# MURRAY-DARLING BASIN PLAN: South Australian Implementation Strategy 2013 – 2019

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### Foreword

The adoption of the Murray-Darling Basin Plan on 22 November 2012 was a historic milestone for the River Murray and the communities and industries which rely upon it.

South Australia had much to gain if the Basin Plan delivered enough water for a healthy river – but so much to lose if it didn't.

It was a tough fight - but we won.

But it was only through the shared commitment and vision of South Australian industry, government and community that we prevailed.

We now have a Basin Plan which will return 3200 gigalitres of water to the river – 450 gigalitres more than intended.

It was South Australian efforts that secured \$1.77 billion in Commonwealth funding to recover this additional water. This extra water will help to keep the Murray Mouth open, flush salt from the system, meet salinity and water quality targets to protect the Coorong, Lower Lakes and the river channel, and provide environmental flows to our precious River Murray wetlands and floodplains.

South Australia's irrigators were also finally recognised for their efficient and responsible water use with \$265 million of investment for additional water recovery and industry regeneration projects. This will help diversify regional economies and support these communities.

While much has been achieved, the fight for the Murray continues.

The challenge now is to implement the Basin Plan so that all of its objectives are realised.

South Australia must remain vigilant and maintain the strong and united approach to ensure the Basin Plan is implemented successfully and that other Basin states meet their obligations. This Murray-Darling Basin Plan: South Australian Implementation Strategy 2013 – 2019 outlines a high-level roadmap and key actions to achieve this.

Ultimately, successful implementation of the Basin Plan will transform the way water is managed in the Murray-Darling Basin, and will result in better outcomes for the industries, communities and environments that depend on a healthy and resilient river system.

We encourage you to read this strategy and remain active in its implementation.

Its success will rely upon all South Australians.



Jay Weaterill

The Hon Jay Weatherill MP Premier of South Australia



The Hon Ian Hunter MLC Minister for Water and the River Murray



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## Introduction

The Murray-Darling Basin Plan was adopted by the Federal Minister for Sustainability, Water, Population and Communities on 22 November 2012 and commenced on 24 November 2012. It will now guide the management of water across the Murray-Darling Basin in South Australia, New South Wales, Victoria, Queensland and the Australian Capital Territory.

The Basin Plan will be put into effect through:

- new sustainable diversion limits (SDLs) that limit the amount of surface and ground water that can be taken from the Basin for consumptive use
- an environmental watering plan that guides how water will be applied to maximise environmental outcomes
- a water quality and salinity management plan to guide river management and longer term planning and management
- new water trading rules to facilitate efficient and effective water markets across the Basin

- water resource planning requirements to guide the development and implementation of state water resource plans which will implement SDLs and water resource management arrangements consistent with the Basin Plan
- an SDL adjustment process which allows SDLs to be adjusted up or down within defined limits
- the development of a constraints management strategy to identify projects to remove or relax physical and operational constraints to environmental water delivery
- a monitoring and evaluation plan to measure the Basin Plan's effectiveness.

The Basin Plan does not operate in isolation but is part of a package of reforms which includes a number of complementary activities integral to its successful implementation. These include Commonwealth programs to recover water to achieve the new SDLs, environmental and regional development projects, and reviews of the Murray-Darling Basin Agreement.

#### THE IMPLEMENTATION PATHWAY

The key elements of the Basin Plan will be implemented progressively during the next six years.

The environmental watering plan, the water quality and salinity management plan, and the monitoring and evaluation program all came into effect on 24 November 2012. New water trading rules will come into effect on 1 July 2014, and the SDL adjustment mechanism will operate in 2016, with SDLs put into effect in 2019. Compliant state water resource plans will be progressively developed over the next six years to 2019.

Some SDL adjustment, water recovery and constraint management projects will take longer to implement, and will have until 2024 to be completed.

#### **ROLES AND RESPONSIBILITIES**

The Basin Plan establishes new roles, responsibilities and obligations for Basin states, the Murray-Darling Basin Authority (MDBA) and the Australian Government.

The South Australian Government is responsible for ensuring water resources are managed consistently with the frameworks set out in the Basin Plan. The South Australian Government also has a role in advocating for, and implementing, water recovery projects, regional development initiatives, environmental works and measures, constraints management measures, and SDL adjustment projects. South Australia's natural resources management boards will play a key role in linking the needs and aspirations of communities to these activities, particularly through the development of water resource plans.

