



Committee Secretary
House of Representatives Standing Committee on
Regional Australia
PO Box 6021
Parliament House
CANBERRA ACT 2600
AUSTRALIA

Dear Sir

Re: Standing Committee on Regional Australia Inquiry into the Proposed Basin Plan

The Risorsa Group works with organisations and businesses to create opportunities in, and solutions to, the challenges presented by scarcity of natural resources.

We specialise in water and have staff with extensive experience in water management and the development and implementation of infrastructure projects that create water efficiencies and water savings.

The Risorsa Group thanks the Standing Committee for the opportunity to submit a paper to the Inquiry on the Proposed Basin Plan and requests the opportunity to address the Standing Committee at one of its public hearings.

It is the opinion of the Risorsa Group that a more balanced approach to recovery of water for the Basin environment could be established by:

- Setting the timeframe for implementation over a twenty to thirty year period to give communities and industry time to adjust;
- Investing in environmental works and measures to increase the efficiency and effectiveness of environmental watering;
- Investing in targeted infrastructure projects to improve the efficiency of irrigation and water distribution;

The Risorsa Group Pty Ltd

PO Box 8154,
East Griffith, NSW 2680

P: 02 6962 2220

W: www.therisorsagroup.com.au

ABN: 65 146 641 269



- Investing in targeted buy-back programs where necessary to compliment infrastructure upgrades; and
- Facilitating trade from the environmental water holder into the food and fibre sector in times when the environmental outcomes achieved by watering would be sub-optimal.

More detail on these key points is provided in the attached submission.

Yours sincerely

Kaye Dalton
Managing Director

17 December 2010.



Submission to the Standing Committee on Regional Australia Inquiry into the Basin Plan.

17 December 2010

**The Risorsa Group
Kaye Dalton
Managing Director
PO Box 8154
East Griffith**

1. Impact on Regional Communities

The volumes of water recovery for the environment proposed in the Guide to the Basin Plan are unprecedented. For some valleys and specific locations within the Basin, the proposed sustainable diversion limits, if implemented, will result in significant reductions in availability of water for food and fibre production. This will have flow on impacts to secondary industries and dependent local and regional communities.

It is recognised that the Basin Plan has been built from a hydrological hypothesis and as such, the volumes required to meet the plan objectives are much greater than those envisaged under an “environmental asset” approach, such as the Living Murray. The differences in these approaches are generally not well understood by those outside of the academic or technical community. In addition, the premise for selecting the range of 60% to 80% of natural flows to achieve ecosystem functionality objectives, are not well explained. It doesn't appear from the Guide to the Plan that there is published and peer reviewed scientific evidence to support the selection of this range of flows.

In a regulatory planning process such as the Basin Plan, where the extent of the proposed change is so significant, the underpinning science must be robust and subject to peer review standards. There must be a clear explanation of the science provided to all areas of the community to allow them to understand the linkages between the objectives of the Plan, and the actions required to achieve those objectives.

The Risorsa Group Pty Ltd

PO Box 8154,
East Griffith, NSW 2680

P: 02 6962 2220

W: www.therisorsagroup.com.au

ABN: 65 146 641 269



The proposed timeframes for both Plan development and implementation are very tight and do not allow for the required depth of engagement with, and understanding by, the community, or time for industry and community adjustment.

If the implementation timeframes were lengthened to a 20 to 30 year period, with measurable objectives each 10 years along with a review of environmental health outcomes, there is likely to be greater community understanding and acceptance of the proposed scale of change.

Some of the possible social and economic impacts of the Basin Plan would also be mitigated if a framework for trading water back into the consumptive pool was developed and implemented, in years when environmental allocations exceeded environmental requirements. Governments should give some attention to the triggers that would facilitate this trade as well as mechanisms for entering into leasing and other market based options that help to manage risk associated with cash flow and water availability for both farmers and the environmental water holder.

2. More Efficient Use of Environmental Water

There has been over a decade of experience gained by environmental water managers across the Basin in ways to manage environmental water more efficiently. Programs such as the Living Murray Works and Measures have led to effective environmental watering of assets such as Hattah Lakes and the Chowilla Floodplain and produced significant environmental outcomes using relatively modest volumes of water. In addition, State Government Agencies and community based groups such as the Murray Wetlands Working Group have been using works and measures to extend the positive benefits of environmental watering in areas such as the Lowbidgee wetlands in the Murrumbidgee Valley and Murray Valley wetlands in NSW.

