
RIVER MURRAY ACT 2003

Updated
September 2012

ANNUAL REPORT FOR 2011-2012



Government of South Australia
Department of Environment,
Water and Natural Resources

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FOREWORD

The *River Murray Act 2003* reflects the importance of a healthy River Murray system for South Australians. The *River Murray Act 2003* has demonstrated the crucial importance of an integrated and coordinated approach to decision making in regards to the River Murray and South Australia. This model was successful during the 2007-2010 extreme drought and is proving to be equally robust in a time of renewed flows for the River Murray.

Despite two years of good flows, the health of the River Murray continues to face challenges and it is clear that a significant volume of water will need to be returned to the River on an ongoing basis. At the same time, different ways of managing the River Murray and investment to address constraints to the delivery of larger volumes of water from upstream will need to be considered. The Objects and Objectives for a Healthy River Murray that are the foundations of the *River Murray Act 2003* remain as relevant today as they were in 2003, and are reflected in the South Australian response to the proposed Basin Plan and subsequent iterations in the lead up to the finalisation of the Basin Plan.

I would like to commend the effort across government agencies and community groups in responding to the challenge of recovering from the drought, responding to the proposed Basin Plan and participating in major investment programs to improve the health of the River Murray. All these programs involve significant levels of engagement and cooperation across government and with communities. This cooperation indicates an exceptional capacity to manage the River Murray system as well as a strong ability to communicate and negotiate South Australia's interests in the Murray-Darling Basin region.

I would also like to recognise the concerted efforts of the various agencies that have worked together on the challenge of managing the River Murray under variable conditions. As the system has moved from extremely low flows during the drought to the current higher flows, it continues to pose challenges for development and land activities adjacent to the River. Increasing volumes of environmental water and the management of increased variability in flows requires robust planning frameworks and decision making. The powers under the *River Murray Act 2003* may become increasingly important within this context.

It is with great pleasure that I present the *River Murray Act 2003* Annual Report for 2011-12, which highlights some of the excellent work that has been undertaken this past year.

PAUL CAICA

MINISTER FOR WATER AND THE RIVER MURRAY

CONTENTS

DEPARTMENT OF
ENVIRONMENT, WATER AND
NATURAL RESOURCES

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FOREWORD	4
CONTENTS	5
1. INTRODUCTION	7
2. OVERVIEW	8
2.1 Overview of the Act	8
2.2 Overview of the Report	10
<hr/>	
3. ACHIEVEMENT OF THE <i>RIVER MURRAY ACT 2003</i> OBJECTS AND OBJECTIVES FOR A HEALTHY RIVER MURRAY	13
3.1 River Health Objective	13
3.2 Environmental Flow Objective	14
3.3 Water Quality Objective	14
3.4 The Human Dimension Objective	15
<hr/>	
4. REPORT ON RELEVANT MATTERS	16
4.1 Referral of Matters Under the Related Operational Acts	16
4.2 Enforcement of General Duty of Care and Issue of Orders	22
4.3 Policy Activities	24
<hr/>	
5. EMERGING ISSUES FOR THE RIVER MURRAY ACT	25
5.1 The Murray-Darling Basin Plan	25
5.2 Climate Variability	25
5.3 State Natural Resources Management Plan 2012-17	26
5.4 AMALGAMATION of DFW and DENR	27
<hr/>	
LIST OF ACRONYMS	28
APPENDIX 1 - CONTRIBUTORS	30
APPENDIX 2 – OBJECTS AND OBJECTIVES FOR A HEALTHY RIVER MURRAY (ORMS)	31
Objects	31
Objectives for a Healthy River Murray (ORMs)	31

1. INTRODUCTION

The *River Murray Act 2003* (the River Murray Act) was enacted in 2003 after recognition of the need for improved policy frameworks and integration of activities between agencies to ensure adequate protection of the River Murray.

This is the ninth annual report, reporting on the relevant activities that have occurred in the period from 1 July 2011 to 30 June 2012.

Section 10 of the River Murray Act requires the Minister responsible for the administration of the River Murray Act, on or before 30 September of each year, to prepare a report on the operation of the River Murray Act for the preceding financial year. The Minister for Water and the River Murray must provide a copy of the report to both Houses of Parliament within six sitting days of the report being prepared.

As per Section 10(2) of the River Murray Act the report must include:

- a. information on the implementation of the River Murray Act (taking into account the provisions of the *River Murray Act 2003 Implementation Strategy* (the Implementation Strategy);
- b. information on the extent to which the Objects of the *River Murray Act 2003* and the Objectives for a Healthy River Murray (ORMs) are being achieved; and
- c. report on the following matters for the financial year –
 - i. the referral of matters to the Minister for Water and the River Murray under any related operational Act;
 - ii. the enforcement of the general duty of care; and
 - iii. action taken by the Minister for Water and the River Murray or an authorised officer under Part 8 of the River Murray Act (protection and other orders).

The Annual Report has been compiled from information provided by the Department for Water (DFW) (now the Department of Environment, Water and Natural Resources (DEWNR) and other relevant agencies.¹ Agencies contributing to the report are listed in Appendix 1. Current programs and projects relevant to the achievement of the ORM for 2011-12 are set out in the River Murray Act 2003 Annual Report 2011-12 Supporting Document (Supporting Document).

¹ Where activities for 2011-2012 are reported, references to the Department for Water and Department of Environment and Natural Resources have been retained as they were the Departments in place at that time. Where references are made to ongoing roles and responsibilities, the Department of Environment, Water and Natural Resources is used.

2. OVERVIEW

2.1 OVERVIEW OF THE ACT

The River Murray Act aims to protect, enhance and restore the River Murray in South Australia, ensuring that its use and management is sustainable.

The River Murray is defined in the River Murray Act as the main stem of the River Murray and its associated natural resources.

The natural resources include:

- a) the River Murray system including all of its tributaries, anabranches, wetlands and floodplains;
- b) soil, groundwater, surface water, air, vegetation and ecosystems connected with the River Murray system;
- c) cultural and natural heritage, amenity and geological value connected with the River Murray system; and
- d) minerals and other substances, and facilities, that are subject to the operation of a Mining Act and are such that activities undertaken in relation to them may have an impact on the River Murray.

This definition recognises the range of River Murray values that need to be protected.

In addition, the River Murray Act provides for the declaration of River Murray Protection Areas (RMPAs) by regulation (see Figure 1 on page 10: River Murray Protection Areas). The RMPAs are defined areas for regulating activities and policies to ensure that they are consistent with the protection of River Murray values. There are two RMPAs: the River Murray Floodplain Area (including the main stem of the river) and the River Murray Tributaries Area.

The River Murray Act has a set of key Objects and Objectives for a Healthy River Murray (see Appendix 2) to guide effective management of the River Murray.