The MDBA is responsible for implementing various provisions of the Basin Plan, ensuring Basin states comply with the plan, undertaking monitoring and evaluation, reporting on the plan's effectiveness, and reviewing the plan. The South Australian Government (and other Basin states) will contribute to this evaluation by collecting and analysing data and information related to the State's obligations under the Basin Plan.

Periodic audits on the effectiveness of the Basin Plan's implementation and associated state water resource plans will be undertaken by the National Water Commission.

The Australian Government is responsible for recovering the water required to meet new SDLs and investing in measures to address constraints on environmental water delivery. The Australian Government Water Minister will accredit Basin Plan compliant state water resource plans. The Commonwealth Environmental Water Holder (CEWH) is responsible for managing the Australian Government's environmental water holdings in accordance with the environmental watering plan under the Basin Plan.

### PURPOSE OF THE IMPLEMENTATION STRATEGY

This *Murray-Darling Basin Plan: South Australian Implementation Strategy 2013 – 2019* (the Implementation Strategy) will guide the state's implementation of the Basin Plan and related programs.

It outlines the key actions that will be pursued during the six-year transition period to ensure the plan is fully integrated into South Australia's ongoing water management arrangements.

The strategy focuses on Basin Plan reforms and does not cover the entire breadth of work being undertaken within the South Australian Murray-Darling Basin. It complements and builds on the broad range of existing projects and programs that aim to improve water and natural resource management such as the *Living Murray Initiative*, salt interception schemes, environmental works, and regional natural resources management and water allocation planning.

Progress on delivering the Implementation Strategy will be publicly reported and the strategy will be regularly reviewed to ensure it remains relevant.

#### IMPLEMENTATION OUTCOMES

The South Australian Government aims to achieve five key outcomes for Murray-Darling Basin environments and communities, which build on the principles that guided Basin Plan negotiations:

- 1. Return of a volume of water that is sufficient, based on best available science, to meet key environmental outcomes in South Australia.
- 2. Environmental flows delivered to help protect and restore River Murray wetlands and floodplains, including the Chowilla Floodplain and the Coorong, Lower Lakes and Murray Mouth.
- 3. Secure, reliable and good quality water supplies that support healthy and productive industries, communities and ecosystems.
- Regional communities strengthened through investment that helps drive value-adding and diversification opportunities.
- 5. Effective implementation of the Basin Plan and associated reforms to achieve beneficial outcomes for the river and its communities.

The Implementation Strategy will also contribute to the achievement of key targets in *South Australia's Strategic Plan*, and assist in underpinning one of the state's key strategic priorities: 'premium food and wine from our clean environment'. It will also contribute to key actions under *Water for Good: A plan to ensure our water future to 2050.* 

## **OUTCOME 1:** Return of a volume of water that is sufficient, based on best available science, to meet key environmental outcomes in South Australia

The South Australian Government, based on best available science, advocated during the Basin Plan negotiations for the recovery of an annual average of 3200 gigalitres<sup>1</sup> (GL) of water, in conjunction with addressing constraints on the delivery of environmental water, to protect and restore the River Murray system.

As a result, the Basin Plan provides the framework to recover 3200 GL of water for the environment.

The Plan sets a benchmark for water recovery of 2750 GL and provides for this volume to be adjusted to enable the recovery of an additional 450 GL of environmental water without adverse social and economic impacts. In late 2012, the Australian Government committed an extra \$1.57 billion to fund the recovery of this additional water.

### IMPLEMENTING SUSTAINABLE DIVERSION LIMITS

The Basin Plan sets new sustainable diversion limits (SDLs) on the amount of water that can be used for consumptive purposes from the Basin's water resources.

In addition to the River Murray, South Australia's Murray-Darling Basin water resources include groundwater aquifers, dams, creeks and other river systems including those located in the Eastern Mount Lofty Ranges, Angas Bremer, Marne-Saunders and other catchments. For most of these water resources, new SDLs reflect current levels of take, which means that water will not be required to be recovered for the environment in these systems.

However, for the River Murray in South Australia, implementation of the new SDLs requires 183.8 GL to be recovered for the environment by 2019. Over half of this water recovery target has already been met.

To ensure water entitlements are not reduced in value or compulsorily acquired as a result of introducing new SDLs, the Australian Government has committed to recovering water for the environment through voluntary measures such as water purchase and investment in water efficiency measures.

There will be a significant amount of work to ensure the state's water resources are managed in accordance with new SDLs from 1 July 2019. In the lead up to implementation of SDLs, South Australia will need to review its existing water resource plans and management frameworks to bring them into line with the Basin Plan.

#### Action 1: Develop and implement water planning and management frameworks that comply with the SDL requirements of the Basin Plan.

