

#### EXECUTIVE SUMMARY

South Australian Government Response to the Draft Murray-Darling Basin Plan

16 April 2012







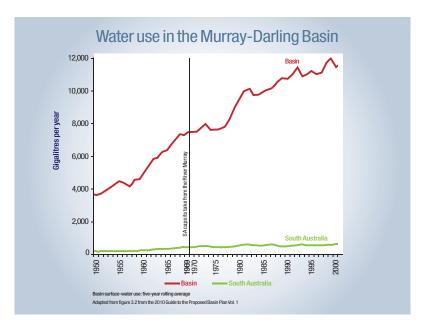
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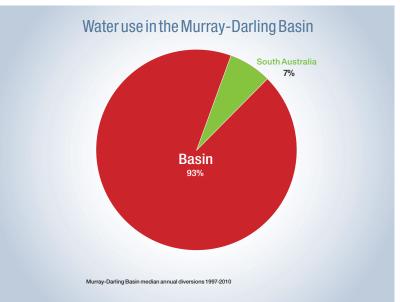
#### A national icon

The River Murray is the nation's most iconic river and supports estuarine, floodplain and wetland environments of national and international significance. Across the Murray-Darling Basin, there are about 30,000 wetlands with sixteen listed under the Convention on Wetlands of International importance (the Ramsar Convention). The Basin supports significant agriculture, tourism and other productive industries and is home to more than two million people.

The Murray-Darling system is one of the largest in the world but it carries by far the smallest volume of water of any major river system in the world. It is therefore particularly vulnerable to any degree of change whether by natural causes or consumptive use.

The health of the Murray-Darling Basin's river systems is in decline. River regulation and over-allocation of water have drastically reduced river flows. Under natural conditions, the median flow to the sea at the Murray Mouth was 11,880 gigalitres (GL) per annum – by 1994, it was only 21% of this. The warning signs were there. Reforms before the *Water Act 2007* (Cth) (Water Act) have only dealt with immediate problems. It is vital that we now adress the root cause of the Basin's declining health – unsustainable water use.







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## The significance to South Australia

The River Murray is essential to the economic, social, cultural and environmental wellbeing of South Australians. We rely on a healthy river to protect our Ramsar-listed Riverland-Chowilla floodplain and the wetlands of the Coorong, Lower Lakes, and Murray Mouth. Our irrigators and primary producers rely on a healthy river so they can supply Australians with high-quality food, wine and fibre. Metropolitan Adelaide and country towns rely on the river to supply water for human needs. Traditional owners and river communities rely on the river as the centrepiece of their cultural and social activity.

#### SOUTH AUSTRALIA HAS ALWAYS BEEN A RESPONSIBLE CUSTODIAN OF THE RIVER

South Australia only diverts about 7% of the water extracted from the Basin and most of the water that flows into South Australia remains in the river to benefit the environment. South Australia was the first state to voluntarily put a cap on entitlements in 1969.

South Australian irrigators are some of the most efficient in the nation.

We have reduced water losses by installing fully piped pressurised systems, and our irrigators have invested heavily over the years in efficient irrigation practices.

We were the first state to meet our water recovery target under the Living Murray Initiative.

#### A RIVER SYSTEM BROUGHT TO THE BRINK OF COLLAPSE

While South Australia managed diversions within its cap, other states continued to allow more water to be taken out of an already struggling Basin.

Decades of over-allocation were exacerbated by the recent drought and combined to devastate South Australian communities and river environment.

The Ramsar listed Coorong, Lower Lakes and Murray Mouth was on the verge of ecological collapse with up to 20,000 hectares of acid sulfate soils exposed, and parts of the Coorong five times saltier than the sea.

Despite having high-security water, irrigator allocations started at only 2%.

The water supply of Adelaide and country towns was threatened and prompted the need for expensive infrastructure.

South Australians made many sacrifices to reduce water consumption and help the river survive

Unless we get the Basin Plan right, this could be the experience of the whole Basin in the future.

