW, mining activities that utilize water for mining operations would be subject to entitlement requirements. However, in the actual extraction of minerals, unplanned interception of groundwater or river water, does not require a license entitlement.

Therefore, it is important for the MDBA to recognise the inconsistent planning processes between or within States and account for the transitions that have already occurred.

The question is how will groundwater extractions influence the setting of SDL's and take into account the wide variety of factors, planning processes and inconsistent laws that currently face water interception across all States.

It is blatantly apparent that across the Basin, there are still major deficiencies in science and water planning across States. In addition, there are still huge gaps in knowledge between surface and groundwater interaction across all areas.

Groundwater connectivity may differ or be regarded as not directly connected if water level response between surface and groundwater flows/extractions do not reflect similar levels. In this case it may be geological formations separating systems or other similar regional factors.

If the MDBA were to set one SDL for surface and groundwater, the complexities of Australia's landscape, the influence of climatic events and water planning scenarios, would make this action extremely risky for all stakeholders.

In the report “ Exploring the Impact of Groundwater Use on Australia’s Rivers – Exploring Technical, Management & Policy Challenges” published by Land & Water Australia (April 2007), it states *“due to the complexity and variability of the natural environment there is no single robust and technically simple tool for predicting the impact of groundwater pumping on stream flow. Over the last 20 years various attempts have been made to link surface water models with groundwater models to calculate stream flow impacts. These attempts have had mixed success because of the different scales and variability in time periods used in the analysis.”*

Applying long term planning for the setting of a SDL for both surface and groundwater is highly complex. While the interaction of groundwater and surface water is recognised, it is the level of connectivity, timescales and external influencing factors that will create model and policy risk for the MDBA. Often connectivity may roll over decades or in the Great Artesian Basin (GAB) more.

It may be more prudent for the MDBA to ensure that water sharing plans are placed across all water sources and extractions methods, and to ensure that sustainable diversion limits and extractions are placed in areas of the Basin. This action would ensure consistency with the NWI.

MGI trusts that the above points will be taken into consideration when the SDL is being determined for our region.

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