<sup>1</sup>The MDBA and Australian Government use long term average annual figures when referring to water recovery under the Basin Plan. The actual volume of water available for the environment each year will vary depending on climate conditions and annual water availability. Except where otherwise stated, all references to GL in this document represent the long term average annual figures.

#### SUSTAINABLE DIVERSION LIMIT ADJUSTMENT

The Basin Plan recognises that the environmental, social and economic outcomes implicit in new SDLs may be improved by adjusting SDLs (and, as a result, water recovery) up or down within defined limits.

A groundwater SDL adjustment mechanism allows the MDBA to propose adjustments if there is better knowledge about usage, groundwater recharge, or surface-groundwater connectivity than was available at the time the Plan was developed.

A surface water SDL adjustment mechanism will operate from a benchmark of 2750 GL to:

- increase SDLs and reduce the amount of water recovery through projects that achieve the same environmental outcomes with less water, such as environmental works and measures or improved river operations
- reduce SDLs and increase water recovery through projects that do not have adverse social and economic outcomes, such as on-farm water use efficiency improvements or other projects proposed by states.

Basin states will develop SDL adjustment project proposals which will then be assessed for feasibility, impacts and benefits. Proposals to remove or relax flow constraints and allow more effective use of environmental water will also be considered under this process. Once the assessment is completed, the MDBA will advise the Australian Government Water Minister in 2016 about the level of adjustment to SDLs. Adjusted SDLs will then need to be reflected in State water resources plans and will take effect from 2019. All SDL adjustment projects will need to be completed by 2024.

There are both potential risks and opportunities for South Australia from the SDL adjustment process.

The South Australian Government will support projects that recover additional water across the Basin (including in South Australia) to enhance the environmental outcomes of the Basin Plan. The Government will also work with key stakeholders and industries to investigate opportunities for South Australian projects to reduce water recovery requirements.

South Australia will also take an active role in the development and application of the SDL adjustment process and the joint government process for assessing projects, to ensure that any projects proposed – particularly projects to reduce the level of water recovery – do not have adverse impacts on the state's key environmental assets, salinity and water quality outcomes, or our share of River Murray water.

Action 2: Participate in, and influence, the development and implementation of the SDL adjustment mechanism and assessment of projects.

Action 3: Identify and develop potential South Australian SDL adjustment project proposals and implement approved projects.

#### RECOVERING WATER FOR THE ENVIRONMENT

To ensure a smooth transition to new SDLs, the Australian Government will recover water to 'bridge the gap' between water that has already been returned to the environment and water required to be returned under the Basin Plan.

The Australian Government has committed to do this through investment in water efficient infrastructure and purchases from willing sellers. It will also invest in SDL adjustment projects, such as environmental works and measures that achieve equivalent environmental outcomes with less water, and as a result reduce the volume of water that needs to be recovered.

The Australian Government's approach to water recovery is outlined in detail in its *Environmental Water Recovery Strategy for the Murray-Darling Basin* which is available at www.environment.gov.au.

At the start of 2013, over half of the water required to be recovered from the River Murray in South Australia had already been recovered through a mixture of purchases from willing sellers and irrigation efficiency projects.

In its Basin Plan negotiations, the South Australian Government successfully secured a commitment from the Australian Government to provide \$240 million for the *Water Industry Alliance River Murray Improvements Program*. This program will recover up to 40 GL<sup>2</sup> of water entitlements for the environment, while driving business sustainability and creating new business models. The program will make a significant contribution to 'bridge the gap' in South Australia. The South Australian Government maintains that for future water recovery, projects must be agreed to by the government and relevant industry groups. Consequently, the government will establish a water recovery advisory forum of industry experts to provide advice on the development of South Australian water recovery projects.

The government will use the advice from this forum to take a strategic approach to the development and implementation of water recovery projects – with the aim of avoiding detrimental social and economic impacts and securing benefits for South Australian irrigators and other water users where possible. This includes exploring opportunities for further water recovery, industry innovation and efficiency projects under the \$1.57 billion in funding set aside to recover an additional 450 GL of water across the Basin.

Through projects that are planned or underway, such as the *Water Industry Alliance River Murray Improvements Program*, the proposed sale of water from SA Water, investment in water efficient infrastructure and environmental works and measures, the South Australian Government is confident that the required water recovery will be undertaken by 2019.

#### Action 4: Identify and support implementation of strategic water recovery projects, with advice from the water recovery advisory forum.

<sup>2</sup> This is an entitlement value – the long term annual average value of this entitlement is 36 GL.