The Objects cover the requirements to:

- incorporate the principles of ecologically sustainable development into management and rehabilitation of the river;
- ensure development does not compromise the values of the river;
- recognise indigenous and local communities' views of managing the river; and
- ensure that strategies and plans developed take into account the river values.

The ORMs give specific criteria which determine what a 'healthy' river is, and what should be pursued as 'good river health'. The ORMs are grouped under the following themes:

- river health;
- environmental flows;
- water quality; and
- the human dimension.

The River Murray Act furthers the Objects and ORMs by providing a legislative framework which ensures that all reasonable measures are taken to safeguard, restore and enhance the River Murray. This includes regulations, referrals, compliance tools and policies.

The River Murray Act plays a key coordinating role and interacts with related operational Acts, existing institutions and plans to improve the focus on the River Murray, in particular the protection of river values. The establishment of the referral mechanism for related Acts to refer relevant issues to the Minister for Water and the River Murray is central to the integration of the river's protection into other regulatory frameworks.

The administration of the River Murray Act aims to serve community based activities and plans as well as government programs.

The first Implementation Strategy was adopted in 2006 to help guide implementation of the River Murray Act. The Implementation Strategy:

- sets out priorities that the Minister for Water and the River Murray will pursue in order to achieve the Objects of the River Murray Act and to further the implementation of the ORMs;
- sets out strategies that the Minister for Water and the River Murray intends to adopt to meet those priorities; and
- takes into account the *State Natural Resources Management (NRM) Plan* and the *Planning Strategy*.

The key priorities outlined in the 2006 Implementation Strategy are as follows:

- abate the clearance of native vegetation;
- achieve an environmental flow regime for the River;
- improve water quality; and
- conserve and protect heritage value.

The strategies which are deemed to be required for achieving the outcomes in each priority area are:

- providing advice or direction;
- promoting integration;
- undertaking or promoting programs;
- enforcement and compliance; and
- adopting a leadership role in relation to management of the Murray-Darling Basin.

The Implementation Strategy was reviewed in 2010-11. The review made a number of recommendations for the development of a new Implementation Strategy to ensure that the focus of implementation of the River Murray Act is aligned with the emerging risks and opportunities for the River Murray today. The development of a new Implementation Strategy has commenced but has been delayed due to the focus on the South Australian Government's response to the proposed Basin Plan. The review can be seen at: <http://www.waterforgood.sa.gov.au/rivers-reservoirs-aquifers/river-murray/river-murray-act-2003/>.

2.2 OVERVIEW OF THE REPORT

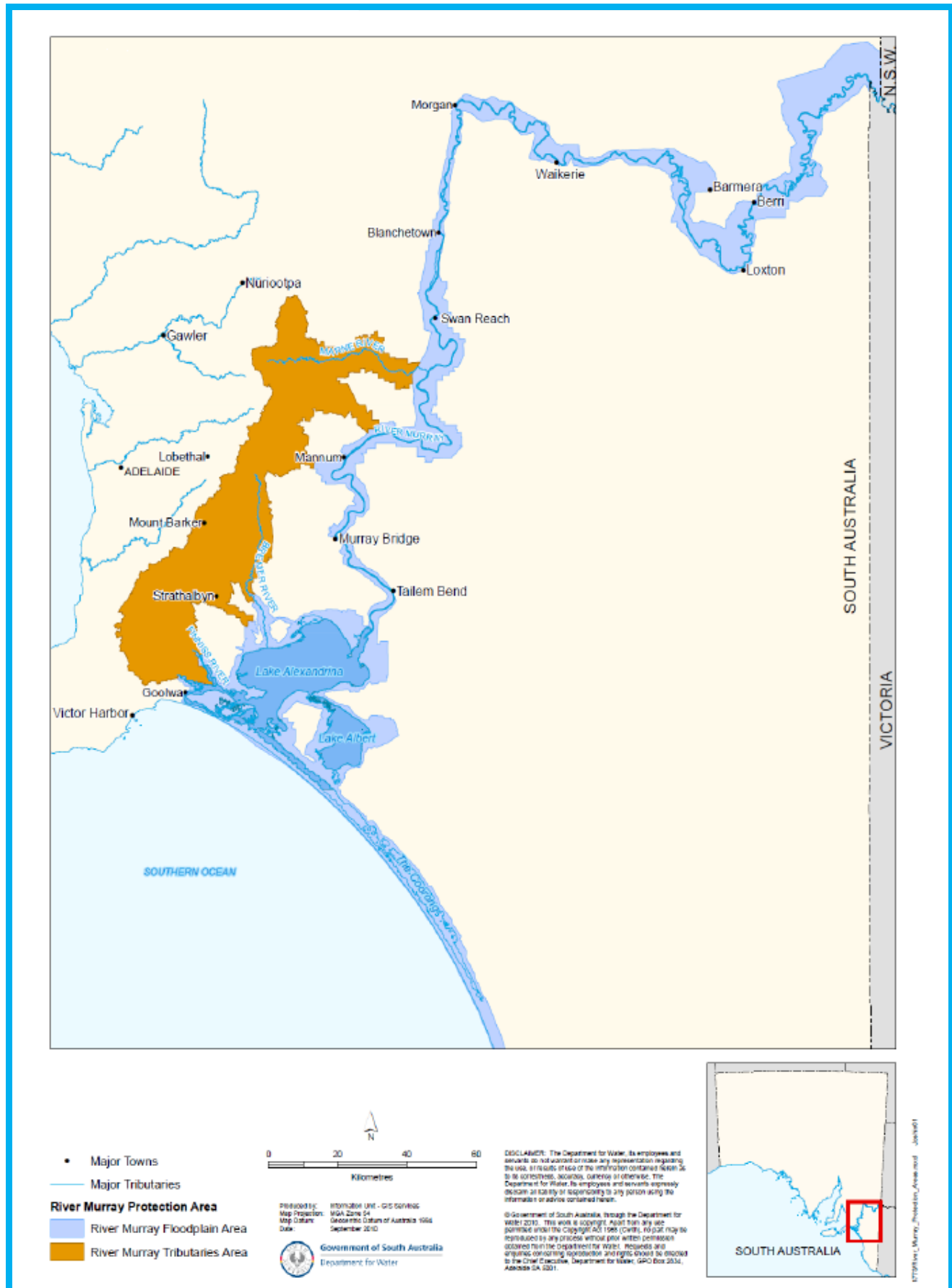
The report is structured around the reporting requirements of Section 10 of the River Murray Act.

Section 3 explores the extent to which the Objects and ORMs of the River Murray Act are being achieved, drawing key achievements from the wide range of projects and programs undertaken to deliver a healthy working River Murray, as outlined in the Supporting Document. These projects and programs also demonstrate progress against the priority areas of the 2006 Implementation Strategy and align clearly with its strategies, as they demonstrate providing advice or direction, promoting integration, undertaking or promoting programs and adopting a leadership role in relation to management of the MDB.

