

New South Wales RiverBank Business Plan

Part A: Program Plan 2006–2011

(2010 update)

Buying and managing water for the environment



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Contents

1.	Executive summary	4
2.	RiverBank goal and objectives	6
2.1	Environment and culture	6
2.2	Business	6
2.3	RiverBank values and profile	7
3.	RiverBank operating environment and history	9
3.1	Water management context	9
3.2	Existing major riverine and wetland initiatives	10
3.3	The RiverBank niche	11
4.	RiverBank services and areas of operation	13
4.1	RiverBank services	13
4.2	Strategic alliances	14
4.3	Areas of operation	14
4.4	Aboriginal cultural considerations	17
5.	Financing RiverBank	19
6.	Licence acquisition and trading	20
6.1	Investment targets for water purchase	20
6.2	Target water products	20
6.3	Water allocation trading	21
6.4	Mode of acquisition	22
6.5	Pricing strategy	22
7.	Using RiverBank water	24
7.1	Target environmental assets	24
7.2	Water use plans	24
7.3	Environmental water management plans	25
7.4	Annual watering plans	26
7.5	Accounting for environmental water use	26
8.	Governance arrangements	28
9.	Marketing and communications	30
10.	Monitoring, reporting, and adapting	31
10.1	Program performance monitoring and evaluation	31
10.2	Target asset performance monitoring and evaluation	32
10.3	Adaptive management	32
10.4	Reporting	33
11	Appendices	35
A.	Terms of reference for the Environmental Trust RiverBank subcommittee	35
B.	NSW RiverBank charter	36

1. Executive summary

On 29 November 2005, the NSW Government announced the City and Country Environment Restoration Program. The program provides funding of \$439 million over five years to tackle specific and significant environmental challenges.

The largest single sub-program within the City and Country Environment Restoration Program is NSW RiverBank — a \$105 million program administered by the Department of Environment, Climate Change and Water NSW (DECCW) to buy and manage water for environmental benefit, and specifically to protect and restore our ailing wetlands and river systems.

RiverBank represents a logical step in the Government's 10-year reform of water management in NSW. Extensive consultation during the late 1990s culminated in the passage of the *Water Management Act 2000* (WMA), and the making of water sharing plans covering more than 80% of the State's water extraction. These recognised the statutory rights of both the environment and existing water users, and established more robust market mechanisms to enable water rights to move freely between uses, including between consumptive and environmental uses.

The NSW Government recognises that more needs to be done to maintain and improve the health of the State's rivers and wetlands — to meet our international obligations under the Ramsar Convention on Wetlands of International Importance, and agreements with China, Japan and South Korea for the conservation of migratory birds; to maintain the enormous community, productive, and biodiversity values associated with healthy rivers and wetlands; and to combat the predicted impacts of climate change. It also recognises that, generally, this should not come at the expense of current holders of water rights.

RiverBank has been set up within DECCW to work within this established framework to purchase water rights and manage them for environmental benefit. In particular, its goal is to make a significant contribution to the rehabilitation and protection of stressed rivers and iconic wetlands in NSW. The objectives of RiverBank are to purchase water entitlements that can be managed to contribute to:

- improving the ecosystem function of wetlands and rivers, including the habitat for aquatic biodiversity
- rehabilitating wetland habitat for significant water-dependent biota, including floodplain eucalypts, waterbirds, frogs, reptiles and fish
- meeting the nation's international obligations with respect to wetlands and migratory birds
- improving water management decisions to reflect an understanding of the links between environmental and Aboriginal cultural values.

RiverBank works within the existing water market, purchasing only from willing sellers. RiverBank is a legitimate market participant that supports water-dependent ecological assets on public and private lands, and provides a price signal in the market that reflects ecological values. All licence holders in the target valleys have an opportunity to interact with the RiverBank program. DECCW will achieve its RiverBank objectives by investing predominantly in water access licences and actively managing its licence portfolio for environmental benefit.

The initial \$105 million State Government funding has been supplemented by an Australian Government contribution of a further \$45.87 million. DECCW may further supplement this funding from non-government sources, including from environmental organisations, philanthropic entities and individuals, and corporations whose social responsibility interests align with RiverBank objectives.

Initially, access licence products are being purchased in those inland, regulated river valleys where there are very high-value environmental assets, in particular and in many cases associated with wetlands that also support Aboriginal cultural values.

RiverBank water is used for very specific and measurable purposes, and for occasional contribution to larger environmental flows made from planned environmental water reserves. Initial target assets for watering include:

- in the Macquarie valley — target vegetation communities in the north marsh nature reserve, private Ramsar sites, and smaller wetlands on the Macquarie River system upstream of the Macquarie Marshes
- in the Gwydir valley — disconnected and discrete wetlands in public ownership, private Ramsar sites, and in-stream environmental health
- in the Murrumbidgee valley — wetlands on the Lowbidgee floodplain, primarily within Yanga National Park
- in the Lachlan valley — Lake Ita, Murrumbidgee Swamp, and small wetland assets on the mid and lower Lachlan creeks.

DECCW prioritises its acquisition of water licence assets under RiverBank based on the conservation and cultural significance of rivers and wetlands, the water supply risks currently posed to those values, and other factors such as the potential for developing strategic alliances with other stakeholders and building on the outcomes of other initiatives.

DECCW works with other groups and programs to maximise the environmental benefits of its riverine and wetland health activities.

This Program Plan (Part A of the Business Plan) outlines RiverBank's vision, objectives and expected outputs, and establishes the basic philosophy, processes and business model that are applied. It outlines the environmental management services that are offered by RiverBank, and explains the strategies for licence acquisition and for use of the acquired licences. Finally, the Program Plan specifies the program monitoring, evaluation and reporting required to provide the NSW Government, other potential investors, and the public with a means for gauging the program's success.

This Program Plan should be read with Part B of the Business Plan, which outlines the proposed activities for 2010-11.

2. RiverBank goal and objectives

The RiverBank program's primary goal is to make a significant contribution to the rehabilitation and protection of stressed rivers and iconic wetlands in NSW via the purchase and management of water for improved environmental and cultural benefits.

2.1 Environment and culture

The expected environmental and cultural outcomes of RiverBank are a contribution to:

- stabilising the ecological decline of iconic wetlands in NSW
- stabilising the threat to Aboriginal cultural values associated with the declining health of iconic wetlands
- rehabilitating wetland-dependent biodiversity
- improving the in-stream ecology of some major inland NSW rivers.

The environmental and cultural objectives of RiverBank are to:

- improve the ecosystem function of wetlands and rivers, including the habitat for aquatic-dependent biodiversity
- rehabilitate wetland habitat for significant water-dependent biota, including floodplain eucalypts, waterbirds, frogs, reptiles and fish
- contribute to meeting the nation's international obligations with respect to wetlands and migratory birds
- add strategic value to ecological outcomes achieved under the existing water sharing plans
- improve water management decisions to reflect an understanding of the links between environmental and Aboriginal cultural values.

The environmental and cultural outputs of the program are:

- more frequent and larger environmental water flows to significant wetlands
- provision of follow-up flows to sustain significant ecological processes, such as wetland bird-breeding events
- targeted watering of iconic and representative wetland plant communities
- an increase in the availability of water in major inland rivers to enhance environmental outcomes.

2.2 Business

RiverBank's expected business outcomes are:

- a robust framework for acquisition, trading and management of water products for environmental benefit
- a fair and equitable market mechanism for enabling water entitlement holders to benefit from, and adjust to, reductions in available water for consumptive use.

RiverBank's business objectives are to:

- acquire and manage a portfolio of water access licence products for the benefit of the environment
- invest in water access licence products and infrastructure in a commercially efficient manner
- strengthen, deepen and diversify the market for water access products where possible
- aim for full recovery of licence portfolio costs by the end of the initial five-year funding period
- provide credible environmental water management services to governments, non-government organisations and individuals.

