Australian Government

MURRAY–DARLING BASIN AUTHORITY

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Summary of submissions to SDLs Issues Paper

Introduction

In November 2009 the MDBA released a discussion paper inviting comments on issues around developing sustainable diversion limits (SDLs) for the amount of water that can be taken from the Murray Darling Basin's rivers, waterways and groundwater.

In December 2009, the MDBA also held two forums in Canberra for peak bodies, science and government organisations, and a Northern Basin Indigenous Gathering, to discuss the Basin Plan and issues raised in the Issues Paper.

The SDLs Issues Paper asked five specific questions for readers to consider about its proposed approach to setting SDLs:

- Which Water Resource Plan (WRPs) areas should be used?
- Which forms of 'take' should be limited by the SDLs?
- How should SDL provisions be determined in a way that optimises economic, social and environmental outcomes?
- How should surface water-groundwater connectivity be dealt with?
- How should SDLs be set and expressed?

The MDBA received over 150 submissions from governments, interested groups and individuals.

A summary of the issues raised in response to the questions asked in the SDLs Issues Paper is set out below. This summary is followed by a general response from the MDBA on how it is responding to issues raised by stakeholders, on an ongoing basis. Many submissions also raised other issues to do with developing the Basin Plan, more generally. These other issues are also summarised.

The MDBA has not attempted to respond in detail to the issues raised in the submission as this is the subject of ongoing work in developing the Basin Plan. The MDBA has commissioned a detailed technical review of all submissions to ensure that key elements and information from the submissions are fully considered and taken into account in the Proposed Basin Plan.

Full or further details of matters raised in submissions can be found in the original submissions themselves, available on the MDBA's website. The full SDL Issues Paper and fact sheet are also available on the MDBA's website and provide greater context for this discussion of issues in setting SDLs.

Discussion of Question 1 "Which Water Resource Plan areas should be used?"

The Basin Plan must identify the boundaries for water resource plan areas (WRP areas) and must specify the water resource to which each WRP will apply. The Water Act requires there be a Water Resource Plan (WRP) for each WRP area.

The SDLs Issues Paper proposed an approach to identifying WRP areas that involves, as far as possible, using boundaries currently provided for under state water management regimes as the basis for WRP areas in the Basin Plan, and sought views on this approach. Please see the SDLs Issues Paper itself for further details.

Summary of issues raised in submissions

Submissions received showed a fairly high level of acceptance of the MDBA's proposed approach to setting WRP areas. Numerous submissions agreed with the principles identified in the paper, but made further suggestions, including the need to clearly identify connectivity between water resources. The issue of cross-state WRP areas was also raised as a concern, with some submissions calling for an integrated approach across states. Several submissions called for a greater level of detail on the proposed WRP areas to be released for comment. Other views put forward included some suggestions that the MDBA should set different WRP areas.

Other concerns in relation to WRP areas, included the unfamiliar terminology, concerns about areas that may not be covered by a WRP, sharing arrangements between states, and the resources for producing WRPs.

The issues of connectivity with both the Great Artesian Basin and the Snowy Mountains Scheme were also raised.

Discussion of Question 2 "Which forms of 'Take' should be limited by the SDLs?"

The Water Act introduced a new basis for sharing water resources of the Basin, and in doing so uses terms and concepts with both similarities and differences to existing state and national arrangements. SDLs are the quantities of water that can be taken on a sustainable basis from the Basin water resources. This notion is further developed in the Water Act requirement that each SDL must reflect an 'environmentally sustainable level of take'. The SDLs Issues Paper proposes that SDLs will account for water on the basis of net use, rather than gross water use, where there are arrangements to account for return flows as with current arrangements under the current Murray-Darling Basin Cap and subject to a review of such arrangements for consistency with the Basin Plan objectives.

The SDLs Issues Paper explored the different forms of 'take' and asked the questions 'Which forms of 'take' should be limited by SDLs?' and 'How should interception activities be treated?'

Summary of issues raised in submissions

Submissions showed a degree of general agreement with the forms of 'take' identified in the Issues Paper but also called for more detail to be provided. There was widespread agreement that unauthorised take should not be tolerated and that including it in SDL calculations would wrongly send a message that such activity is acceptable. Some submissions did not agree with the use of the word 'take' or request that the MDBA provide further clarification and explanation of the concept, as it is not widely understood among stakeholders.

There were diverging opinions on the treatment of environmental water as 'take'. A significant number of submissions proposed that environmental water should be treated as take in the same way as other forms of take for consistency and so that the environment shares risk in the same way as other users. A small number of submissions proposed that environmental water should be treated separately from other forms of take.

Those submissions that discussed the concept of accounting for water on the basis of 'net water use', rather than gross water use, generally supported that approach, although one submission commented that it did not support net use at the farm gate level.