# South Australian Government Analysis of the draft Basin Plan

The South Australian Government has carefully scrutinised the draft Basin Plan.

#### We have:

 undertaken substantial scientific and policy analysis, including an independent review of the South Australian Government scientific analysis by an expert panel of scientists convened by the Goyder Institute for Water Research;





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- assessed the Basin Plan against the requirements of the Water Act;
- considered the implications of the Basin Plan for our environment, irrigators, critical human water needs, river communities and traditional owners; and
- consulted extensively across South Australia.

Our analysis has shown that the draft Basin Plan fails to deliver essential outcomes for South Australian environments and communities and does not meet the requirements of the Water Act.

In particular:

The draft Basin Plan fails to protect our environment. Many of the South Australian and Murray-Darling Basin Authority's own environmental water requirements are not met by the proposed water recovery target of 2750 GL. With this amount of water, South Australia's River Murray environment will continue to suffer, with:

- salt accumulating in the lower reaches during dry periods because there won't be sufficient flows to flush it out to sea through the Murray Mouth;
- continued accumulation of salinity in our floodplains degrading our natural environment and causing loss of habitat;

- the potential for extreme low water levels and salinity in the Lower Lakes and Coorong in drought conditions, affecting habitats for native fish and migratory water birds; and
- little or no extra water to the River Murray's middle and high elevation floodplains, with severe consequences for our Black Box and River Red Gum forests.

By failing to restore and protect our environment, the draft Basin Plan does not meet its central purpose under the Water Act, and compromises our international and moral obligations to protect our unique and irreplaceable wetlands for the future.

The draft Basin Plan has not used the best available science. It fails to adequately take into account key factors affecting water availability and environmental watering, such as climate change risks, the uncertainty over groundwater and surface water interactions, and how the removal of physical, operational and policy constraints would improve the delivery of environmental water.

The draft Basin Plan does not recognise South Australia's history of responsible water stewardship. South Australia has consistently shown leadership in efficiently and sustainably managing the River, and we should not be penalised for our previous responsible water management.

The draft Basin Plan does not acknowledge that South Australian irrigators are some of the most efficient in the nation. Our strong history of efficient water use does not allow for the easy wins seen in other states yet South Australian irrigators are exposed to further water recovery.

The draft Basin Plan does not recognise that the river system has not recovered from the effects of the recent drought. Its profound effects are still being felt in the lower reaches of the Murray, with salt levels in Lake Albert remaining unacceptably high and ongoing water quality issues below Lock 1.





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#### Our recommendations

Based on our consultations and our scientific analysis, we have made 71 recommendations to the Murray-Darling Basin Authority, listed at Appendix 1.

Key recommendations include:

THE MDBA MUST ADOPT AN ENVIRONMENTAL WATER RECOVERY TARGET GREATER THAN 2750 GL THAT DELIVERS ON ESSENTIAL ENVIRONMENTAL OUTCOMES

Our scientific analysis shows that 2750 GL is not enough to meet the environmental water requirements of the Ramsar-listed Riverland-Chowilla floodplain and Coorong, Lower Lakes and Murray Mouth.



THE MDBA MUST DELIVER A
BASIN PLAN WHICH WILL MEET
KEY SALINITY AND WATER
LEVEL OUTCOMES TO PROTECT
OUR ENVIRONMENT AND OUR
REGIONAL AND METROPOLITAN
COMMUNITIES

This includes delivering the following outcomes:

- exporting salt loads of two million tonnes per year over a rolling three year average;
- keeping the Murray Mouth open without the need for dredging in at least 95% of years, with flows through the barrages out to sea every year;
- maintaining average daily water levels in the Lower Lakes above 0.4 metres average height datum (AHD) for 95% of the time and above 0.0 metres AHD at all times:
- maintaining average daily salinity levels in the Coorong (South Lagoon) below lethal thresholds for key species; and
- maintaining average daily salinity levels in Lake Alexandrina below 600mg/L (1000 EC) for 95% of the time and below 900mg/L (1500 EC) for 100% of the time to avoid ecological degradation.