The business outputs of the program are to:

- establish a RiverBank portfolio of water access licence products in each target valley
- manage acquired water products in accordance with agreed and approved water-use plans
- trade water allocations to cover the statutory charges associated with water access products, and potentially to fund the ongoing operation of RiverBank
- establish and maintain strategic alliances with water industry and market participants, including agents, advisors, catchment management authorities (CMAs) and entitlement holders
- contribute to regulatory reform and administration to ensure markets are efficient and property rights remain secure.

2.3 RiverBank values and profile

RiverBank recognises the:

- statutory rights provided for water access licence holders through the reform of water management legislation
- operation of statutory water sharing plans
- existence of other catchment and riverine environmental management activities
- existence of markets for water access licence products.

RiverBank wishes to be recognised as:

- being a legitimate participant in the water market to address the environmental consequences of water extraction from inland rivers
- providing a credible and stable mechanism for government and non-government investment in purchase and active management of water for environmental and cultural benefit
- supporting water-dependent ecological values protected in national parks, nature reserves and elsewhere
- providing opportunities for optimising environmental outcomes for rivers and wetlands through cooperation and partnerships
- having no unfair advantage by virtue of its government ownership

- providing the market with a price signal that reflects environmental values, while seeking to avoid contributing to extreme peaks in water product prices or water shortages
- providing opportunities for optimising economic outcomes where compatible with environmental objectives
- providing market opportunities for licence holders to access funds for water efficiency investment at a scale and time that suits their specific business circumstances, or to choose to downscale or adjust out of the irrigation industry
- creating synergies with other programs and activities focused on infrastructure-based water savings and riparian and catchment initiatives aimed at improving river and wetland health.

3. RiverBank operating environment and history

3.1 Water management context

Since 1996, the NSW Government has been at the forefront of major reforms to the water sector – in particular the rural water sector. The initial phase of reform culminated in the passage of the *Water Management Act 2000* (WMA), which among other things:

- separates land rights from the right to access water
- provides statutory recognition of environmental water needs and priority over extractive use
- enables statutory plans for sharing water between the environment and water uses, and between different categories of water use
- establishes compensatable rights associated with water access licences, subject to water sharing plans
- establishes provisions for water for the environment, in the form of planned environmental water provisions, and ‘adaptive environmental water’ conditions on licences
- establishes a comprehensive system for trading of water access licences and their associated water allocations
- enshrines the participation of stakeholders in water resource management.

In accordance with the WMA, water sharing plans were developed and commenced for the majority of the State’s major inland regulated rivers, various coastal and inland unregulated rivers, and two coastal groundwater systems.

On 25 June 2004, the NSW Government signed the Intergovernmental Agreement on a National Water Initiative, in which the states and territories agreed, among other things, to address over-allocation and overuse of water resources where this exists, and establish ‘clear pathways to return all systems to environmentally sustainable levels of extraction’. In doing so, NSW agreed to the:

... consideration of all available options for water recovery, including: investment in more efficient water infrastructure; purchase of water on the market, by tender or other market-based mechanisms; investment in more efficient water management practices, including measurement, and investment in behavioural change to reduce urban water consumption.

Another important aspect of the National Water Initiative was a commitment by governments to identify, protect and manage high conservation value rivers and their dependent aquatic ecosystems. These principles are now embedded in the national approach to water management established by the *Commonwealth Water Act 2007*, and by the formation of the Murray–Darling Basin Authority in 2008.

In addition to the national and state reform initiatives, the Australian Government is a Contracting Party to the Convention on Wetlands of International Importance (Ramsar,

Iran, 1971), the broad aim of which is to halt the worldwide loss of wetlands and conserve those that remain through wise use and management. Contracting Parties make a commitment to protecting the ecological character of listed sites. This means ensuring that activities that might affect wetlands do not lead to the loss of biodiversity or diminish the many ecological, hydrologic, cultural or social values of wetlands. In NSW, there are 12 Ramsar sites across a range of wetland types and tenures. These include sites within the Macquarie Marshes, the Gwydir Wetlands and Narran Lakes. While some of these sites are within national parks and nature reserves, their ecological character is threatened by water extractions from the rivers that support them.

The Australian Government has also signed agreements with China (CAMBA), Japan (JAMBA) and South Korea (ROKAMBA) to assist in the conservation of migratory birds, mostly waders that travel between these countries and Australia. The major wetland complexes in NSW, in particular the Ramsar-listed wetlands, are critical habitats for migratory birds, and the preservation of these areas supports the achievement of obligations under those agreements.

3.2 Existing major riverine and wetland initiatives

In January 2007, the Australian Government announced a \$10 billion commitment to improve water efficiency and address over-allocation of water in rural Australia. In May 2008, the newly elected Federal Labor government announced the **Water for the Future** program, which enhances the former commitment. The program includes approximately \$5.8 billion for modernising irrigation infrastructure to achieve on- and off-farm efficiency gains, and improve metering of extractions and river operations and storage management, and \$3.1 billion for industry adjustment, including purchase of water entitlements. The purchase of water under that program began in March 2008.

The **Australian Government Water Fund** (AGWF) is a \$2 billion Australian Government implementation fund for the reform of water management under the National Water Initiative that supports investment in water infrastructure, improved water management and better practices in the stewardship of Australia's scarce water resources. The fund supports practical on-ground water projects that improve Australia's water efficiency and environmental outcomes. Those projects that help to achieve the objectives, outcomes and actions of the National Water Initiative are eligible to receive assistance from the fund. Water recovery for the environment, and other measures to support the achievement of environmental outcomes from water use, are eligible for funding under the AGWF.

Water for Rivers was established by the NSW, Victorian and Australian governments in 2002 to acquire water for the Snowy and Murray Rivers to enable additional environmental flows of 212 gegalitres and 70 gegalitres, respectively, by June 2012. Water for Rivers investigates, funds and commissions water efficiency projects and buys water entitlements from willing sellers in the Murray River upstream of the South Australian border, the Murrumbidgee River system and the Goulburn River system.

The **Living Murray** initiative (www.environment.gov.au/water/policy-programs/lmi/index.html) was established in 2002 by the Murray–Darling Basin Ministerial Council:

... in response to substantial evidence that the health of the Murray River system was in decline ... threatening the Basin's industries, communities, and natural and cultural values.

On 25 June 2004, the Premiers of NSW, Victoria and South Australia, the Chief Minister of the Australian Capital Territory, and the Prime Minister signed the Intergovernmental agreement on addressing water over-allocation and achieving environmental objectives in the Murray–Darling Basin. The agreement commits \$700 million over five years to address water over-allocation in the Murray–Darling Basin. The initial focus is on recovering water through works and market acquisition to achieve specific environmental outcomes for six significant ecological assets along the Murray River.

The NSW **Wetland Recovery Plan** is

'...a suite of projects developed to deliver long-term and permanent benefits to ecologically significant wetlands through water efficiency projects, water buy-back, and other projects to improve wetland management in the Macquarie Marshes and Gwydir Wetlands'.

The NSW Government has committed \$13 million to the program, which has been matched by the Australian Government through the AGWF. The \$26 million program consists of \$10 million for the purchase of water licences in the Gwydir and Macquarie valleys, and \$16 million for ecological characterisation, management planning and environmental and other works.

The Hawkesbury–Nepean River Recovery Program is funded up to \$77.4 million from the Australian Government's Water Smart Australia fund. This program aims to improve river health below the major water supply dams by increasing the water available for environmental flows in the river and reducing nutrient loads. During its implementation, the project also seeks to engage and involve landholders within the catchment with all levels of government.