Section 4 reports on referrals of matters to the Minister for Water and the River Murray under related operational Acts, the enforcement of the duty of care, and any action taken by the Minister for Water and the River Murray or an authorised officer under part 8 of the River Murray Act. It also outlines how the strategy of enforcement and compliance is implemented. Section 4, also reports on broader policy matters associated with the River Murray Act, including progress on the findings of the 2006 Implementation Strategy Review and the Triennial review undertaken in 2010-11.

Section 5 documents emerging issues that may potentially impact on future implementation of the River Murray Act.

Figure 1: River Murray Protection Areas



3. ACHIEVEMENT OF THE *RIVER MURRAY ACT 2003* OBJECTS AND OBJECTIVES FOR A HEALTHY RIVER MURRAY

A substantial number of government programs and projects played a role to further progress the Objects and ORMs of the River Murray Act in 2011-12. These included both statewide projects and those focused on the River Murray region.

A number of government agencies were responsible to lead and partner in such activities according to their specific obligations and agency focus. A range of community groups were also instrumental in the implementation of projects including Aboriginal groups and Local Action Planning Associations.

Each government agency provided information relating to relevant programs and projects under the four themes of the 'healthy River Murray.' These are fully detailed in the Supporting Document and a summary of key outcomes is detailed below according to the four ORMs.

3.1 RIVER HEALTH OBJECTIVE

Major achievements and successes in 2011-12 included:

- Delivery of the South Australian Government's submission to the Murray Darling Basin Authority's (MDBA) Proposed Basin Plan. The submission made 71 recommendations for change or improvement that addressed environmental water requirements, key environmental assets, catchment risks, socio-economic issues, water quality and salinity issues, critical human water needs, and state water resource plan requirements.
- Commencement of South Australia's new rights under the Murray-Darling Basin Agreement 2008 to carryover and store water for critical human needs, as well as for private carryover.
- Rehabilitation of the Coorong, Lower Lakes and Murray Mouth (CLLMM) region with the involvement of local community and Ngarrindjeri groups through a number of projects, including ecological monitoring, vegetation programs, management of acid sulfate soils and environmental water prioritisation and delivery.
- Actions to protect native fish populations, including condition and intervention monitoring programs, a study of flow and fish ecology and the reintroduction of threatened fish species to the CLLMM region.
- Management of wetlands to maintain important key habitats and features such as aquatic and riparian vegetation and to provide habitat for important fauna such as the nationally threatened Southern Bell Frog.
- Commencement of work on the \$87 million Murray Futures Riverine Recovery Project involving the development of draft hydrological regimes and objectives, as well as community and landholder engagement for 22 wetland sites.

For more detailed information please refer to sections in the Supporting Document that relate to River Health.

3.2 ENVIRONMENTAL FLOW OBJECTIVE

Major achievements and successes in 2011-12 included:

- Successful negotiation for the allocation and delivery of 468 gigalitres (GL) of environmental water to the South Australian River Murray, the vast majority of which was used to enhance barrage releases and reduce salinity in the Coorong.
- Continued good flow conditions occurred for the River Murray in 2011-12 which helped to maintain connectivity between the Lower Lakes, Coorong and Murray Mouth, reduced salinity in the Lakes, ensured fish passage and contributed to an open Murray Mouth.
- Improved flows leading to connectivity along the River Murray channel, the wetlands and floodplain led to a number of positive ecological responses.
- Completion of the 'Improving Environmental Water Policy' project, the outputs of which will provide a strong foundation for the strategic environmental management framework for all dealings with environmental water on the River Murray.
- Continued assessment of the environmental water requirements for the South Australian River Murray floodplain, including a hydro-ecological analysis of the proposed Basin Plan water recovery scenarios.

For more detailed information please refer to the sections in the Supporting Document that relate to Environmental Flow.

3.3 WATER QUALITY OBJECTIVE

Major achievements and successes in 2011-12 included:

- Securing Commonwealth funding of over \$20 million to support the delivery of more than 120 individual irrigator projects and deliver water savings in excess of 6.5 GL.
- Continued progress in salinity management including ensuring that South Australia's balance on the Basin Salinity Management Strategy Registers remained in positive credit and that the State's obligations to manage Murray-Darling Basin salinity were delivered;
- Continued work on the construction of the Murtho Salt Interception Scheme, commissioning of the four constructed bores of the Pike Salt Interception Scheme and ongoing operations and maintenance of existing schemes to intercept about 280,000 tonnes of salt per year.
- Monitoring water quality and acid sulfate soils in the Lower Lakes to guide adaptive management responses and better prepare for future periods of low inflows and re-wetting events;
- Securing funding and undertaking planning to remove regulators in the Goolwa Channel.
- Continued media and enforcement campaign to increase awareness and reduce the instance of importing and dumping sand for amenity along the banks of the River Murray.

- Promotion of the Code of Practice for Vessel and Facility Management, which included engagement with all private and commercial vessel owners operating on the River Murray to ensure a commitment (and firm timeframe) to comply with the code.

For more detailed information please refer to the sections of the Supporting Document that relate to Water Quality.

3.4 THE HUMAN DIMENSION OBJECTIVE

Major achievements and successes in 2011-12 included:

- Amendment of the *Natural Resources Management Act 2004* to manage the water resource impacts of plantation forests. This amendment places South Australia at the forefront of policy and legislative reform on the impacts of forestry on water resources and will be relevant for plantation forest development in the River Murray Tributaries Protection Area.
- Addressing the risks of riverbank collapse to public safety, infrastructure and the environment. On-ground mitigation activities focused on the prevention of accidents and injuries through site-closure and installation of fencing and signage.
- Delivery of a range of education programs such as the natural resources management education schools program; the Brainwave series of learning programs which promote student awareness towards water issues; and the WaterWise Communities initiative, which encourages, businesses, community groups and households to be responsible users of water.
- Increasing the participation of the Aboriginal community in natural resources management through the provision of training and employment, protecting and restoring cultural assets and growing cultural awareness within the community.
- Announcement of over \$10.8 million in grants to assist the Riverland region to diversify its economic base and facilitate recovery of the local economy including through delivery of infrastructure projects which support sustainable economic development.
- Ensuring a comprehensive response to flood hazard through provision of community advice, implementation of a new community flood warning regime for the River Murray and completion of a flood risk assessment for the Murray and Mallee Emergency Management Zone.

For more detailed information please refer to the sections of the Supporting Document that relate to the Human Dimension.

4. REPORT ON RELEVANT MATTERS

The provisions within the River Murray Act for establishing referrals and the general duty of care are important tools in ensuring the protection of the River Murray.