In asking which forms of take should be limited by the SDLs, the SDLs Issues Paper also asked how interception activities should be treated. There was a strong view in submissions that the majority of incidental interception activities should be accounted for and included when setting SDLs.

Numerous submissions discussed the interception impact of forestry activities and how they might be included in setting SDLs. Submissions noted that interception activities related to reafforestation can be complex because of their potential for beneficial environmental outcomes and some submissions asked for them to be given different consideration. Some submissions also discussed other interception activities that have positive environmental benefits (e.g. farming practices like stubble retention and improved vegetative cover) and questioned how these might be dealt with in setting SDLs.

On the question of including stock and domestic water as take, some submissions noted the expense and difficulty that could be involved in measuring such take. The issue was also raised of 'basic rights' in NSW as an unmetered and unlicensed use that is difficult to quantify. Several submissions also called for the status of floodplain harvesting to be clarified, with some arguing that it should have the same status as other licensed take.

The question of reduced irrigation return flows due to increased irrigation efficiency was also raised in relation to interception activities. One submission suggested using tradeable water entitlements for interception activities.

In relation to considering other forms of take, mining was mentioned in several submissions as an area of concern in relation to changing ground water systems, high levels of take from aquifer systems, incidental take and differences in state approaches to mining extraction.

One submission commented that minerals operations intercept water, often releasing it again, under current regulations, and any new treatment of these interceptions needs to be more efficient.

Some submissions raised other potential forms of take that they thought MDBA may need to consider, including storages for flood mitigation and power generation, subdivision of rural land, reuse of sewage water by local authorities, modern farming systems that prevent runoff and agricultural production stemming from private wetlands that benefit from environmental watering.

Several submissions expressed concern that impoundment may be considered a form of take, arguing that deferral of delivery is not the same as take. Some submissions questioned how other forms of urban water use, including industrial use, stormwater capture and reuse and household tanks will be treated in terms of take.

Some submissions discussed the question of what methods of measurement might be used, how losses will be accounted for and the risk of errors and inaccuracy.

Some submissions discussed the question of how critical human water needs will be included in SDLs, with some considering that this has not been clearly expressed in the Issues Paper.

Discussion of Question 3 "How should SDL provisions be determined in a way that optimises economic, social and environmental outcomes?"

The SDLs Issues Paper provided a general description of the relationship between economic, social and Indigenous assessments and SDLs. A key aspect of these assessments involves determining how a given set of environmental requirements across the Basin can be satisfied at least social and economic cost.

The SDLs Issues Paper sought views on a proposed approach to optimising economic, social and environmental outcomes and asked the question "How should SDL provisions be determined in a way that optimises economic, social and environmental outcomes?"

Summary of issues raised in submissions

Submissions generally indicated support for moving to a more sustainable use of the Basin's water resources. However, whilst some submissions supported increasing the priority given to the environment's need for water, some raised concerns about the prioritisation of different elements within the Water Act.

Several submissions noted that the Water Act specifies economic, social and environmental outcomes should be optimised and considered that the MDBA should seek to balance all three rather than focusing on environmental outcomes as the top priority. However others raised concerns that the environmental outcomes intended by the Basin Plan could be threatened if there is too great an emphasis on social and economic needs. Some considered that environmental sustainability should be paramount and that many positive outcomes will flow from the Plan.

Some submissions call attention to the potential social and economic impacts of the Proposed Basin Plan. Some submissions raised the question of how MDBA proposes to make 'trade offs' between potential impacts and outcomes.

A number of submissions made suggestions about approaches and issues that could be considered in the socio-economic analysis for the Plan. Many submissions suggested resources such as tools, case studies and information that could be used in setting SDLs, and a number offered further advice and assistance. Some submissions offered assistance with engaging communities and integrating social and economic considerations into the Proposed Basin Plan.

There were concerns raised regarding the short time available to develop the Basin Plan, particularly in relation to researching and integrating social and economic information into the setting of SDLs. Some submissions suggested an extension should be sought for preparing the Plan.

Many submissions suggested the MDBA should more fully engage Basin communities in developing the Proposed Basin Plan, while noting the difficulty of doing so within the current timeframe.

A number of submission raised concerns about the need for investment security for farmers and irrigators (both past investment and potential future investment) and the importance of recognising existing property rights. A number raised the issue of compensation and there were arguments for and against the use of temporary diversion provisions.

Some submissions commented on the importance of the market in making changes to use of the Basin's water resources.

Several submissions raised questions and issues relating to water sharing between valleys, and a number requested further clarification on how this could occur.

Discussion of Question 4 "How should surface water – groundwater connectivity be dealt with?"

The Water Act states that the description of the Basin water resources must include information about the size, extent, connectivity, variability and condition of those resources. The SDLs Issues Paper provided information about the nature of surface water-groundwater connectivity that occurs in the Basin, noting that connectivity between surface water and ground water will need to be considered in determining SDLs.