The RiverBank section of DECCW will implement a \$5.35 million licence purchase project as a component of this program that aims to:

- stimulate the use of water trading in the water source once the water sharing plan is gazetted
- gauge the market value of water in the water source and, over time, deepen the market
- purchase an estimated 3 gigalitres of water entitlement for the environment which will reduce existing diversions for irrigation.

3.3 The RiverBank niche

The NSW Government recognises that the initial water sharing plans developed under the WMA and begun in 2004 were a first step in addressing sustainable outcomes for inland, regulated rivers. It also recognises that further opportunities for water recovery through infrastructure investment are being pursued through other initiatives and are typically more expensive per unit recovered than the market recovery of water. Where such projects are cost-effective relative to the purchase of

water, landholders typically self-finance the savings measures, and retain the savings, for example, on-farm or within-irrigation-area savings. Such projects typically require a significant development and implementation timeframe and carry a higher level of risk in relation to achieving completion than market purchase, but would be expected to deliver ongoing water efficiency benefits past the point of water extraction.

The NSW Government established RiverBank to buy water on a commercial basis in existing water markets and to manage it for environmental benefit in recognition of these factors, and of growing public awareness of the need to address environmental degradation and put in place measures to adjust to climate change. RiverBank's initial focus is regulated inland rivers with important wetland systems that are currently affected by flow regulation. This builds on the outcomes achieved by the initial water sharing plans, contributes to addressing environmentally sustainable levels of extraction over time, and complements other measures and programs being pursued to achieve healthy and productive river and wetland systems.

The NSW State Plan confirms the aim of RiverBank as a key vision for the State. The State Plan aims, by 2015, for an improvement in the condition of riverine ecosystems, and an improvement in the condition of important wetlands, and maintenance of the extent of those wetlands. It specifically supports water licence buy-back and improved management to restore the Macquarie Marshes and Gwydir Wetlands, and using funds from the RiverBank program to continue buying water on the open market for wetlands and river ecosystems.

4. RiverBank services and areas of operation

4.1 RiverBank services

RiverBank provides the following environmental water management services:

- purchasing water access licences on behalf of the NSW Government, and using and managing them for environmental benefit
 - The NSW Government retains ownership of the acquired licences, managing them on behalf of the community.
- purchasing water access licences with funds provided by other entities, and using and managing them for environmental benefit
 - These funding entities may include the Australian or local Governments; non-government entities such as corporations, companies, environmental and other not-for profit organisations, or individuals. The NSW Government retains ownership of the acquired licences, managing them on behalf of the community, with the entities having simply donated or granted the funds.
- accepting water access licences donated or bequeathed by existing licence holders, and using and managing them for environmental benefit
 - The State Government assumes ownership of the licences, managing them on behalf of the community.
- using and managing water access licences for environmental benefit on behalf of licence holders
 - RiverBank can use and manage licences held by any third party (including CMAs). It may be the case that a government or non-government entity or individual wishes to retain ownership of licences they have acquired or currently own. In this case, RiverBank provides a means by which those licences can be managed on a day-to-day basis, consistent with management plans for each target valley.
- using annual 'account water' donated or sold by licence holders
 - In some circumstances, or in some years, licence holders may be happy for RiverBank to use some or all of their water on valley environmental assets.
- advice to governments, both State and Commonwealth, on environmental water management, as required
- advice to CMAs and non-government organisations on watering of environmental assets.
 - These entities may wish to manage their own environmental water. RiverBank can provide advice on watering opportunities, and work with these entities to create synergies between their activities and those of RiverBank.

4.2 Strategic alliances

Strong links between RiverBank and CMAs are being formed, particularly in relation to the development of valley-scale environmental water management plans, which will give strategic direction to environmental water use at a valley or major wetland scale. RiverBank works closely with the relevant CMAs and identifies linkages with catchment action plans developed by CMAs and its own environmental water use planning.

RiverBank's relationships with environmental water advisory groups established under the water sharing plans are critical, and DECCW is now responsible for administering these groups. The opportunities for RiverBank water to significantly improve the efficacy of existing 'planned' environmental water are being fully explored, and these water advisory groups will provide advice to DECCW on the use of all available environmental water, including that held by RiverBank, to inform the development of annual watering plans.

National park managers are key partners in achieving environmental and cultural benefits from the application of RiverBank water to parks and reserves. Forests NSW also manages important wetland areas, including riparian forests, which may benefit from the application of RiverBank and other environmental water. RiverBank works closely with these managers to develop its watering strategies and priorities.

Similarly, significant environmental outcomes can be achieved through partnerships between RiverBank and private landholders with on-farm environmental assets. In each valley, RiverBank seeks to identify and collaborate with willing landholders.

The relationship between RiverBank and water brokers and agents is being actively fostered. Agents and brokers provide important water price and availability signals for RiverBank, and their local knowledge may facilitate dealings in thin markets. Likewise, RiverBank, as a significant player in the water market, provides further depth to existing markets.

4.3 Areas of operation

In approving the initial \$105 million funding for the RiverBank program, the NSW Government identified the Macquarie Marshes, the Gwydir Wetlands, the Lowbidgee Wetlands and Narran Lakes as initial areas of focus for restoration and protection. It also recognised that RiverBank may purchase water for other wetlands and rivers where significant conservation values are at risk, where significant market opportunities arise, or the potential to collaborate with others exists. RiverBank has extended its area of interest to include environmental assets in the Lachlan Valley, and, under separate funding arrangements, the Hawkesbury–Nepean river system. It may consider opportunities for future investment in other high conservation value coastal and inland unregulated river systems.

RiverBank program funds are not invested within the Murray or lower Darling rivers, recognising that other intergovernmental initiatives are pursuing market-based environmental water recovery for these water sources.

The selection of target water sources and wetlands is based on their conservation and cultural significance, and the magnitude of the water supply risks currently posed to their values. Other factors taken into account include:

- the potential for strategic alliances with community groups and other government initiatives to ensure the ecological benefits of environmental water use are maximised and sustainable
- opportunities for enhancing the current environmental water rules with additional flows
- the current state of knowledge about the water requirements of threatened environmental and cultural values
- tenure of the wetlands or other sites
- statutory security of any rights that may be purchased
- the risk that any benefits accrued will be diminished by other influences outside the control of RiverBank
- river operations constraints
- inter-jurisdictional impediments.

Given the above, the acquisition and use of water licences is initially being pursued in the water sources discussed below, all of which (except the Narran) have water sharing plans in place, establishing secure and predictable rights for water users and the environment until 2014.

The Macquarie Regulated River: The Macquarie Marshes (originally covering approximately 200,000 hectares) are listed on both the National Heritage Register (of the Australian Heritage Commission) and the National Trust Register (as a Landscape Conservation Area). The Macquarie Marshes Nature Reserve, gazetted in 1900, covers approximately 20,000 hectares of the marshes area, and was listed in 1986 as a Ramsar wetland of international significance under the Ramsar Convention. The Wilgara Wetland, within the marshes, is one of five privately owned Ramsar sites in NSW.

The ecology of the Macquarie system has been the subject of some research, and the effects of altered flows into the marshes are very apparent. The extent of river red gum woodland, water couch grassland and reed beds has declined over recent decades and large areas of river red gum are currently showing signs of severe stress. Without additional water this regression will continue. The Macquarie Marshes are recognised as among the most significant sites for waterbird breeding in inland NSW, making them critical in terms of meeting obligations under the CAMBA and JAMBA agreements. Waterbird numbers have dropped dramatically in recent decades. In 2008 the marshes hosted an egret breeding colony – their first significant waterbird breeding event since 2000.