The referral provisions of the River Murray Act require the Objects and ORMs to be taken into account in the administration of related operational Acts. Input from the Minister for Water and the River Murray must be sought before granting approval for certain types of activities in particular locations. Most of the referral provisions are activated through regulations under the relevant related operational Acts, which in turn, set out the types of activities that need to be referred. Section 4.1 outlines the referrals under related operational Acts for 2011-12.

As a part of the referral process, a one-stop-shop service is operated by DFW (now DEWNR), on behalf of the Minister for Water and the River Murray. DEWNR is the central co-ordinating body for receiving referrals and sending them out for comment to relevant technical experts, both internally and to other government agencies. A consolidated response is then provided to the planning authority to pass on to the applicant.

The River Murray Act also establishes a duty of care for the River, enforceable by a River Murray Protection Order or Reparation Order. All persons have a general duty of care to take reasonable measures to prevent or minimise harm to the River Murray through actions or activities. A breach of this duty does not constitute an offence but the issuing of a Protection Order or Reparation Order can enforce compliance. Information on the enforcement of the general duty of care and actions taken during 2011-12 is provided in section 4.2. Section 4.3 sets out broader policy matters associated with the River Murray Act, including progress on the findings of the 2006 Implementation Strategy Review and the Triennial review undertaken in 2010-11.

4.1 REFERRAL OF MATTERS UNDER THE RELATED OPERATIONAL ACTS

4.1.1 Overview

In 2011-12 there were 488 referrals made to the Minister for Water and the River Murray with the majority of referrals made through the *Development Act 1993* (the Development Act) (Refer Table 1: Referrals in 2011-12).

Most referrals were for statutory authorisations including approvals for buildings, land sub-division, dredging, mining exploration and leases, aquatic activity and fishery permit exemptions. A smaller number of statutory instruments were also referred including development plan amendments (DPAs) under the Development Act.

DFW staff continued to progress the process of reducing red tape and unnecessary referrals. The following actions were undertaken:

Development applications under the Development Act

- The delegate of the Minister for Water and the River Murray participated in a whole-of-government referral reduction project in 2009-10 with the aim of reducing development referrals overall by 40%.

Referrals under Acts related to the River Murray Act

Analysis of referrals under Acts related to the River Murray Act identified a number of areas where assessment on behalf of the Minister added no value.

- ***Mining Act 1971*** – Assessment of certain referrals under the Mining Act, typically for exploration licences within a River Murray Protection Area, add little if any value as the exploration research substantially involves remote sensing and desktop analysis. If this research results in a need for on-ground exploration, a further approval to use specific mining equipment on the land is required and this in turn triggers a further referral for assessment against the provisions of the River Murray Act. Proposals to exempt the exploration licences from being referred have been developed and will be considered in 2012-13.
- ***Harbors and Navigation Act 1993*** – A significant number of applications for relatively benign activities such as canoeing and swimming regattas have been referred to the Minister for assessment against the provisions of the River Murray Act. A draft gazettal notice to exempt these matters from referral was forwarded to the Minister responsible for the Harbors and Navigation Act 1993. It was subsequently determined that there already were exemptions within the Harbors and Navigation Act that meant that the vast majority of applications did not require referral. The Department of Planning, Transport and Infrastructure (DPTI) has ensured that all relevant staff members are aware of the existing exemption, resulting in an expected decrease in referrals of over 90 percent.
- ***Fisheries Management Act 2007*** – A significant number of applications for exemptions to the requirements of the Fisheries Management Act over waters that include the River Murray are referred for assessment against the provisions of the River Murray Act. These are typically for scientific research or alien species removal by organisations such as the regional Natural Resources Management (NRM) Board and the South Australian Research and Development Institute (SARDI) and as such, are always supported by the Minister's delegate. Review by DFW indicated that these should be exempted, however, the most appropriate method of ensuring these exemptions are not referred would be via a change to the Fisheries Management Act – this will be pursued during the consultation stage of the next statutory review of that Act.

More detailed information about the relevant referrals under the related operational Acts is provided below.

Case Study 1: River Front Development

Proposed demolition of existing uninhabitable dwellings and construction of elevated dwellings, with associated developments on the floodplain of the River Murray is a common occurrence. As there is an 'existing-use' right, individuals are able to replace their old dwelling if the construction is in its historical location.

In this example, the applicant chose to relocate the proposed replacement dwelling several hundred metres from the original location, to the river front, in an undeveloped section of the River. DFW staff lodged a request for the applicant to alter the location of the proposed site, or provide justification for the dwelling in the proposed location, which was viewed as inappropriate as it was situated between two wetlands and part of a wetland complex. Other reasons for the construction to be seen as inappropriate were the cumulative effects of development in that area as well as it being regularly subject to inundation.

DFW staff directed the authority to refuse the application on behalf of the Minister as it did not meet the River Murray Act Objects and Objectives. This action helped preserve a section of the Murray in private ownership from development, resulting in preservation for both public interest and environmental benefit

Table 1: Referrals in 2011-12

	Statutory Authorisations	Statutory Instruments
Development Act 1993	403	9
Mining Act 1971	32	
Harbors and Navigation Act 1993	31	
Fisheries Management Act 2007	13	
Total	479	9

4.1.2 Referrals from the *Development Act 1993*

Statutory Authorisations

A range of applications for statutory authorisations were referred to the Minister for Water and the River Murray including buildings (i.e. dwellings or sheds), river structures (i.e. jetties, pontoons, mooring posts, and boat ramps), earthworks within the floodplain, activities requiring River Murray water (i.e. irrigation, feedlots, or aquaculture) and land divisions. Buildings comprised more than half of the referrals, whilst river structures comprised 15 percent, and land divisions 12 percent. All referrals were assessed against the River Murray Act Objects and Objectives.

A number of referrals were a result of the Investigations staff uncovering illegal incidents occurring along the River Murray such as jetties, moorings, and retaining walls. These activities were followed up by liaising with the local council to determine the most appropriate action. In most cases the issue was resolved by the applicant going through the development application process, but in some cases the

structures had to be removed immediately. In relation to those that went through retrospective applications, most received approval but often had to modify or amend structures.

Most referrals received in 2011-12 (403 of a total 411) were mandatory referrals under Schedule 8 of the *Development Regulations 2008*. All except 13 were addressed within the statutory time frame of eight weeks. Eight non-mandatory referrals were made to the Minister for Water and the River Murray. In these cases, recommendations were provided to the referring body for consideration in their decision making process.

Of the mandatory referral responses issued, 48 applications had been formally placed 'on hold' prior to being completed. This 'on hold' mechanism was utilised for both the seeking of further information (where, for instance, plans were lacking in detail) or as a result of a request to modify the proposal. As per Section 37(2) of the Development Act, the processing of these applications was halted until all requested information was received.