**OUTCOME 2:** Environmental flows delivered to help protect and restore River Murray wetlands and floodplains, including the Chowilla floodplain and the Coorong, Lower Lakes and Murray Mouth

The Basin Plan will recover a significant volume of water for the environment which must be actively managed and delivered to protect and restore healthy rivers and wetlands.

This will require Basin states to work collaboratively to support the effective implementation of the Basin Plan's environmental watering plan, which guides the planning and use of environmental water across the Basin.

Addressing physical and operational constraints that limit the delivery of environmental water will also be critical to achieving key environmental outcomes, particularly for South Australian River Murray floodplains. To facilitate this, the South Australian Government successfully negotiated for the Basin Plan to include the development of a constraints management strategy. The Australian Government has committed to provide \$200 million to address priority constraints across the Murray-Darling Basin.

In addition to providing environmental benefits, delivering adequate environmental flows will help prevent adverse impacts associated with future droughts, maintain water levels in the lower reaches of the river and ensure the successful implementation of South Australia's long-term plan for the Coorong, Lower Lakes and Murray Mouth region.

### ENVIRONMENTAL WATER PLANNING AND DELIVERY

The Basin Plan's environmental watering plan will guide the effective coordination, planning and prioritisation of Commonwealth, state and other environmental water holdings for environmental use.

Importantly, the environmental watering plan includes management objectives to help guide the achievement of improved environmental outcomes in South Australia, including maintaining Murray Mouth openness and flows to the Coorong, supporting healthy floodplains and maintaining water levels in the Lower Lakes above 0.0 metres AHD (Australian Height Datum) for 100 percent of the time and above 0.4 metres AHD for 95 percent of the time.

Under the environmental watering plan, the MDBA is required to develop a Basinwide environmental watering strategy within two years of the Basin Plan coming into effect, along with annual Basin-wide environmental watering priorities. In developing the Basin wide strategy and annual environmental watering priorities, the MDBA must consult with Basin states and the CEWH and seek the views of stakeholders and local communities. The CEWH and other environmental water holders must manage their water consistently with the environmental watering plan and have regard to the annual watering priorities set by the MDBA.

To contribute to the Basin-wide planning and prioritisation process, South Australia is required to develop state long-term watering plans in consultation with local communities within one year of the development of the Basin-wide environmental watering strategy. These plans will identify priority environments and associated ecological objectives and targets to guide watering. South Australia must also prepare annual environmental watering priorities by May each year.

Given the Basin-wide environmental watering strategy will not come into full effect for some time, the South Australian Government will work with the MDBA and the Commonwealth Environmental Water Holder to develop interim arrangements that ensure delivery of environmental water to help protect key sites such as the Coorong, Lower Lakes and Murray Mouth.

Action 5: Work with the Commonwealth Environmental Water Holder and the MDBA to ensure appropriate arrangements for environmental water delivery to South Australia.

Action 6: Influence the management of environmental water under the environmental watering plan, in particular through the development of the Basinwide environmental watering strategy and annual priorities.

Action 7: Develop and implement South Australia's long-term environmental watering plans and annual watering priorities.

#### **CONSTRAINTS MANAGEMENT**

The ability to deliver environmental water through the River Murray system is currently limited by a number of policies, rules and physical barriers such as low-lying bridges, limited water release capacity in dams and the need to minimise flooding impacts. By investing in works and measures to address these constraints and negotiating new river operations arrangements, there is potential to deliver environmental water more effectively.

The Basin Plan requires the MDBA to develop a constraints management strategy within 12 months after commencement of the Basin Plan. This strategy will be developed in consultation with Basin states and the community.

The Australian Government will provide \$200 million in funding from 2014-15 to address priority constraints across the Basin.

Action 8: Identify and advocate for projects and reforms aimed at removing the barriers limiting the effective delivery of environmental flows through the River Murray system.

### ENVIRONMENTAL WORKS AND MEASURES

At some locations across the Basin, works and measures have the potential to enhance the delivery of environmental water and help improve the outcomes that can be achieved. In some cases, these works and measures may also reduce the volume of water recovery required.

In South Australia works and measures under the Riverine Recovery Program, the Coorong, Lower Lakes and Murray Mouth program and the construction of the Chowilla Creek environmental regulator are helping to enhance the use of environmental water and restore important wetland and floodplain ecosystems.

In 2012, South Australia secured an Australian Government funding commitment of \$155 million to deliver environmental regulators and salt interception schemes that will help to enhance environmental water delivery and restore the health of the Pike and Katarapko floodplains.