The Gwydir Regulated River: Two major streams of the Gwydir River, the Gingham Watercourse and the Lower Gwydir Watercourse, support wetlands listed under the Ramsar Convention as wetlands of international importance, and are also critical for achieving obligations under CAMBA, JAMBA and ROKAMBA. The Ramsar listing protects 823 hectares of wetland and consists of four land parcels managed by private landholders, within a total original area of more than 100,000 hectares of

floodplain and wetland communities. The Ramsar sites are representative of the significant wetland values of the remaining Gwydir Wetland complex, which is threatened by expanding cotton development.

The Gwydir Wetlands are a significant component of the few inland wetland systems found within NSW and contain one of the largest remaining stands of water couch and marsh club-rush. The wetlands have provided breeding and feeding grounds for large numbers of colonial water bird species (around 500,000 in 1998) and a habitat for many threatened species, as well as continuing to support a viable grazing industry.

The Murrumbidgee Regulated River: Within the Murrumbidgee, the mid-Murrumbidgee Wetlands and the Lowbidgee Wetlands are listed as wetlands of national significance, and the Fivebough and Tuckerbill wetlands are Ramsar-listed. A water sharing plan is in place for the regulated section of the Murrumbidgee River. The Lowbidgee Flood Control and Irrigation District receives water from the regulated Murrumbidgee River in accordance with rules specified in the Murrumbidgee River Water Sharing Plan. A water sharing plan for the Lowbidgee area is being developed to identify environmental water needs for the floodplain and define environmental and consumptive water access rights.

Water purchased by RiverBank within the Murrumbidgee Regulated River water source will predominantly be managed for diversion to the Lowbidgee floodplain for the benefit of wetlands on the floodplain. Within the Lowbidgee floodplain, Yanga National Park contains important river red gum, lignum and other wetland habitats of high conservation value, although significant areas of wetland also remain in private ownership.

The Living Murray and Water for Rivers initiatives are also targeting the Murrumbidgee River for water recovery for the benefit of the Murray and Snowy rivers. Strategies are in place within the NSW Government to ensure program objectives are aligned.

The Narran River and Lakes: The Narran Lakes are at the end of the Narran River and contain areas of both leasehold land and nature reserve. The lakes area within the nature reserve was listed as a Ramsar wetland in 1999. The Narran River is unregulated and the lakes receive nearly all of their inflow from the Queensland Condamine–Balonne system. Continuing large-scale harvesting of floodwaters on the Lower Balonne floodplain has substantially reduced flow to the Narran Lakes. Little active extraction occurs from the Narran River within NSW, so Queensland Condamine–Balonne water access rights need to be secured to achieve environmental benefits for the Narran Lakes.

The Queensland Government has gazetted the Condamine and Balonne water resource plan under the *Queensland Water Act 2000*. However, NSW considers that the currently gazetted plan does not adequately address the environmental water needs of the Narran Lakes, and that the ecological condition of the lakes will decline unless over-allocation and overuse of water in the Queensland Condamine–Balonne system is addressed. Queensland has yet to complete its statutory processes to commence the water resource plan, and until that happens, water rights cannot be acquired by RiverBank for use in NSW.

The Lachlan Regulated River: Within the Lachlan Valley, the terminal Great Cumbung Swamp, and several wetlands in the mid and lower Lachlan are listed as wetlands of national significance and its wetland values are well recognised. In addition, DECCW already holds a small number of water licences in the Lachlan that were acquired over time as a consequence of property acquisition for conservation reserves. The purchase of additional licences through RiverBank considerably enhances opportunities to achieve environmental outcomes from these licences.

The Namoi Regulated River: An extensive network of floodplain and riverine wetlands exist within the Namoi Valley. The ecology of the Namoi system is comparatively well known. However, there remains a considerable amount of information to be collected or assessed in regard to wetland location, classification, and biological and hydrological features and threats.

The Hawkesbury–Nepean River System*: The Hawkesbury–Nepean River is an iconic waterway and an important ecological and community asset. The river supplies water to Sydney's 4.3 million people as well as supplying agricultural production. This, combined with increased pressures from land-use change for urban development, means the river has been suffering significant stress.

River regulation and elevated nutrient levels in the water have had serious impacts on the river's health. These two elements contribute to algal blooms, excessive weed growth and reduced numbers of native fish, which in turn impact negatively on fisheries, tourism, agricultural production and biodiversity conservation.

Discharges from sewage treatment plants and from sources such as agricultural runoff and urban stormwater add nutrients to the river, also increasing the risk of algal blooms. Water being stored in dams and weirs and direct extraction of water below the dams for agricultural production reduces the amount of water in the river.

The recent drought has added to and emphasised these problems. (See [*http://www.environment.gov.au/water/policy-programs/water-smart/projects/nsw27.html](http://www.environment.gov.au/water/policy-programs/water-smart/projects/nsw27.html))

The recovery project funded by the Australian Government's Water Smart Australia Fund aims to improve water quality and volume within the river channel for improved environmental outcomes.

4.4 Aboriginal cultural considerations

In general terms, it is important to recognise that the above river systems and their associated wetlands have substantial significance to Aboriginal people. Because Aboriginal people's experiences and relationships with their land changed drastically after European settlement, the values associated with wetlands can be broadly categorised as either traditional (pre-contact) or historical/contemporary (post-contact). Some aspects of traditional Aboriginal society continued after European occupation, albeit adapted to reflect contemporary circumstances, and there is considerable overlap between these categories. In both, however, the fundamental relationship of Aboriginal people with their Country remains central.

Aboriginal people's interests in wetlands include:

- links to traditional stories, beliefs and practices, including as sources of food, places of ceremony and as part of creation beliefs
- use in the present or recent past, including as places of employment and refuge
- importance to cultural identity, including as places for meeting, teaching and recreation.

As a manager of environmental water licences, DECCW seeks to improve its understanding of the relationships between environmental and Aboriginal cultural values for rivers and wetlands in order to enhance Aboriginal cultural values through environmental water use where possible.

5. Financing RiverBank

There are two major investors in RiverBank — the NSW and Australian governments. The NSW Government is providing \$105 million to RiverBank over the five years from 2006–07 to 2010–11 through the Environmental Trust. The Australian Government is providing a further \$45.87 million from the Australian Government Water Fund over the three years from 2007–08 to 2009–10 for licence acquisition through RiverBank. It is also providing a further \$25.9 million to support other NSW Government activities that will further the objectives and outputs of RiverBank, including activities that:

- improve the knowledge base and capacity of water managers, to inform adaptive management processes
- demonstrate the ecological outcomes from effective environmental flow management
- improve the release and delivery of flows for environmental benefit
- improve land and water management practices to support environmental watering objectives on privately owned land.

The Australian Government is also funding the Hawkesbury Nepean River Recovery Project to a total of \$77.4 million, of which \$5.35 million is allocated to a water licence purchase project to be implemented by DECCW consistently with this Business Plan.

RiverBank may also encourage investment by the non-government sector. Potential investors include:

- environmental organisations
- philanthropic entities and individuals
- corporations whose social responsibility interests align with RiverBank’s objectives.

Riverbank’s capacity can also be increased through donations or bequests of access licences or allocations. Potential participants include existing licence holders:

- with water rights or allocations excess to requirements
- wishing to downsize or leave the industry
- whose objectives align with RiverBank’s environmental water management objectives, or
- whose operations are winding up (for example, mining operations).

6. Licence acquisition and trading

6.1 Investment targets for water purchase

The indicative investment targets for purchasing water products using both NSW and Australian government funding, adjusted for current rolling investment levels, are set out in Table 1. These targets are modified, with expenditure now re-profiled over a six-year funding period.