Requests for further information or minor modifications to proposals were sought for a further 15 to 20 percent of applications, without the need for formal holds.

Applications received were initially reviewed to examine any key issues and decide whether specific advice would be required. Where required, advice on the referrals was sought from a range of specialist staff and groups both within DFW and other agencies as a part of the one-stop-shop service (refer to Table 2 below). This advice resulted in referrals being scrutinised in relation to their impact on a range of natural resource assets, for example water resources, environmental flows, vegetation and cultural heritage.

Table 2: Specialist Groups/Agencies consulted in relation to referrals

Referral Type	Percent of applications referred (approximate)
Aboriginal Heritage (DPC)	80
Native Vegetation and Biodiversity Management (DENR)	20
Crown Lands (DENR)	20
Biosecurity (PIRSA)	18
River Murray Works (including riverbank collapse) (DFW)	5
Transport Safety (DPTI)	10
Shipwrecks (DENR)	4
Water Licensing (DFW)	5
State Heritage (DENR)	6
Groundwater and surface water (DFW)	3
Environmental Water Management (DFW)	1
Coastal Conservation/Public Land (DENR)	1

Applicants were also advised of their obligations under other legislation including the *Crown Land Management Act 2009*, the *Natural Resources Management Act 2004*, and the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

For the majority of mandatory referrals, conditions were attached to the approval. The conditions generally required that during works the site be appropriately maintained, that waste material be properly disposed of and contained, and that the potential for erosion and sedimentation of water resources be minimised through responsible stormwater management.

The majority (94 percent) of mandatory referrals during 2011-12 related to activities occurring within the River Murray Floodplain Area. Just six percent of mandatory referrals related to activities within the River Murray Tributaries Area.

A number of additional activities (primarily land divisions) occurring within the RMPAs or the wider South Australian Murray-Darling Basin region were also referred to the Minister for Water and the River Murray as non-mandatory referrals. Applicants were advised of their obligations under relevant legislation and conditions were recommended.

Case Study 2: Subdivision and Management of Native Vegetation

A land owner on Hindmarsh Island originally proposed a boundary arrangement for an allotment that would have had an impact on native vegetation. Through DFW the mandatory response requirement for land divisions in and around the River Murray, and the one-stop-shop, the application was referred to the Native Vegetation and Biodiversity Management Unit of DENR for advice.

Working in partnership with DENR, DFW staff requested several amended plans, requiring the applicant to redesign the boundary allotment plan so as not to have an impact on vegetation. The plans were provided by the applicant, and after several site visits, DENR staff provided advice that they were satisfied that the application as amended could proceed because there was no impact on native vegetation.

The outcome gave the land owner the ability to adjust the land boundaries and increase development on Hindmarsh Island, but also ensured that the majority of native vegetation remained in one allotment and was not impacted.

Statutory Instruments

A number of statutory instruments relating to the Development Act were referred in 2011-12 to the Minister for Water and the River Murray as required under section 24(3) of the Development Act. This included nine Development Plan Amendments relating to land within the Murray Darling Basin region. Such instruments are important in determining future land use, with proposals scrutinised to ensure that any changes of land-use were appropriate in the context of River Health. DFW responded to each of these referrals with comments and recommendations.

This assessment is subsequent to earlier assessment by DFW at the Statement of Intent stage and the Agency Consultation stage of the development plan amendment process. Relevant matters are typically

addressed in the earlier referrals. The assessment at the final stage acts as an important final check to ensure that River Murray Act Objects and ORMs are not compromised.

4.1.3 Referrals from the *Mining Act 1971*

A total of 32 mining applications were referred in 2011-12 including exploration licences, declared equipment use and mining leases in accordance with the *Mining Act 1971*. Of these applications, 20 were for exploration licences and exploration licence renewals. In all instances, the Minister for Water and the River Murray concurred with the Minister for Mineral Resources and Energy regarding the outcome, but provided advice to applicants regarding their obligations on matters such as water use, Branched Broomrape control and native vegetation.

4.1.4 Referrals from the *Harbors and Navigation Act 1993*

A total of 31 Aquatic Activity Licence applications were referred in 2011-12 in accordance with the regulations of the *Harbors and Navigation Act 1993*. Activity licences typically included closing off part of the river for special activities such as rowing, wakeboarding, water skiing, and swimming competitions. The role of the referral process is to provide education regarding relevant responsibilities to the organisers and the public for protecting the river.

4.1.5 Referrals from the *Fisheries Management Act 2007*

The Minister for Agriculture, Food and Fisheries must consult with the Minister for Water and the River Murray prior to issuing a licence, permit, or an exemption from the requirement for a licence under the *Fisheries Management Act 2007* that related to waters within the River Murray system.

In 2011-12, 15 such matters were referred, almost all relating to exemptions from the requirement of needing a permit for projects conducted by research, scientific, or conservation agencies that were found to further the Objects and ORMs.

Case Study 3: Referrals to the Aboriginal Affairs and Reconciliation Division

Development applications that are referred to the Minister are most often referred to the Department of Premier and Cabinet, Aboriginal Affairs and Reconciliation Division (AARD). AARD check that the application will not be affecting an Aboriginal Heritage Site. In the advent that there is a site on the land parcel, DFW informs the relevant Aboriginal Heritage Committee of the works that are planned and that there may be a site affected.

DFW also inform the planning authority of their requirements under the *Aboriginal Heritage Act 1988*, and advises the applicant to contact the relevant committee prior to the commencement of works on the parcel. Given that the River Murray is abundant in Aboriginal artefacts and sites, the referral mechanism under the River Murray Act plays an important role in protecting the sites, informing people of the sites and their obligations and allowing AARD an opportunity to check applications for potential impacts on sites and communicating with Aboriginal committees about the sites.

4.2 ENFORCEMENT OF GENERAL DUTY OF CARE AND ISSUE OF ORDERS

4.2.1 General Duty of Care

The general duty of care principle is defined as follows:

‘A person must take all reasonable measures to prevent or minimise any harm to the River Murray through his or her actions or activities’.

As in previous years, the duty of care in 2011-12 was primarily enforced through a combination of referrals for new development applications and a compliance program. Referral and compliance processes have supported each other in order to achieve compliance with the duty of care principle.

The referral process is an important tool, to support the duty of care. It can place specific and enforceable conditions on activities and developments to ensure that they will not harm the River Murray, either through an individual action or in a cumulative sense. Cumulative impacts are particularly relevant for issues such as vegetation clearance, water extractions, erosion, and sedimentation where impacts on individual sites may be minor but could become significant when multiplied overall.