The government is also working to identify and negotiate other potential environmental works and measures projects that could deliver improved environmental outcomes in the state, including working with the community through an Environmental Works and Measures Feasibility Program managed by the South Australian Murray-Darling Basin Natural Resources Management Board and funded by the Australian Government.

Action 9: Facilitate the implementation of the Pike and Katarapko environmental works and measures project.

## **OUTCOME 3:** Secure, reliable and good quality water supplies that support healthy and productive industries, communities and ecosystems

The River Murray in South Australia is particularly vulnerable to the impacts of poor water quality, high salinities, and low water levels during periods of low flow. In extreme cases, these impacts can threaten the security of the state's drinking water.

In order to improve the security, reliability and quality of River Murray water supplies, the Basin Plan builds on existing arrangements under the Basin Salinity Management Strategy and Murray-Darling Basin Agreement for managing water quality and salinity, and includes provisions to ensure critical human water needs can be met.

The Plan also aims to improve the clarity and consistency of water resource management across the Basin by specifying particular requirements that state water resource plans must address and introducing consistent rules for water trading. These changes will build on and refocus existing state water planning and trading arrangements.



### WATER QUALITY AND SALINITY MANAGEMENT

The Basin Plan sets objectives and targets to guide long-term water quality and salinity management across the Basin, inform the development of management measures under state water resource plans and guide the management of river flows.

Specific objectives and targets to guide improved outcomes for the River Murray in South Australia include the flushing of an average two million tonnes of salt through the Murray Mouth each year, a salinity target for major irrigation off-takes and targets for managing water flows (including a target to maintain salinity levels below 1000 EC for 95 percent of the time in the Lower Lakes).

Under the Basin Plan, South Australia is required to develop compliant water quality management plans for each of the state's Murray-Darling Basin water resource plan areas.

River managers, infrastructure operators and environmental water managers will need to have regard to water quality and salinity targets for managing river flows when making river management decisions.

The South Australian Government will also continue to work with other jurisdictions to implement the Murray-Darling Basin Agreement and ensure actions that may cause adverse impacts on water quality and salinity in South Australia are appropriately managed and, wherever possible, avoided.

Action 10: Develop and implement water quality management plans for South Australia's Murray-Darling Basin water resource plan areas.

#### WATER TRADE

The Basin Plan builds on the achievements of the National Water Initiative by setting water trading rules and arrangements to increase access to information and improve the operation of the water market.

The rules will begin in July 2014 and aim to support a consistent approach to approving and managing trade across the Basin, making it easier to participate in the market, minimise costs, protect the environment and third parties, and ultimately allow water to move to where it is most valued and useful.

The Basin Plan limits the types of restrictions that can be placed on trade to physical or environmental reasons, which is consistent with South Australia's long-term support for a water market free of unnecessary and artificial trade barriers. In implementing the Basin Plan, it will be critical for the MDBA to ensure the rules are adhered to.

South Australia already has a range of water trading rules in place through water allocation plans. These policies will be reviewed and may need to be amended to ensure that they are compliant with the Basin Plan.

Action 11: Develop water trading policies, protocols and business processes that comply with the Basin Plan.

#### WATER RESOURCE PLANS

Basin Plan compliant water resource plans will give effect to and bring together many of the Plan's provisions in South Australia.

The Plan identifies three areas in South Australia for which water resource plans will need to be developed:

- South Australian River Murray (River Murray watercourse only)
- Eastern Mount Lofty Ranges (surface water and groundwater resources)
- South Australian Murray region (surface and groundwater resources).

In South Australia, water resource plans will generally be made up of one or more water allocation plans and water quality management plans, as well as other relevant policies and plans. Water allocation plans will incorporate many of the requirements of the Basin Plan, including rules for complying with SDLs, planning for environmental outcomes and water trading.

Water resource plans that are consistent with the Basin Plan need to be in place across the Murray-Darling Basin by 1 July 2019. Until new plans are accredited, existing water allocation plans will continue to apply to the administration of local water entitlement and allocation arrangements, including trade.

Natural resources management boards will develop Basin Plan compliant water resource plans for the South Australian Murray region, the River Murray and Eastern Mount Lofty Ranges by 2019. This will include reviewing existing water allocation plans. The River Murray water allocation plan is currently being reviewed by the South Australian Murray-Darling Basin Natural Resources Management Board, and is scheduled to be completed in 2014. Where possible, the amended water allocation plan will be consistent with the Basin Plan, prior to a fully compliant plan being developed by 2019.