THE MDBA MUST MODEL
OTHER WATER RECOVERY
SCENARIOS USING THE BEST
AVAILABLE SCIENCE AND WITH
CONSTRAINTS REMOVED OR
RELAXED

Additional modelling of water scenarios including 3200 GL, 3500 GL and 4000 GL is required to ensure that the figure eventually adopted by the MDBA delivers the key environmental water requirements for the Ramsar-listed Riverland-Chowilla floodplain and Coorong, Lower Lakes and Murray Mouth.

Our analysis shows that environmental outcomes for some sites are improved under a 3200 GL water recovery target but the information available is insufficient to fully determine the outcomes that would result.

Decisions about the additional water needed for the environment must be based on the best available science. This includes modelling with key physical, operational and policy constraints that impede the delivery of environmental water removed. It also includes taking into consideration climate change risks and the impacts of groundwater extraction.



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# PHYSICAL, OPERATING AND POLICY CONSTRAINTS IMPEDING THE DELIVERY OF ENVIRONMENTAL WATER MUST BE ADDRESSED

The MDBA must as a priority identify and address these constraints and the Commonwealth Government must commit to investment of funds to address key constraints as an important step to improving environmental water delivery.

## COMPLEMENTARY ACTIONS ARE NEEDED TO RESTORE DROUGHT AFFECTED ENVIRONMENTS TO HEALTH

Water delivery and a minimum allocation for the Coorong, Lower Lakes and Murray Mouth must be a priority, along with interim measures, including environmental watering, to restore key drought affected environments to baseline health.

#### SOUTH AUSTRALIA'S PAST RESPONSIBLE MANAGEMENT AND WATER USE EFFICIENCY MUST BE RECOGNISED

There must be no forced reductions in water entitlements and the Basin Plan needs to recognise South Australia's history of responsible water management. Any water recovered from South Australia should be achieved through strategic buy-back and investment in water saving infrastructure agreed to by the South Australian Government and relevant industry organisations.

# THE MDBA MUST CONSULT MORE CLOSELY WITH INDIGENOUS ORGANISATIONS TO BETTER UNDERSTAND CULTURAL NEEDS, AND GIVE CONSIDERATION TO RECOGNISING CULTURAL NEEDS ACROSS THE BASIN

Traditional owners rely on the health of the river system to maintain cultural heritage sites and for their cultural economy. This must be better recognised in the Basin Plan.

It is imperative that the Basin Plan delivers what the environment needs, as it will be the River Murray and future generations that will suffer the consequences of not getting this right.









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#### -We will continue to pursue a healthy River-

South Australia has long recognised the importance of a healthy river, managed as an entire system.

Successive South Australian governments have sought and supported reform of water management in the Murray-Darling Basin. We've demonstrated this through our support for the introduction of the Water Act which led to the establishment of the independent Murray-Darling Basin Authority and the creation of a Basin Plan.

It is now time to see these reforms come to fruition. We need an effective and viable Basin Plan that meets the environmental needs of the river so that Basin communities have a sustainable and prosperous future.

South Australia has long pursued its rights in relation to Basin resources. We have worked actively to protect our river environment. We have struggled for the guaranteed supply of water for critical human needs. We have argued for a minimum entitlement of water resources and we've achieved upstream storage rights.

In addition to the amendments we seek to the Basin Plan, we will continue to pursue:

- compensation for the measures we have taken to protect our water supplies and water users from the damaging effects of upstream over-allocation;
- secure storage rights for South Australian water;
- recognition of our critical human needs water;
- an equitable distribution of Murray-Darling Basin resources; and
- targeted social and economic support for vulnerable River Murray communities in South Australia to increase their economic diversity and help them make the transition to a future with a less certain water supply.

We maintain that the rights of South Australians will only be met by delivery of a healthy river system and will continue to pursue our rights if the Basin Plan does not meet these requirements.