Table 1: Indicative investment targets for RiverBank

Financial year	Water investment target (\$ million)
2006–07	\$16.6 million
2007–08	\$44.4 million
2008–09	\$47.0 million
2009–10	\$21.8 million
2010–11	\$5.6 million
2011–12	\$6.8 million
Total	\$142.2 million

In addition to the above investment, the Pipeline NSW program will access \$3.5 million over the four years to 2011–12 through the Environmental Trust for implementing works to improve the efficiency of rural stock water distribution systems. A further \$5.3 million over five years is provided for program administration to June 2011, including payment of relevant licence charges and monitoring and evaluation costs. In addition to the above, a further \$5.27 million of Australian Government funding is allocated to Hawkesbury Nepean water licence purchases in 2010–11.

6.2 Target water products

RiverBank is focusing its initial acquisition activities on three main tradeable water 'products' — high security, general security and supplementary water access licences. Some unregulated (*Water Act 1912*) licences may also be purchased where a strategic benefit can be demonstrated.

High security licences have a secure annual volume in all but extreme drought years, and the frequency, timing and duration of delivery can be controlled by the licence holder. The volume of water available for general security licences varies with seasonal conditions and dam inflows, and allocations generally only begin to accrue to the licences when high security and other higher priority uses (for example, town water and stock and domestic allocations) are fully satisfied. Again, however, once the allocation accrues to the licence, the frequency, timing and duration of water delivery can be controlled by the licence holder. Water allocation accounting rules also allow flexibility to varying degrees in different valleys to carry forward unused general security account water from year to year.

Supplementary access has the lowest priority of access under the WMA. The magnitude, frequency, timing and duration of access under supplementary water access licences are all variable, subject to event-specific declarations. The entitlement simply provides an opportunity for access to water if certain conditions are present. The extent of opportunity varies from system to system. RiverBank buying supplementary licences may increase flows to wetlands by reducing the potential extraction of unregulated high flows, but this needs to be balanced against the risk that supplementary access may be reduced over time if access by higher priority licence categories increases or due to the imposition of a new Sustainable Diversion Limit under the Murray–Darling Basin Plan.

RiverBank may invest in the full suite of tradeable licences in the target valleys through the purchase of active licences or the transfer of entitlement onto licences already held. The mix of licences ultimately acquired in a particular valley is a function of market conditions, effective water portfolio management and the environmental flows needed to achieve the required ecological objectives.

DECCW will remain open to the potential to create other water products where they yield a net environmental benefit, such as term transfer of water entitlements under specified environmental circumstances. Such arrangements must demonstrate the provision of long-term reliable water access at a time that suits ecological objectives, and at a price that is competitive with water licence acquisition.

6.3 Water allocation trading

Water allocations in the accounts of RiverBank licences may be assigned (traded) from time to time to provide sufficient revenue to meet the statutory charges associated with the licences, and any taxes and service fees associated with licence transactions.

In addition, water allocations in the accounts of RiverBank licences may be traded from time to time when:

- conditions mean that the use of water within the given year is unlikely to achieve more than marginal environmental improvements at targeted assets
- the water cannot be carried forward into the next year in the water allocation account
- current prices for traded water allocation represent a significant market opportunity and there is a net environmental benefit from the trade.

In addition to meeting statutory charges, the proceeds of any trade of water allocations from RiverBank licences may be used to:

- buy additional water access entitlements
- buy water allocations (temporary transfers) from time to time
- fund term transfer (lease) arrangements to access entitlements for a defined period
- fund capital works (and maintenance) to improve the efficacy of purchased entitlements
- fund the acquisition of other water access products as they emerge in the market
- fund RiverBank operational costs beyond the initial five-year funding period, including all statutory fees and charges and conveyancing costs.

As discussed above, RiverBank may purchase water allocations (temporary transfers) from the proceeds of any previous sale of RiverBank water allocations. Water allocations will not, however, be bought directly from government funds intended for water entitlement purchase, or funds from any other entities (unless explicitly permitted by the entity). While water allocations may be valuable to satisfy environmental watering requirements in a particular year, once used, they are exhausted, and have no ongoing value. As a general rule, RiverBank will only use its capital funding to secure water products that retain their value in the longer term, thereby protecting community investment in environmental outcomes in perpetuity.

6.4 Mode of acquisition

The main means to acquire water products is to buy them through the existing water market. This may occur via:

- formalised registration of expressions of interest in sale of entitlements
- direct negotiations between RiverBank and willing sellers
- established water agents or brokers, who facilitate the sale or purchase of water entitlements and allocations; they may match sellers with buyers themselves, or through a water trading platform
- online water trading platforms that provide a marketplace where willing buyers and sellers identify each other or are otherwise matched.

RiverBank formally calls for expressions of interest in the sale of particular water products in each of the target valleys on an ongoing basis until annual investment targets in each valley are reached. The use of online trading platforms is considered, particularly where there is limited trading of specific, targeted products. Expressions of interest received are treated confidentially, and interested parties are asked to specify the product and volume they may be willing to sell, and to indicate the price they would accept. RiverBank assesses expressions of interest against its acquisition and water use priorities and the specified sale price, and against other criteria, which may include any constraints on trade specified in a water sharing plan.

Property experts at the NSW Crown Solicitor's Office are responsible for the conveyancing of water access licences, so that all the procedural and due diligence requirements of the *Water Management Act 2000* are performed by qualified legal professionals.

6.5 Pricing strategy

The value of the various categories of water licences and products varies between valleys and individuals, and is generally a function of the reliability of water access, expected future return from the use of water, comparable expected returns from other alternative investments, risk associated with the expected returns, and other relevant characteristics such as market liquidity. In its charter of acquiring and managing water for environmental benefit, DECCW may value water products differently from other market participants, reflecting environmental values and the different risks associated with achievement or non-achievement of its program objectives.

In general, RiverBank purchases licences at a price consistent with recent or historic market activity or benchmarks, initially derived from an independent assessment of

water markets undertaken for RiverBank. Where an acquisition is proposed at a price more than 15 per cent higher than price benchmarks reported to the Environmental Trust, RiverBank seeks the approval of the Chair of the Environmental Trust, detailing current market and other circumstances, including the value of the licence to RiverBank in meeting its ecological objectives.

7. Using RiverBank water

7.1 Target environmental assets

Table 2 shows the environmental assets within each valley where RiverBank will target the use of its acquired licences. This initial selection of assets reflects the relatively small amount of water that will be available to RiverBank over its first few years of operation. It also focuses on assets that are either already being actively managed by government for environmental and cultural benefit, are in public ownership, or are owned by private landholders who have a willingness to be involved in managing them for improved environmental outcomes.

Table 2: Initial target environmental assets by valley

Water source	Target environmental assets
Macquarie Regulated River	<ul style="list-style-type: none"> • Vegetation communities in the Macquarie Marshes Nature Reserve • Private Ramsar areas • Smaller wetlands on the Macquarie river system upstream of the Macquarie Marshes
Gwydir Regulated River	<ul style="list-style-type: none"> • Disconnected and discrete wetlands where management arrangements can be negotiated with landholders and managers • Ramsar sites within the wetland system to which water can be delivered • In-stream environmental health
Murrumbidgee Regulated River	<ul style="list-style-type: none"> • Semi-permanent wetland areas within Yanga National Park, including areas of southern bell frog habitat • River red gum forests and woodlands within Yanga National Park • Significant bird breeding locations within Yanga National Park and on the Nimmie–Caira system
Lachlan Regulated River	<ul style="list-style-type: none"> • Lake Ita (within Kalyarr State Conservation Area) • Murrumbidgee Swamp on the Merrimajeel Creek • Wetlands on the property Booligal Station • Small wetland assets on private land in the mid Lachlan creeks (Wallaroi, Wallamundry, Bumbergan, Torriganny)
Hawkesbury–Nepean river system	<ul style="list-style-type: none"> • In-stream environmental health

7.2 Water use plans

Statutory approvals are required under the WMA to 'take and use' the water associated with licences acquired by RiverBank. In addition, 'adaptive environmental water' conditions for the acquired licences and associated implementation plans need to be approved and placed on the licences by the Minister for Water. The water use

plans provide the basis for these approvals and conditions for all water access licences acquired and managed by DECCW in a water source.