Water resource plans that are consistent with the Basin Plan will be developed in consultation with governments, communities and industry, and will be provided to the Australian Government Water Minister for accreditation.

Accredited water resource plans will enable water users to undertake their business planning and water management in much the same way as they do now, but within the consistent planning and management framework imposed by the Basin Plan.

#### Action 12: Develop and implement water resource plans that are consistent with the Basin Plan.



#### **CRITICAL HUMAN WATER NEEDS**

Along with water from the Mount Lofty Ranges, the Adelaide Desalination Plant and local water resources, water from the River Murray is fundamental to a secure supply of water for metropolitan Adelaide and many of South Australia's regional centres.

Historically it was assumed that there would always be sufficient water in the River Murray system to meet and deliver water for human needs across the Basin. However, the Millennium Drought highlighted the need to develop new Basin-wide arrangements to ensure the ongoing supply of water to meet basic human needs.

Critical human water needs are the highest priority water use for those communities dependent on Basin water resources, especially in times of drought and low flow. Arrangements to ensure these needs can be met are an essential element of the Basin Plan and the Murray-Darling Basin Agreement, and are strongly supported by the South Australian Government.

The Basin Plan identifies the volumes of water required for critical human needs for those areas of South Australia, New South Wales and Victoria dependent on the water resources of the River Murray system. The Basin Plan also provides for a conveyance water reserve so that the delivery of critical human water needs is secured and sets out arrangements for managing and sharing water for critical human needs in times of reduced water availability or other exceptional circumstances that affect water quality and quantity.

Action 13: Continue to work with other Basin states and the MDBA to ensure critical human water needs can be provided in times of low flow or impaired water quality.

## **OUTCOME 4:** Regional communities strengthened through investment that helps drive value-adding and diversification opportunities

The South Australian Government has successfully secured commitments for significant Australian Government funding for regional development in this state.

The next step will be to maximise the benefits of that funding in order to support our communities, promote diversification of the economic base in the South Australian Murray-Darling Basin and improve regional capacity for innovation, research, and development.

#### **REGIONAL DEVELOPMENT**

The Australian and South Australian Governments have committed significant funding for regional development projects that will stimulate employment and economic growth in South Australia's river communities.

The Australian Government has committed \$265 million to projects in South Australia's River Murray region that will further improve business capacity for innovation, research and development. \$240 million of this funding will support the *Water Industry Alliance River Murray Improvements Program*, with the remaining \$25 million funding for complementary research and regional development projects in the region. Communities will also have the opportunity to access funding from the Basin-wide \$100 million Australian Government Murray-Darling Basin Economic Diversification Program.

These commitments are in addition to the South Australian Government's existing \$20 million investment through the *Riverland Sustainable Futures Fund*, which was established to assist industry restructuring and promote sustainable economic and social development in the Riverland. Since establishment of this fund in 2010, \$13.8 million in grants has been provided.

To maximise opportunities for South Australian communities to access funding from the Basin-wide Murray-Darling Basin Economic Diversification Program, the South Australian Government will allocate remaining funds from the *Riverland Sustainable Futures Fund* towards projects submitted for funding under the Basinwide Economic Diversification Program in order to leverage additional investment.

#### Action 14: Support community and industry access to funding for economic diversification and regional development projects.

Action 15: Support implementation of the Water Industry Alliance River Murray Improvements Program.



## **OUTCOME 5:** Effective implementation of the Basin Plan and associated reforms to achieve beneficial outcomes for the river and its communities

Implementing the Basin Plan will be a major challenge for the MDBA and Basin states.

It will be critical that state obligations and responsibilities are clearly outlined, and that there is coordination of effort between the MDBA, Australian Government agencies and the Basin states to avoid duplication and inefficiency. Implementation must be cost effective and take into account the different local conditions and management arrangements in each Basin state.

The South Australian Government will proactively engage with the community, MDBA, Australian Government and other Basin states to ensure that the Plan's implementation is underpinned by best available science and that South Australia's interests are recognised.

#### **ENGAGING THE COMMUNITY**

Building on the community engagement undertaken through the Fight for the Murray campaign during the development of the Basin Plan, the South Australian Government will work with local communities during implementation.

There will be many opportunities for communities to get involved. In particular, community engagement will be a fundamental element of the development of water resource plans, which bring together many of the different elements of the Basin Plan. Natural resources management boards will play a key role in engaging local communities.

There will also be opportunities for communities to become involved in the planning and management of environmental water, including the development of long-term watering plans for the state.

Through the water recovery advisory forum, there will also be opportunities for industry stakeholders to be involved in the development of strategic water recovery projects.