The compliance issues that were reported in 2011-12 were identified by DFW field staff, members of the community, as well as from referrals through other government agencies. The main compliance issues included the unmetered taking of water, damage to the riverbank, and unauthorised development. Issues such as sinking houseboats, dumping materials on the floodplain, and breaches of the building code were attended to jointly and/or referred to local government, the Environment Protection Authority (EPA) and the DPTI. A total of six matters were reported in relation to activities that were likely to cause damage to the river. The majority of issues continued to be resolved through round table meetings between referral, investigation, local council staff, and proponents. A small number of incidents still require more formal actions to repair the damage caused by some activities, but these were resolved through meetings and provision of information. No protection orders or reparation orders were issued in 2011-12.

Investigation and Compliance Officers, with support from Assessment and Compliance Officers, remained vigilant to detect new work along the river and checked that such activities had gone through appropriate approval processes. They also monitored water extraction from the River Murray and tributary areas.

Investigation and Compliance Officers continued to work closely with local councils, as well as staff from the Native Vegetation Group and regional NRM Boards along the River Murray, employing a mutual information exchange that has aided in resolving compliance matters. As part of the new approach in 2011-12, key community stakeholders were engaged to proactively encourage higher levels of voluntary compliance.

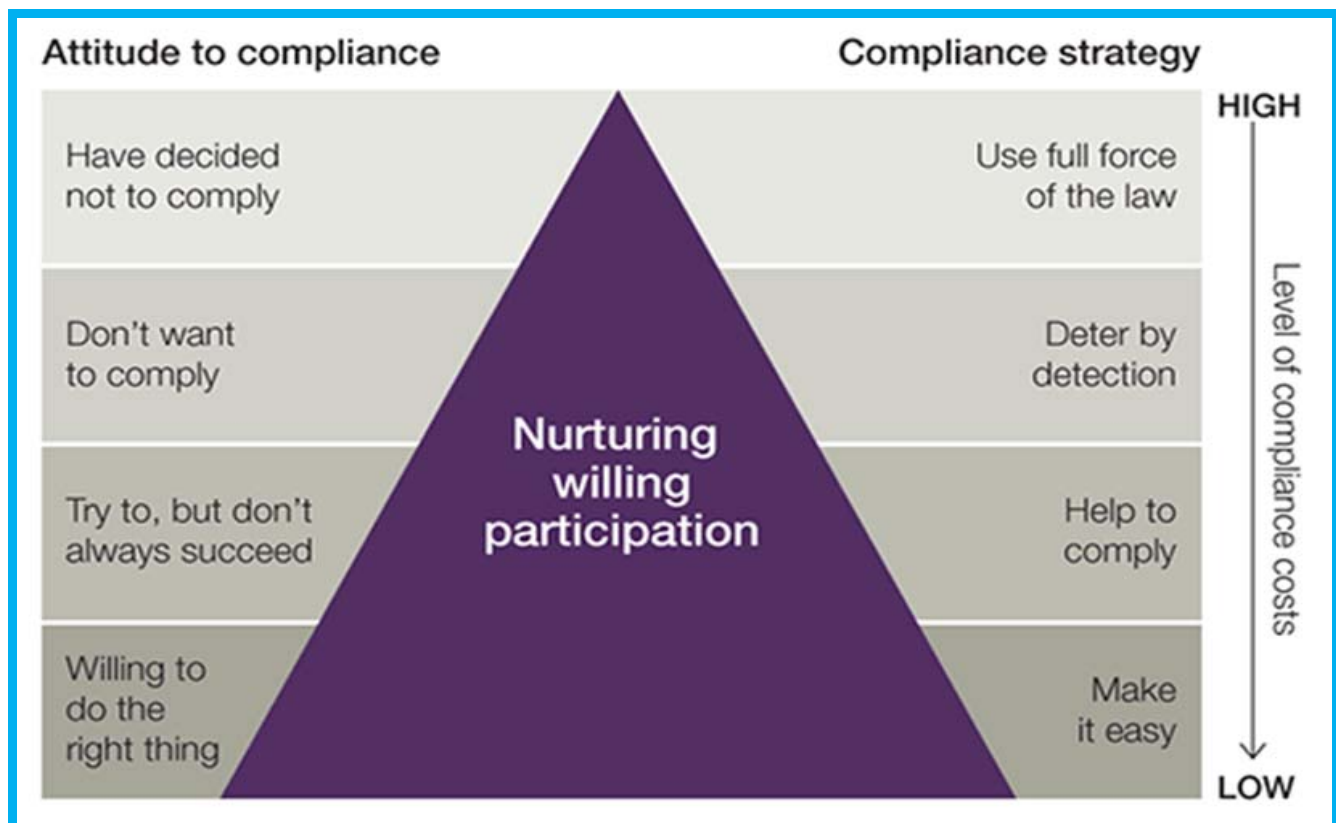
4.2.2 Compliance approach

DFW introduced a risk-based compliance strategy which recognises that the majority of people wish to be compliant (see Figure 2). The first step in the strategy is to educate and inform individuals of their compliance rights and responsibilities regarding the River Murray Act. The next level of the strategy is to assist the individuals who try to comply but are not always successful. If an individual, after receiving

information and assistance from an officer continues to be willingly non-compliant, they will receive a warning. After this, officers may follow-up with the individual, to ensure that compliance has occurred. If, by this stage, an individual is still non-compliant, a River Murray Protection Order (or other relevant order) will be issued. A person to whom an order is issued must comply with its content. If the individual does not comply with it, the Minister may take any action required by the order; this may be in the form of a monetary penalty. If the offence is of a serious nature, the Minister may decide to move forward with legal proceedings.

The adoption of the new strategy was complemented by a change in roles and responsibilities for compliance and enforcement. All DFW staff that are engaged in on-ground activities, for example meter reading, are now part of the compliance and enforcement program, gathering information from landholders and the wider community and providing information.

Figure 2: DFW Compliance Strategy



A review of the River Murray Act Enforcement and Compliance Guidelines was undertaken in 2011-12. The updated Guidelines will be used as a training tool for new and current Authorised Officers. New and existing officers will continue to be trained under related operational Acts, including the *Natural Resources Management Act 2004*, the *Environment Protection Act 1993* and the *Native Vegetation Act 1991*, which allows them to have a broader understanding and capacity to protect River Murray values.

4.3 POLICY ACTIVITIES

The recommendations from the River Murray Act Implementation Strategy Review and the Triennial Review provided the focus for the policy activities for 2011-12. Limited resources for the policy component required a prioritisation of these recommendations and a focus on those activities that could be implemented with relatively small effort but would have a significant benefit.

The key achievements of the River Murray Act noted in the Implementation Strategy Review included awareness raising of the importance of a healthy River, streamlining and integrating values of the Act into planning processes, regulating matters that are not regulated through other Acts, and promoting interagency networks and coordination.