The SDLs Issues Paper asked the question "How should surface water-groundwater connectivity be dealt with?"

Summary of issues raised in submissions

A number of submissions agreed with the MDBA's proposed approach of setting separate SDLs for surface and groundwater that take account of current and future interactions between them. Some submissions disagreed, or agreed with the principle of separate SDLs but expressed reservations about the practicalities of administering different SDLs and the desirability of treating all water as the same product.

There was a high level of concern expressed that current levels of knowledge and existing science are inadequate and that the science underpinning this aspect of the Proposed Basin Plan is not adequately peer reviewed.

Some submissions discussed issues of connectivity that they thought should be considered in relation to groundwater, including management and science issues. Some asked for assurance that existing groundwater arrangements would be taken into account when decisions are made.

Submissions raised several other issues they thought should be considered in relation to surface water-groundwater connectivity including its relationship to salinity, equity between users of each resource and how the Great Artesian Basin would be considered. Some submissions offered specific suggestions, tools or resources to help the MDBA resolve issues of surface water-groundwater connectivity.

Discussion of Question 5 "How should SDLs be set and expressed?"

The Water Act requires that the Basin Plan must set SDLs and determine how compliance with SDLs will be assessed, but also provides a degree of flexibility in how this is done.

Whilst SDLs must be presented as long-term average annual volumes, there are a variety of ways in which these limits could be represented in WRP requirements. Long-term average SDLs could be specified as particular quantity of water per year, as a formula to calculate a quantity of water per year or in any other way the Authority determines appropriate.

SDLs will place limits on a number of different forms of take with different degrees of significance and impacts. The SDLs Issues Paper therefore proposed that a flexible approach be taken to specifying and assessing compliance with SDLs and discussed a variety of approaches appropriate in different circumstances. The paper sought views on how SDLs should be set and expressed.

Summary of issues raised in submissions

Some submissions agreed with the approach to specifying SDLs as long term annual averages, noting the advantage of this approach was in allowing credit to build up in dry years and be used in wet years. A greater number submitted that setting SDLs as a percentage of the available resource would be a better approach as it could take account of actual climate variability and change and would be transparent for users.

A number of submissions agreed that because of the complexity of the issues, models will be needed to specify SDLs and variations in diversions from year to year. However some raised concerns about the inherent risks in using models, including the CSIRO Sustainable Yields Audit. The NSW Integrated Quantity and Quality Model (IQQM) is mentioned positively. Several submissions argued that SDLs must allow for a degree of flexibility.

A key issue raised in submissions was the question of how the environment should be treated compared to other water users, especially in relation to climate change. In this regard, some submissions argued that the MDBA must maintain the ability to deal with a range of climate variability and change in the medium to long term, with care being taken not to unnecessarily create adverse impacts on water users. Others called for a more precautionary approach.

Equity between all users – including the environment – was widely supported in the submissions, with some exceptions. There was a strong view expressed in some submissions that in order to balance social, economic and environmental outcomes, social and economic analysis needs to feed in to the setting of SDLs rather than be used to assess the impact after SDLs have been set. Some submissions called on the MDBA to ensure that it minimises any reduction in water availability when setting SDLs.

Some submissions commented that they do not yet have a clear idea of what an SDL will look like. Some submissions made specific suggestions of what should be included in an SDL and what issues should be considered when setting SDLs. Several submissions raised questions and issues relating to how water sharing between valleys would occur, with a number requesting further clarification.

The relationship between the Proposed Basin Plan and the current Murray-Darling Basin Cap arrangements was raised and while some submissions noted problems with the Cap, they commented that some of the Cap mechanisms could still be useful and should not be dismissed.

Some submissions expressed concern with the MDBA's potential approach to using production values as a basis for making decisions about SDLs.

Other submissions also suggested tools and existing approaches that could be used in setting SDLs, such as the Gwydir Regulated River Water Sharing Plan, the Macintyre Brook Catchment water allocation model and the minerals industry water accounting framework.

MDBA's ongoing consideration of stakeholders' views in developing the Basin Plan

The MDBA appreciates the input received through submissions and recognises the considerable time and effort that went into providing so many substantive comments. The MDBA has heard clearly from stakeholders their issues and concerns.

The following is a general response to the issues raised. The MDBA has not attempted to respond in detail to the issues raised in the submission as this is the subject of ongoing work in developing the Basin Plan. The MDBA has commissioned a detailed technical analysis of all submissions to ensure that key elements and information are fully understood and can be used to inform the ongoing development of the Proposed Basin Plan.