Action 16: Engage the community throughout the Basin Plan implementation process.

#### MONITORING, EVALUATION AND REPORTING

Effective monitoring and evaluation of the Basin Plan will be critical to ensuring its objectives are achieved.

The Plan establishes the framework for monitoring and evaluating the effectiveness of its various elements – including with respect to accreditation and implementation of the water resource plans, compliance with sustainable diversion limits and progress towards the objectives and targets of the environmental watering plan and the water quality and salinity management plan.

Under the monitoring and evaluation program, the MDBA will:

- report annually on the effectiveness of the Basin Plan
- undertake five-yearly reviews of the environmental watering plan and water quality and salinity management plan targets
- advise on Basin Plan social, economic and environmental impacts after the first five years of implementation
- review the Basin Plan on a ten-yearly basis.

The National Water Commission (NWC) will also periodically audit and report on the effectiveness of the Plan's implementation. The NWC will release an initial report on Basin Plan implementation in March 2013.

The South Australian Government, along with other Basin states, the CEWH and the Federal Department of Sustainability, Environment, Water, Population and Communities, is required to contribute to this evaluation by collecting, analysing and reporting data and information on activities and outcomes relating to their Basin Plan obligations. This includes reporting on matters relating to the environmental watering plan, water quality and salinity, water trading rules and water resource planning.

Through this process, the South Australian government will work to ensure that monitoring and reporting is cost effective and existing processes are streamlined and built upon wherever possible.

Action 17: Ensure South Australia's Basin Plan monitoring, evaluation, and reporting arrangements are effective and efficient.

#### **BEST AVAILABLE SCIENCE**

The South Australian Government's response to the Basin Plan was based on best available science.

The government, with the support of experts from the Goyder Institute for Water Research, undertook robust scientific analysis of the MDBA's modelling to determine whether the level of water recovery would be adequate to ensure a healthy river system.

The government will continue to use best available science in implementing the Basin Plan, including (where practical) collaborating with the Goyder Institute and other research providers.

Action 18: Ensure best available science supports South Australia's implementation of the Basin Plan.

#### BASIN PLAN IMPLEMENTATION AGREEMENT

The Basin Plan enables the MDBA to enter into implementation agreements with Basin states to set out their implementation obligations under the Plan. The South Australian Government considers there are advantages to entering into an agreement in order to clearly set out the state's obligations and to ensure implementation requirements consider South Australia's particular circumstances and build on or complement existing arrangements.

Action 19: Negotiate and implement a Basin Plan Implementation Agreement with the MDBA and other Basin states that has regard to South Australian circumstances and all relevant Commonwealth-State agreements.

#### INTER-GOVERNMENTAL AGREEMENT ON IMPLEMENTING WATER REFORM IN THE MURRAY-DARLING BASIN

The South Australian Government has endorsed a new inter-governmental agreement (IGA) with the Australian Government and other Basin states to give effect to the Basin Plan and other complementary programs and commitments.

Through this IGA, the South Australian Government has secured an agreement to work collaboratively to plan for the use and management of environmental water, establish joint government arrangements to support the effective operation of the SDL adjustment mechanism, and secure Commonwealth funding toward the costs incurred as a result of implementing the Plan. The Australian Government has also used the IGA to formalise their commitment to 'bridge the gap'.

Action 20: Implement the Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin.

### REVIEW OF THE MURRAY-DARLING BASIN AGREEMENT

The Murray-Darling Basin Agreement (the Agreement), which is set out at Schedule 1 of the Commonwealth *Water Act 2007*, outlines arrangements for the sharing, governance and management of the Basin's water resources, particularly the River Murray System.

Its purpose is to:

'promote and coordinate effective planning and management for the equitable, efficient and sustainable use of the water and other natural resources of the Murray-Darling Basin, including by implementing arrangements to give effect to the Basin Plan, the Water Act and State water entitlements'.

The agreement will need to be reviewed and may require amendment to ensure it is consistent with the objectives of the Basin Plan, and that monitoring and reporting arrangements are integrated with Basin Plan arrangements wherever possible. The South Australian Government recognises that there may be opportunities to improve the historical water management arrangements that have existed between Basin states. There may also be opportunities to change operating rules in ways that could help environmental water be delivered more efficiently and effectively throughout the system.

Action 21: Ensure South Australia's interests are considered in any reviews or amendment of the Murray-Darling Basin Agreement.