Improving access to information and reviewing existing River Murray Act information resources was a priority for 2011-12.

A review of the River Murray Act factsheets including the River Murray Act Overview, General Duty of Care, and Referrals under the River Murray Act was completed, and all are currently available on the Water for Good website. A gap analysis and feasibility study commenced to recommend areas for policy review and development under the River Murray Act. This included a review of River Murray Act referral assessment policies with the objective of updating their content and consolidating resources to ensure consistent and outcome-driven decision making.

A review of the Water for Good River Murray Act website content is in progress to include a useful suite of information resources. All previous annual reports, triennial reviews, and the Implementation Strategy Review are now available online, as well as the River Murray Act Users Guide. New content is being developed to provide greater guidance to planners and applicants on the referral process, including how referrals are assessed and what will constitute a compliant application.

Building on the recommendations of the Implementation Strategy Review, a new Implementation Strategy is being developed. This will provide outcomes-based deliverables for the River Murray Act program which will focus on utilising the key powers and functions of the Act to manage the significant threats and emerging issues facing the River Murray. Key performance indicators will be used to measure the achievement of the priorities and strategies. A risk assessment approach has initially been used to assist in identifying priority issues for a new River Murray Implementation Strategy, derived from the key learning of the 2011 Implementation Strategy Review. In cases where risks to a healthy River Murray system are not being adequately managed through other processes or legislation, the River Murray Act's powers could provide effective tools for future priorities.

Information sharing and information gathering processes have been reviewed and amended to streamline reporting and create greater efficiency in reporting between the River Murray Act Annual Report and the Save the River Murray Fund Annual Report (and other reporting requirements for the River Murray).

Recommendations from the Implementation Strategy Review and Triennial Review that focused on opportunities for future policy development, use of unutilised powers under the River Murray Act, and further alignment of the River Murray Act with other policy and regulatory frameworks have seen limited progress, due to other priorities, particularly the South Australian Government's response to the proposed Basin Plan taking precedence.

5. EMERGING ISSUES FOR THE RIVER MURRAY ACT

The context for management of the River Murray is constantly evolving and some major changes have occurred during 2011-12 and/or are currently in development, providing future drivers for change.

5.1 THE MURRAY-DARLING BASIN PLAN

The *Water Act 2007* (Cth) sets out the broad framework for the management of South Australia's water resources within the Murray-Darling Basin and is central to all work relating to the River Murray within the State. It established the MDBA, which was tasked with developing the Basin Plan, drafts of which were released in 2011-2012. Government scientists and staff undertook analysis of the MDBA's proposed scenarios and made recommendations addressing environmental water requirements, key environmental assets, water quality and salinity, and socio-economic issues.

As this is such an important issue for the River Murray, and South Australia as a whole, the Premier of South Australia and the Minister for Water and the River Murray set up a specialised task force to lead the State's response to the Proposed Basin Plan. This task force is currently working on amendments to the proposed Basin Plan in the interest of the River Murray. It is also involved in negotiations with the Commonwealth government about complementary programs, including addressing constraints to the delivery of environmental water and programs to bridge the gap between current diversions and the sustainable diversion limits (SDLs).

Expected to be finalised in late 2012, the final Basin Plan will set SDLs on water extractions from surface water and groundwater resources in the Murray-Darling Basin and may have a significant impact on determining the future long term health of the River Murray system and the quality and quantity of water that flows into South Australia. Throughout 2011-12 the South Australian Government has had ongoing engagement with the MDBA and the Commonwealth Government through multilateral and bilateral processes and contributed to the development of the proposed Basin Plan and complementary programs. The Basin Plan will incorporate both an Environmental Watering Plan, to ensure that the best use is made of water available for environmental purposes, and a Water Quality and Salinity Management Plan, that will set water quality and salinity objectives for the Basin. It includes water resource plan requirements that will set a minimum standard for water resource planning across the Basin.

The management framework that evolves from the final Basin Plan may necessitate changes to the River Murray Act and will influence the priorities for the new River Murray Act Implementation Strategy. The River Murray Act and its integrated approach to assessing development activities and plans and its broad powers for the Minister to undertake works and develop policies may be the best mechanism to ensure that South Australia can respond to and participate in the changes required to deliver sustainable outcomes for the River Murray system.

5.2 CLIMATE VARIABILITY

Managing the impacts of climate change is one of the most important challenges facing Australia. The variability of the climate within South Australia is an issue that is being addressed through for example adaptive management and increasing scientific understanding. With the extreme weather events that

have been observed in recent years (drought and floods) and the frequency at which they occur, the Government will need to continue to build its capacity to respond.

An unprecedented period of low rainfall and low flow affected the Murray-Darling Basin (MDB) in the period 2007 to 2010, yet between 2010 and 2012 the upper catchments of the MDB have sustained higher rainfall, which has led to higher inflows into South Australia. These variable conditions have had a significant impact on how the River Murray Act has been administered and has changed the focus of the River Murray Act's implementation. During the drought, the need for specific programs aimed at preventing irreversible damage to environmental assets and ecological processes, and increasing environmental flows and water quality programs were prioritised and implemented into the Government's environmental services. Currently, in the higher flow period, a new series of challenges require careful management, including acid sulfate soils, reintroducing native species, flood management protection, restoration and removal of infrastructure such as levee banks and regulators, and delivery of larger volumes of environmental water.

These recent experiences of climatic variability raise important questions about how the South Australian MDB region will have the capacity to cope with and respond to a future with more variable water levels and potentially less water for consumptive use, both in terms of potential reductions in water availability as a result of climate change and also as a result of the new SDLs under the Basin Plan. Development of a new operating context that addresses the climatic variability of the MDB needs to draw on these experiences, as well as the understanding of the causes and potential impacts of climate change.

Work is currently being done on a framework for Climate Change Adaptation, which will aim to deliver improved coordination between the public and private sectors and the community. It will support the identification of climate change risks, the development of climate change adaptation plans, and the improvement in the State's ability to plan for climate change responses.

The River Murray Act has the broad Objects and Objectives as well as legislative tools to support adaptation to climate change and variable water levels. This will need to be explored further in the development of a new Implementation Strategy and the framework for Climate Change Adaptation.

5.3 STATE NATURAL RESOURCES MANAGEMENT PLAN 2012-17

A new State Natural Resources Management Plan (State NRM Plan) was released in June 2012, which sets out the goals and targets for South Australia in its management of natural resources for the next five years. It provides the framework for the development of regional NRM plans which will seek to deliver comprehensive environmental and ecological strategies at a regional level.

The State NRM Plan establishes the direction for South Australia's management of natural resources for the present and future. The three main goals of the Plan are:

- People taking responsibility for natural resources and making informed decisions;
- Sustainable management and productive use of land, water, air and sea; and
- Improved condition and resilience of natural systems.