If the proposed Basin Plan drew from this experience and identified ways in which works and measures can be used to create watering efficiencies in the environment, the volume of required water recovery would be less, along with the impact on communities and industry.

Environmental works and measures should be a feature of the Basin Planning process moving forward, and adequate funding should be apportioned to scoping, development and implementation of appropriate works and measures projects across the Basin.

3. Opportunities for Water-savings Measures and Water Recovery

Extrapolating the work that has been done under the Living Murray and the Water for Rivers programs, there are three levels of potential water savings and water recovery projects available to government investors:

- a. At a river valley scale, where the automation of river operations using real time flow and water use data, together with predictive models can more closely match dam releases with downstream water use demands. In the Murrumbidgee River, the Computer Aided River Management (CARM) Project, developed by Water for Rivers and the State Water Corporation will result in more water stored in the upper dams, reducing wastage and evaporative losses.

In addition, there should be a focus on less efficient areas of natural water delivery systems, rationalising these where appropriate and upgrading systems where the demand is sufficient and benefit-cost is positive.

- b. At an off-river water supply scheme level there remain opportunities for rationalisation and upgrade of supply infrastructure to increase water delivery efficiency and recover water savings. There are leading examples of what can be achieved through channel system modernisation in Coleambally Irrigation and in the Goulburn Murray, and in pipeline schemes already commissioned across the Basin.

This level of infrastructure investment needs to work in closely with strategic buy back of entitlement to achieve the most beneficial social and economic outcomes for the water delivery business, as well as for the communities and farming enterprises that they service.

- c. At a farm level, there is significant scope for recovery of water savings across the Basin. Whilst there has already been significant water saving initiatives rolled out on farms, the implementation of new irrigation and water supply technologies, together with the adoption of new crop types and farming systems can, over the coming decades, result in hundreds more GLs of water savings. As an example a 10% efficiency gain on farms could result in the order of 500GL of water savings (based on a long term diversion of surface water from watercourses and floodplains of 10,940GL [Guide to the Proposed Basin Plan Volume 1, Table 5.2, Page 51], and an assumption that 50% of these diversions are lost between the river and the farm).

4. Delivery of Water Recovery Measures

The level of investment available for water recovery through buy-back and infrastructure modernisation presents a once in a lifetime opportunity to create world class water delivery and water use systems.

Infrastructure projects typically have long lead times in planning, design, costing and approval processes. In addition, there is a requirement for investment to be made available at the scoping and feasibility stages of projects to encourage private sector organisations and State and Local Governments to bring forward ideas and concepts that can be developed and assessed. There needs to be a recognition that not all projects will progress to implementation, and the hurdles to gaining funding for feasibility work should be set at a low level to facilitate this important and often overlooked area of project development.

The vehicle for delivering infrastructure investment needs to be streamlined, to turn around investment decisions quickly and on a rolling basis. The responsible organisation should have a regional presence with people capable of adding value to project development and implementation.

There should be incentives provided to water delivery organisations and private water corporations to develop packages of works that deliver cost effective water savings to government, and rationalisation and modernisation outcomes tailored to suit their own business objectives. There should be a degree of autonomy provided to these organisations to deliver an agreed parcel of water for an agreed scope of works in an agreed timeframe. Flexibility should be provided in project delivery if greater efficiencies can be delivered through a change of scope.

In designing a delivery framework for investment in water savings infrastructure, it is recommended that there is a separation of the regulator (including policy provider) and the operator (or implementing organisation), in line with agreed COAG principles.

5. Conclusions

Despite the degree of demonstrated community opposition to the proposed Basin Plan, there is a widespread understanding that there is a need for a healthy river environment. A balanced planning process that gives due regard to the social and economic consequences of change, and effectively engages with communities, can be developed with broad support. However, to achieve a true triple bottom line outcome, the plan process moving forward must:

- Ensure that the science on which it is based is robust, well-tested, peer reviewed and accessible to the standards we would expect of world class academic institutions;
- Lengthen the time for plan development and implementation to allow adequate engagement, understanding, debate and if necessary, subsequent adjustment;
- Be accompanied by an effective framework for the delivery of investment in the rationalisation and modernisation of water supply and irrigation infrastructure and environmental works and measures; and
- Facilitate trade of water between the environmental and consumptive pools to ensure that water use is optimised to produce positive environmental and production outcomes.