## **APPENDIX 1:** Summary of Actions

The table below summarises the key actions that are to be undertaken under the Implementation Strategy, the timeframe for delivery and the lead South Australian Government agency responsible for delivery (as well as other agencies that are responsible for contributing to implementation). Implementing these actions will also involve other government and nongovernment organisations, the community, and industry. Working collaboratively with key stakeholders and the community will be key to the success of the Implementation Strategy, and will help to ensure that the reforms are implemented effectively and deliver the maximum possible benefits for South Australia.

	ACTION	TIMEFRAME	LEAD AGENCY
1	Develop and implement water planning and management frameworks that comply with the SDL requirements of the Basin Plan.	In line with the development of compliant water resource plans – by June 2019.	DEWNR Supporting agencies: NRM boards
2	Participate in, and influence, the development and implementation of the SDL adjustment mechanism and assessment of projects.	March 2013 to December 2015.	DEWNR
3	Identify and develop potential South Australian SDL adjustment project proposals and implement approved projects.	Projects identified – March 2013 to December 2013.	DEWNR
		Projects assessed and confirmed by December 2015.	
		SDLs adjusted in 2016.	
		Additional projects to reduce SDLs can be proposed between July 2016 and December 2023.	
		All approved projects implemented by 2024.	
4	Identify and support implementation of strategic water recovery projects, with advice from the water recovery advisory forum.	Identify and support water recovery projects – 2013 to 2019.	DEWNR Supporting agencies: SA Water NRM boards PIRSA
5	Work with the Commonwealth Environmental Water Holder and the MDBA to ensure appropriate arrangements for environmental water delivery to South Australia.	Ongoing.	DEWNR
6	Influence the management of environmental water under the environmental watering plan, in particular through the development of the Basin-wide environmental watering strategy and annual priorities.	Ongoing. Basin-wide environmental watering strategy due in November 2015.	DEWNR
7	Develop and implement South Australia's long-term environmental watering plans and annual watering priorities.	State annual watering priorities by May each year. Long-term watering plans – within 12 months of the Basin-wide environmental watering strategy being published.	DEWNR Supporting agencies: NRM Boards

## **APPENDIX 1:** Summary of Actions (cont)

	ACTION	TIMEFRAME	LEAD AGENCY
8	Identify and advocate for projects and reforms aimed at removing the barriers limiting the effective delivery of environmental flows through the River Murray system.	Projects and reforms identified – March 2013 to December 2013.	DEWNR
9	Facilitate the implementation of the Pike and Katarapko environmental works and measures project.	Implementation over seven years from 2013.	DEWNR
10	Develop and implement water quality management plans for South Australia's Murray-Darling Basin water resource plan areas.	In line with the development of compliant water resource plans – by June 2019.	DEWNR Supporting agencies: SA Water EPA NRM Boards
11	Develop water trading policies, protocols and business processes that comply with the Basin Plan.	Trading rules come into effect on 1 July 2014. Trading rules that are within water allocation plans will be progressively amended for consistency as required.	DEWNR NRM boards PIRSA
12	Develop and implement water resource plans that are consistent with the Basin Plan.	By June 2019.	DEWNR Supporting agencies: EPA NRM boards
13	Continue to work with other Basin states and the MDBA to ensure critical human water needs can be provided in times of low flow or impaired water quality.	Ongoing.	DEWNR
14	Support community and industry access to funding for economic diversification and regional development projects.	According to Australian Government program timeframes.	PIRSA Supporting agency: Regional Development Australia Murraylands and Riverland

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	ACTION	TIMEFRAME	LEAD AGENCY
15	Support implementation of the Water Industry Alliance River Murray Improvements Program.	Implementation over six years from 2013.	PIRSA Supporting agency: DEWNR
16	Engage the community throughout the Basin Plan implementation process.	Ongoing.	DEWNR
17	Ensure South Australia's Basin Plan monitoring, evaluation and reporting arrangements are effective and efficient.	Ongoing.	DEWNR Supporting agencies: NRM boards
18	Ensure best available science supports South Australia's implementation of the Basin Plan.	Ongoing.	DEWNR Supporting agencies: EPA Goyder Institute for Water Research Other research providers
19	Negotiate and implement a Basin Plan implementation agreement with the MDBA and other Basin states that has regard to South Australian circumstances and all relevant Commonwealth-State agreements.	By December 2013.	DEWNR
20	Implement the Inter-governmental Agreement on Implementing Water Reform in the Murray-Darling Basin.	Ongoing.	DEWNR
21	Ensure South Australia's interests are considered in any reviews or amendment of the Murray-Darling Basin Agreement.	Ongoing.	DEWNR



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