The South Australian Murray-Darling Basin (SA MDB) regional NRM Plan is set to be reviewed in 2015 and will need to reflect the goals set out above. The Plan will also need to include particular strategies that are relevant to the achievement of the Objects and ORMs of the River Murray Act Implementation Strategy, particularly those relating to water quality, environmental flows, and the integration of natural resource management in development planning and assessment processes. Opportunities to align the development of the River Murray Act Implementation Strategy with the State NRM Plan and the development of the SA MDB regional NRM Plan will be explored.

5.4 AMALGAMATION OF DFW AND DENR

The amalgamation of DFW and DENR and integration with the regional NRM Boards provides an opportunity for greater partnership between government staff and the community. The creation of DEWNR allows for those working in the environment sector to achieve greater effectiveness and capabilities in the management of natural resources, and how it delivers services to the people of South Australia.

The amalgamation will build upon the Government's agenda to improve the management of natural resources, which commenced two years ago with the integration of natural resources and environmental services. The new fully integrated approach will be more effective in delivering services to the community and will reduce management and operational overheads.

The impact of the reorganisation is positive for the effective operation of the River Murray Act because the Government can provide fully coordinated support to the Act's aims to protect, restore and enhance the River, related areas and ecosystems, and all of its natural resources in an integrated manner. The amalgamation will ensure that the River Murray is recognised as a critical asset to the South Australian community, while also guaranteeing that the use and management of the River Murray is sustainable to the physical, economic and social well-being of South Australians, while facilitating the economic development of the State.

LIST OF ACRONYMS

CLLMM	Coorong, Lower Lakes and Murray Mouth
Cth	Commonwealth
DENR	Department of Environment and Natural Resources (Government of South Australia)
DEWNR	Department of Environment, Water and Natural Resources (Government of South Australia)
DFW	Department for Water (Government of South Australia)
DPA	Development Plan Amendment
DPC	Department of Premier and Cabinet (Government of South Australia)
DPTI	Department of Planning, Transport and Infrastructure (Government of South Australia)
EPA	Environment Protection Authority (Government of South Australia)
GL	Gigalitre
MDB	Murray-Darling Basin
MDBA	Murray-Darling Basin Authority
NRM	Natural resources management
ORM	Objective(s) for a Healthy River Murray
PIRSA	Primary Industries and Regions South Australia (Government of South Australia)
RMPA	River Murray Protection Area
SAMDB	South Australia Murray-Darling Basin
SDL	Sustainable Diversion Limit(s)
SIS	Salt Interception Scheme

APPENDIX 1 - CONTRIBUTORS

Department of Environment and Natural Resources

Department for Water

Department of Planning, Transport and Infrastructure

Department of the Premier and Cabinet

Environment Protection Authority

Primary Industries and Regions South Australia

SA Water

South Australia Murray-Darling Basin Natural Resources Management Board

South Australian Tourism Commission

APPENDIX 2 – OBJECTS AND OBJECTIVES FOR A HEALTHY RIVER MURRAY (ORMS)

OBJECTS

The *River Murray Act 2003* is guided by a set of Objects or guiding principles to ensure adequate protection of River Murray values.

- i. to ensure that all reasonable and practicable measures are taken to protect, restore and enhance the River Murray in recognition of its critical importance to the South Australian community and its unique value from environmental, economic and social perspectives and to give special acknowledgement to the need to ensure that the use and management of the River Murray sustains the physical, economic and social well being of the people of the state and facilitates the economic development of the state; and
- ii. to provide mechanisms to ensure that any development or activities that may affect the River Murray are undertaken in a way that provides the greatest benefit to, or protection of, the River Murray while at the same time providing for the economic, social and physical well being of the community; and
- iii. to provide a mechanism so that development and activities that are unacceptable in view of their adverse effects on the River Murray are prevented from proceeding, regulated or brought to an end; and
- iv. to promote the principles of ecologically sustainable development in relation to the use and management of the River Murray; and
- v. to ensure that proper weight is given to the significance and well being of the River Murray when legislative plans and strategies are being developed and implemented; and
- vi. to respect the interests and aspirations of Indigenous peoples with an association with the River Murray and to give due recognition to the ability of those Indigenous people to make a significant contribution to the promotion of the principles of ecologically sustainable development in relation to the use and management of the River Murray; and
- vii. to respect the interests and views of other people within the community with an association with the River Murray and to give due recognition to the ability of those people to make a significant contribution to the promotion of the principles of ecologically sustainable development in relation to the use and management of the River Murray; and
- viii. otherwise to ensure the future health, and to recognise the importance, of the River Murray.

OBJECTIVES FOR A HEALTHY RIVER MURRAY (ORMS)

The *River Murray Act 2003* also sets out a list of Objectives for a Healthy River Murray (ORMs). The ORM's were developed by the MDB Commission and endorsed by the MDB Ministerial Council. They outline some of the specific improvements being sought for the River Murray.

RIVER HEALTH OBJECTIVES

There are four river health Objectives collectively covering the issues of:

- maintenance, protection and restoration of key habitats and ecological processes;
- protection and restoration of River Murray environments, particularly high-value floodplains and wetlands of national and international importance;
- prevention of native plant and animal extinctions; and

- avoiding and overcoming barriers to the migration of native animal species.

ENVIRONMENTAL FLOW OBJECTIVES

Three environmental flow Objectives address the matters of:

- reinstatement and maintenance of ecologically significant elements of the River Murray system natural flow regime;
- keeping open the Murray mouth in order to maintain navigation and fish passage and to enhance the health of the River Murray system and Coorong; and
- significantly improving connectivity between and within the environments constituted by the River Murray system.

WATER QUALITY OBJECTIVES

The four water quality Objectives seek to:

- improve water quality within the River Murray system to a level that sustains the ecological processes, environmental values and productive capacity of the system;
- minimise the impact of salinity on the ecological processes and productive capacity of the River Murray system;
- manage nutrient levels within the River Murray system so as to prevent or reduce the occurrence of algal blooms, and to minimise other nutrient related impacts; and
- minimise the impact of potential pollutants, such as sediment and pesticides, on the environments within the River Murray system.

HUMAN DIMENSION OBJECTIVES

The human dimension Objectives aim to:

- implement a responsive and adaptable approach to the management of the River Murray System, taking into account ecological outcomes, community interests and new information as it comes to hand;
- promote the health and proper management of the River Murray system by gathering, considering and disseminating the community's knowledge and understanding of the system;
- take into account the interests of the community by recognising indigenous and other cultural and historical relationships with the River Murray environs, and by ensuring appropriate participation in processes associated with the management of the system; and
- recognise the importance of a healthy river to the economic, social and cultural prosperity of communities along the length of the river, and the community more generally.