DECCW prepares water use plans for each target water source in consultation with the NSW Office of Water (the water resource regulator), State Water Corporation (which delivers the water), and the relevant landholders (public or private). A water use plan for a valley ensures the way RiverBank uses water in that valley is consistent with the objectives and provisions of the relevant statutory water sharing plans. It also specifies:

- the specific environmental assets to be watered, and their location
- conditions of water use, to minimise third party impacts
- the rules and conditions for delivering and accounting for the water delivered to assets
- the rules and conditions regarding measurement of water used under licences.

7.3 Environmental water management plans

The water use plans described set the statutory constraints and accountability mechanisms for the use of environmental water licences in a valley. A Murray–Darling Basin environmental watering plan, and NSW valley–scale environmental water plans will provide the how, why and when details for achieving environmental water objectives from all sources of environmental water (water sharing plans and water licences held by the NSW and Australian governments). This recognises that the portfolio of water products may take time to build, and may change its nature over time, and therefore the watering activities may also change with time. Management plans for environmental water are, therefore, documents that will need to change in response to changes in water availability, the variable water requirements of assets, and improvements in our understanding of ecological processes and responses to river flow and asset watering regimes. These changes will typically be undertaken in consultation with environmental water advisory groups.

Collectively, plans for environmental water will encompass:

- a description of target environmental assets and their associated cultural values within the area
- a brief assessment of the environmental and cultural baselines for the assets
- current environmental water rules under statutory water sharing plans and other initiatives
- ecological and cultural objectives and targets for the assets and linkages to catchment action plans developed by CMAs
- water (magnitude, frequency, timing and duration) needed to achieve the ecological and cultural objectives
- watering priorities across the area (between assets)
- principles for the management of water products, including delivery triggers and volumes
- an assessment of likelihood of meeting conditions to trigger water delivery
- estimates of water availability from year to year — volumes and locations
- strategies for trading water allocations to achieve environmental objectives

- identification of any legal (including land tenure), administrative or operational constraints and risks to implementing the water use plan, and actions to incorporate or minimise these
- potential measures (such as works) to optimise the effectiveness of water delivered to assets
- monitoring, evaluation, reporting and review arrangements
- adaptive management measures
- ongoing roles and responsibilities, including consultation.

The plans will be prepared as a partnership with CMAs and NOW and in consultation with relevant landholders and other interested parties. In the Gwydir and Macquarie valleys, environmental water management and other plans are being developed as an outcome of the **NSW Wetland Recovery Plan** funded by the NSW and Australian governments. DECCW is working with existing processes, with a view to aligning environmental water plans with the basin-wide environmental watering plan to be prepared by the Murray–Darling Basin Authority.

7.4 Annual watering plans

DECCW prepares annual watering plans, consistent with valley-scale plans (where available) in consultation with environmental water advisory groups before the beginning of each water year. These plans describe the types of watering activities that can be used across the water source under different scenarios of water availability and different climate conditions. They include

- a summary of the previous year's achievements
- a brief description of the current condition of identified ecological assets
- details of the volumes of environmental water held in accounts at beginning of the water year (i.e. what's available)
- a description of the likely environmental watering scenarios, including climatic forecasts, across the range of expected environmental water volumes
- specific objectives of environmental water use for the coming water year.

In addition, annual watering plans identify likely risks and the strategies that will be implemented to manage them, as well as outlining monitoring tasks and responsibilities.

7.5 Accounting for environmental water use

Accurate, transparent and appropriate water resource accounting is fundamental to ensuring confidence in the way that RiverBank water is managed and reported on.

In accordance with the WMA's provisions, and for the purposes of auditing compliance with the long-term extraction limit under the relevant water sharing plan, the taking of water under an access licence (or licences) held by RiverBank is accounted for as extraction. This ensures that when RiverBank buys a licence and uses water in a wetland, for example, other water users cannot collectively increase their diversions up to the existing diversion limit of the water sharing plan.

For the purpose of RiverBank's environmental outputs accounting, the actual volumes taken at or delivered to each target asset are accounted for and reported on an annual

basis. DECCW will work with its stakeholders to develop annual watering plans that specify the objectives and opportunities in each valley, and provide a basis for accountability in water delivery.

8. Governance arrangements

RiverBank is administered by the Water for the Environment Branch of DECCW. NSW Government funds are granted to the DECCW RiverBank program annually via the Environmental Trust, a body corporate constituted in 1998 by the *Environmental Trust Act (NSW)* to administer funding arrangements for environmental restoration, rehabilitation, research and education. A specific statutory object of the Environmental Trust is:

... to fund the purchase of water entitlements for the purposes of increasing environmental flows for the State's rivers and restoring or rehabilitating major wetland.

The Environmental Trust has five members: the Minister for Climate Change and the Environment (Chair), the Secretary of the Treasury, the Director General of DECCW, a nominee of the NSW Nature Conservation Council, and a nominee of the Local Government and Shires Associations of NSW.

For each financial year, the RiverBank unit within DECCW submits its annual Business Plan to the Environmental Trust. The Environmental Trust assesses the Business Plan for consistency with the RiverBank Charter (Appendix B), after receiving advice from a RiverBank subcommittee on the priorities and mechanisms for water recovery and the Business Plan's practicality and overall worthiness.