The MDBA notes the concerns raised in submissions about the robustness of the science and other information underpinning the Proposed Basin Plan. The MDBA is developing the SDLs based on the best available science and information from an environmental, economic and social perspective. In developing SDLs for the Proposed Basin Plan the MDBA is:

- identifying key environmental assets and functions, including determining the requirements for environmental water and developing an environmental watering plan
- addressing the relationship between the water quality and salinity management plan and SDLs
- considering the role of economic, social and Indigenous assessments in setting SDLs and
- quantifying the impact of different climate scenarios on water availability.

The MDBA has commissioned extensive social and economic research to better inform the development of the Proposed Basin Plan.

Some stakeholders raised concerns about transparency and the need for peer review of the science. The MDBA is setting up independent peer review processes and the data sets and sources of information underpinning the Proposed Basin Plan will be publically available.

The MDBA acknowledges concerns regarding the timeframe for producing the Basin Plan and is cognisant of the challenges that go with this. The MDBA is therefore committed to developing the best possible Proposed Basin Plan in accordance with the timeframe that has been agreed by COAG for its development.

Involving stakeholders in developing the Basin Plan

The MDBA appreciates participation from stakeholders to date and will continue to provide a range of opportunities for stakeholders to have input into the development of the Basin Plan. In the lead up to the formal consultation period on the Proposed Basin Plan, the MDBA has been meeting with key organisations, members of the public, local communities and interested parties to discuss Basin Plan issues.

The MDBA will hold another forum with key stakeholders in April 2010 in Canberra as a follow-up to the forums held in December 2009. This forum will enable stakeholders to engage at a more detailed level over issues that have emerged as key points for discussion.

MDBA will continue to release fact sheets and reports on particular topics of interest, in response to feedback from stakeholders, with regular updates also being provided through the MDBA website and electronic newsletters.

The MDBA is committed to engaging Indigenous people in developing the Basin Plan. The MDBA has presented to the Murray Lower Darling Rivers Indigenous Nations (MLDRIN). The MDBA also held a northern Basin gathering in Moree where it met with representatives from approximately 27 Indigenous nations. Input from the northern Basin gathering is being considered by the MDBA and the Authority will also hold a follow-up meeting to the northern Basin gathering.

Formal consultation period on Proposed Basin Plan

The Proposed Basin Plan is scheduled to be released for a minimum 16 week public comment period in mid-2010. At this time the MDBA will make available copies of the proposed Basin Plan and a plain English summary, including an outline of the scientific knowledge and socioeconomic analysis on which the Proposed Basin Plan is based. Following this consultation, the final Basin Plan is due to be completed in 2011.

This consultation period will be a genuine opportunity for people to have input to the Proposed Basin Plan. In addition to accepting formal submissions, MDBA will be going into communities throughout the Basin to explain the Proposed Basin Plan and discuss the likely impacts and the processes for taking comments and finalising the Plan. Further information will also be available through peak body networks and at www.mdba.gov.au.

Further details of the MDBA's approach to stakeholder engagement can be found in the Stakeholder Engagement Strategy.

Other issues raised in the Submissions

Beyond discussion of the five questions posed by the MDBA, several other key issues were raised in submissions.

There was strong support for participation in the engagement process at this stage of development of the Basin Plan. Many submissions acknowledged the MDBA's efforts to engage stakeholders within a very limited time frame. Some noted that the MDBA had no statutory obligation to consult at this stage and thanked them for doing so. A common theme was that the MDBA needs to adequately consult stakeholders and communities, and the MDBA must be transparent in its process. Some stakeholders were also concerned that the MDBA properly consider Indigenous water use, cultural flows and engagement with traditional owners.

Some submissions congratulated the MDBA on its SDLs Issues Paper, addressing important and complex aspects of the Basin Plan in a systematic manner. However stakeholders also expressed concern that the language of the SDLs Issues Paper was too specialised and future communications need to be in plain English. Issues need defining as a lack of clear definitions, or different understandings of the meaning of key terms (including 'take', 'productive base' and 'key') have profound implications for the development of the Proposed Basin Plan.

There was a high level of concern about the underlying scientific data and research. Submissions generally called on the MDBA to be committed to using the best available science. For instance, some submissions raised concerns about the degree of socio-economic research and use of climate change data.

Both the submissions and forums called on the MDBA to identify and release key environmental assets. Many stakeholders also wanted further clarity about interactions with the Basin Plan and the water quality and salinity management plan and the environmental watering plan.

Concerns were also raised about the different transition periods between states, and the time lag for Victorian water resource planning to come under the Basin Plan, with some raising concerns that it could result in inequity between states.

Some submissions asked how water trading issues would be handled in relation to SDLs and noted the importance of not inhibiting trade.

Some submissions suggested that there are other methods that could be considered by the MDBA to free up water, including water use efficiencies and engineering solutions. Some submissions considered it important for the MDBA to recognise existing efficiencies that have been achieved in recent years when setting SDLs, so that innovative water managers are not penalised for their achievements.