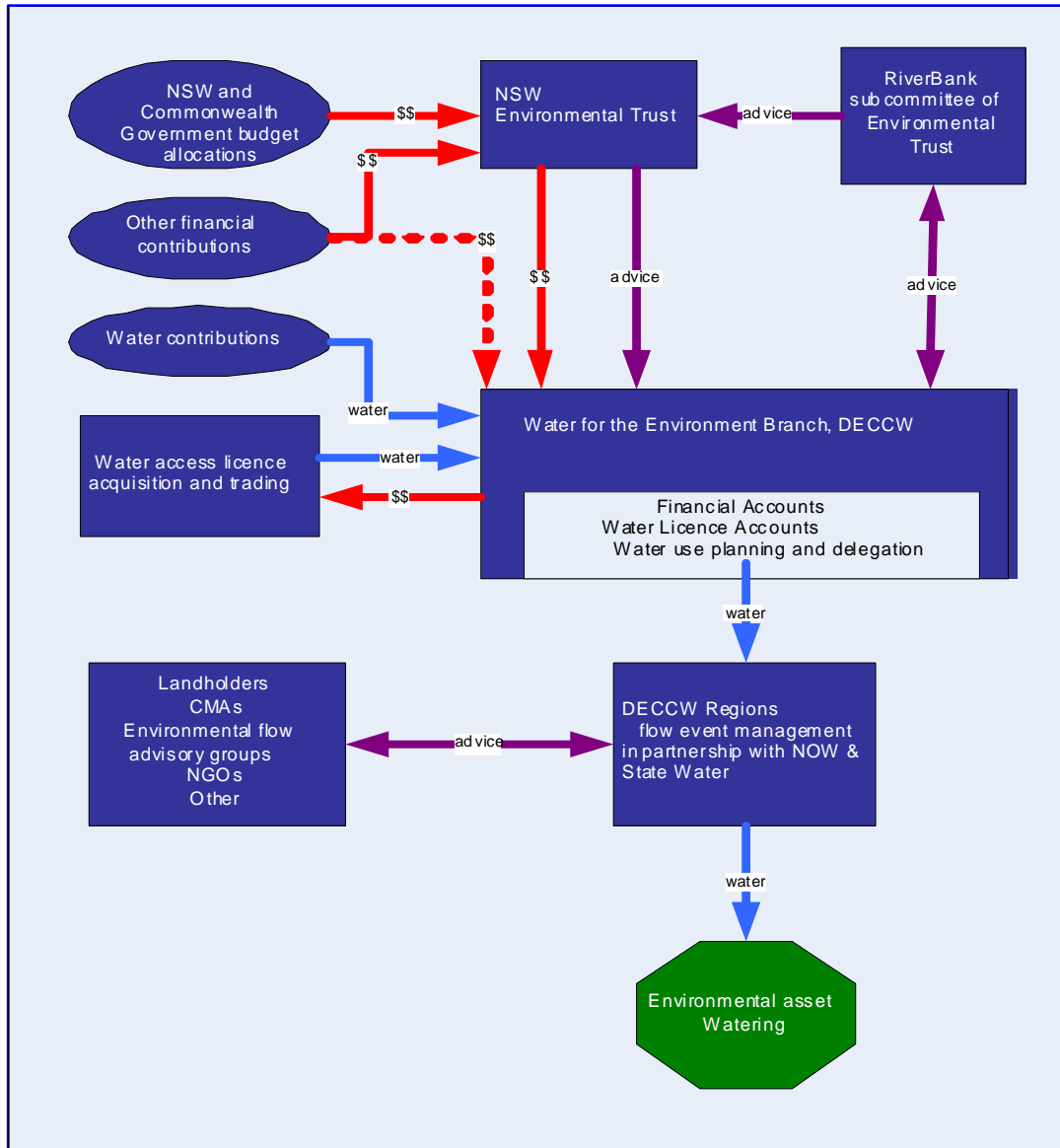
The RiverBank subcommittee of the Environmental Trust is chaired by the Director General of DECCW and its members are independent experts in the fields of aquatic and wetland ecology, environmental water management and water market operations, as well as representatives of the relevant government agencies.

Funding provided by government or non-government entities other than the NSW Government may be administered through identifiable business accounts within DECCW.

Water access licences acquired under the RiverBank program are held by the Minister for Climate Change and the Environment and administered by the Director General of DECCW on the Minister's behalf. The Water for the Environment Branch is responsible for administration of the licences within DECCW, including the development of plans for their use (in cooperation with regional DECCW experts), and meeting all the WMA's licensing and approval requirements, including the payment of any statutory charges.

Day-to-day management and advice on environmental water requirements is delegated to specialist regional officers within DECCW involved in regional environmental flow decision-making processes. A principal responsibility of regional officers is to liaise with other entities that have environmental water responsibilities in the valley to ensure that opportunities for cooperation are created and maintained, and the benefits of all environmental water management actions are maximised. Such entities include CMAs, the State Water Corporation, environmental flow advisory groups established under water sharing plans, and other community-based interests or groups. Accountability for environmental water use decisions rests with the Director, Water for the Environment under delegation from the Director General and Minister.

Figure 1: RiverBank program structure and governance



9. Marketing and communications

RiverBank's marketing and communication objectives are to:

- ensure that individuals and groups that are likely to be affected, that can benefit from, or who are materially interested in RiverBank's activities have an adequate opportunity to participate
- increase awareness and understanding of, and support for, the RiverBank program, including understanding the temporal uncertainty associated with river flows and opportunities for watering of environmental assets
- foster public confidence in the way environmental water is recovered, applied and accounted for.

The main audiences for RiverBank's marketing activities include:

- existing licence holders who may wish to sell or donate all or part of their licence or water allocation, or to enter into other arrangements whereby RiverBank has access to that water
- existing landholders who may wish to enter into agreements with RiverBank to water significant environmental assets on their land
- catchment management authorities
- government and non-government funding entities, including national, state, regional and local environmental interests, companies and corporations, philanthropic organisations, and individuals.

The main audiences for RiverBank's communication activities include:

- catchment management authorities
- community groups, particularly in the target valleys
- Aboriginal groups
- NSW Ramsar Managers Network
- NSW Irrigators' Council, irrigation commodity groups (e.g. Ricegrowers, Cotton Australia and so forth)
- National Water Commission, Murray-Darling Basin Authority, NSW Natural Resources Advisory Council and the Natural Resources Commission of NSW
- Australian Government Department of the Environment, Water, Heritage and the Arts (DEWHA).

Activities to achieve the stated objectives fall into the following three categories.

- basic information on and marketing of the RiverBank program
- communicating the opportunities to participate, and for collaboration
- communicating the outputs and outcomes of the program.

10. Monitoring, reporting, and adapting

Determining the significance of RiverBank's contribution to the rehabilitation and protection of stressed rivers and iconic wetlands in NSW requires an ongoing commitment to:

1. measure and account for delivery of water to ecological targets
2. determine ecological and other outcomes directly related to the application of the purchased water at the targets
3. improve future management actions so that the contribution of RiverBank water is optimised.

RiverBank must also be accountable to the public and investors, and, as such, financial monitoring and reporting is an essential activity for the program.

10.1 Program performance monitoring and evaluation

At the program level, monitoring and evaluation is aimed at measuring the RiverBank program's progress towards meeting its outcomes, objectives and outputs. At this level, monitoring focuses on the following at both a valley scale, and from a broader state-wide perspective:

- **Water access licence volumes acquired for environmental and cultural benefit, water used and water sold.** Water licences acquired by RiverBank are accounted against volumetric acquisition targets in each of the target valleys, and against overall program targets. A register of RiverBank licences is kept, and includes the following information:
 - a. water source
 - b. licence category and volume, or contract type
 - c. estimated average annual volume available under the licence
 - d. WMA dealings in respect of the licence.

The register is related to information about water allocations, water trades, water use decisions, and environmental outcomes.

- **The condition of wetlands, riverine ecosystems and threatened species.** This uses, or builds on where necessary, the Sustainable Rivers Audit, the Aerial Waterbird Survey of Eastern Australia and other programs under the Natural Resources Commission's natural resource management standard. This provides a perspective as to whether the predominant focus of RiverBank activities, being on improvement of specific 'assets', has improved valley-wide environmental health. It will report measures, such as indices of wetland condition, total wetland extent, and riparian vegetation indices.
- **Funds management and potential impacts of government participation in the water market.** DECCW internal auditors conduct an annual audit of RiverBank funds management. Independent auditors may be used from time to time to audit the expenditure of non-government funds that the program may attract.

10.2 Target asset performance monitoring and evaluation

Monitoring and evaluation by RiverBank in relation to using RiverBank water incorporates and builds on existing monitoring and evaluation activities already occurring in the target valleys.

At the asset level, monitoring and evaluation is aimed at measuring progress towards meeting the ecological objectives and targets for the assets, as specified in the relevant valley operating plan. The monitoring and evaluation considers:

- water use – including area wetted over time (hectare days).
- condition assessment – using indicator species such as river red gums, threatened fish, frog populations, waterbirds and aquatic plants to determine the change in condition of individual assets
- causal links – hypothesis-based and understanding the link between predicted and observed ecological responses to individual watering actions or types of watering actions; this is important for testing and refining conceptual frameworks for management of flows for environmental benefit, as well as adjusting the management of such flows to better achieve the asset and program objectives
- compliance monitoring and evaluation – ensuring the environmental water has been delivered, applied and otherwise managed as planned and required.

10.3 Adaptive management

Adaptive management measures tie the monitoring and evaluation elements together and identify how they feed back into future planning as knowledge evolves, water is acquired, and water use plans are put into practice.

Desired objectives include:

- identifying knowledge needs and gaps
- identifying future opportunities, priorities and targets
- providing a basis for modifying approaches, if necessary, to minimise any unintended and unacceptable negative impacts
- enhancing communication between managers, scientists and the community
- incorporating outcomes of previous actions into decision-making and operational management for future years.

Adaptive management is being achieved through:

- DECCW regional officers contributing to plan development and implementation and collaborating with information and innovations
- feedback from the expert advisory committee of the Environmental Trust to review actions and outcomes, and to feed into the relevant plans
- consultation with the relevant CMAs to review actions and outcomes, and to recommend adjustments to the relevant plans
- establishing triggers so that particular outcomes from monitoring trigger further action or investigation.

10.4 Reporting

Biannual reports are prepared for both the Environmental Trust and the Minister for Climate Change and the Environment. They take the form prescribed by the Environmental Trust (Table 3), and cover:

- results of program performance monitoring and evaluation
- results of target asset monitoring and evaluation
- progress against Business Plan activities
- water product acquisition and water allocation trading status
- financial and other business-related matters.

Key program performance indicators include:

- volume of entitlements (or water-sharing plan extraction limit equivalents) acquired
- volume of water accrued to entitlements
- volumes of allocation water traded
- volumes delivered to target assets
- hectare days watered (indicator of wetting extent and duration).

Specific ecological performance indicators are being devised for each target asset as part of developing the valley operational plans, and their monitoring and evaluation components.

Table 3: RiverBank reporting content and frequency

Contents of report	Bi-annual	Yearly	Five yearly
Summary of program to date	✓	✓	✓
Background to, and objectives of, the program		✓	✓
Outcomes achieved <ul style="list-style-type: none"> • Environmental outcomes achieved in reporting period and comparison with those planned 	✓	✓	✓
Outputs and milestones <ul style="list-style-type: none"> • Milestones achieved, compared with those planned • The three most important outputs produced or achieved to date 	✓ ✓	✓ ✓	✓ ✓
Methodology and approach <ul style="list-style-type: none"> • Summary of activities undertaken, approach used and why • Role and contribution of strategic partners 	✓	✓ ✓	✓ ✓
Issues, changes, problems, opportunities <ul style="list-style-type: none"> • Any problems encountered and steps taken or proposed to manage them • Opportunities that have arisen and what will or could be done to harness them • Lessons from the program, long-term opportunities and how benefits from the program could be spread more widely • Other issues 	✓ ✓ ✓	✓ ✓	✓ ✓

Contents of report	Bi-annual	Yearly	Five yearly
Finances			
• Total amount spent to date	✓		
• Financial report showing:		✓	✓
o actual income and expenditure of Environmental Trust funds, compared to approved budget			
o actual income and expenditure of other sources of funds		✓	
o estimated value of in-kind contributions		✓	
Attachments			
• Any significant completed documents, publications and materials produced	✓	✓	✓
• Summary of media coverage obtained and significant written feedback on the program from stakeholders	✓	✓	✓

11 Appendices

A. Terms of reference for the Environmental Trust RiverBank subcommittee

The terms of reference for the Environmental Trust RiverBank subcommittee are as follows:

1. To advise the Environmental Trust on the priorities for expenditure of RiverBank funds in accordance with NSW Government priorities.
2. To review the annual RiverBank Business Plan, and propose to the Environmental Trust any revisions to the Plan.
3. To review program progress reports, annual reports and final report, and provide advice on such to the Environmental Trust.
4. To assess, and to provide advice to the Environmental Trust, whether each water use plan prepared under the Business Plan, is consistent with:
 - a) the RiverBank Business Plan
 - b) the requirements of the *Water Management Act 2000*, and any water sharing plan made pursuant to that Act
 - c) the National Water Initiative, and
 - d) best practice environmental management.
5. To assess, and to provide advice to the Environmental Trust, whether any licence acquisition plan prepared under the Business Plan, is consistent with:
 - a) the RiverBank Business Plan
 - b) the requirements of the *Water Management Act 2000*, and any water sharing plan made pursuant to that Act
 - c) the National Water Initiative, and
 - d) best practice financial and portfolio management.
6. Where appropriate, promote the values of RiverBank, and foster relationships with key strategic partners.
7. To provide advice on any aspect of the operation of the Program, as requested by the Environmental Trust or DECCW.

B. NSW RiverBank charter

Recognising:

1. The commitment of the NSW Government to the National Water Initiative objective to return over-allocated and overused river systems to environmentally sustainable levels of water extraction.
2. The NSW Government has committed \$105 million over five years to be managed by DECCW under NSW RiverBank to restore stressed rivers and wetlands of high ecological value.
3. The Australian Government has committed \$71.77m over three years to be managed by DECCW for complementary environmental water purchase and management, and to secure better outcomes in understanding of environmental watering, delivery of environmental water and use of environmental water on private lands.
4. The NSW Government intends that the primary mechanism for RiverBank contributing to river and wetland restoration is via market purchase of existing water access licences and management of these licences for environmental benefit.
5. The regulated rivers of inland NSW are those most affected by flow regulation and water extraction.
6. That many of the State's wetlands associated with inland rivers are degraded and their condition continues to decline.
7. The major inland wetland systems of NSW are areas of great environmental, social and economic significance. As well as being biologically diverse and major areas for bird breeding, they provide drought refuges for wildlife and stock help maintain water quality and attenuate floods, act as sinks for greenhouse gases, recharge groundwater systems, and support grazing, timber production, honey production, tourism and other industries.
8. Rivers and wetlands are important to the wellbeing of Aboriginal people. They provide tangible links to traditional stories, beliefs and practices, which contribute significantly to the cultural identity of many Aboriginal people. They also provided the stage for many significant events in early Aboriginal and settler relations and as such are of considerable historical importance.
9. Major threats to inland wetlands are changed flow patterns resulting from river regulation and water extraction.
10. Areas of the Gingham and Lower Gwydir (Big Leather) watercourses, the Macquarie Marshes, and the Narran Lake Nature Reserve are Ramsar wetlands, being sites that are recognised as internationally significant under the Convention on Wetlands of International Importance. A number of wetlands in the Murrumbidgee, Lachlan, Darling and other inland unregulated rivers are also recognised as nationally significant.
11. The NSW Government has committed \$315 million over five years to the restoration of the Murray River and \$180 million over ten years to the

restoration of the Snowy River, in partnership with the Australian and other state governments.

12. The NSW Government has committed \$13 million for wetland recovery in the Macquarie and Gwydir systems through environmental management planning, ecological characterisation, structural works to facilitate the delivery of both environmental water and stock and domestic supplies, weed control in the wetlands, and some limited purchase of water to support environmental needs.
13. Existing water access licence holders have legitimate and secure water entitlements.
14. \$105 million represents a small proportion of the total value of water access licences in inland NSW, based on representative average market prices.
15. Government purchase of water for the environment requires appropriate financial transparency and accountability.
16. Government will seek independent advice and input into a market-based water recovery program.

RiverBank will:

17. Be established as a program within the NSW Department of Environment, Climate Change and Water.
18. Be funded through the Environmental Trust, established under the *Environmental Trust Act 1998*.
19. Develop an annual Business Plan for the approval of the Environmental Trust, incorporating advice from the RiverBank subcommittee with its independent expertise in the areas of river and wetland ecology and water markets.
20. Develop a robust framework for the active management of water products for environmental benefit.
21. Aim to contribute to the following environmental and Aboriginal cultural outcomes:
 - a) stabilising the ecological decline of iconic wetlands in NSW
 - b) stabilising the threat to Aboriginal cultural values associated with iconic wetlands
 - c) rehabilitating wetland-dependent biodiversity, and
 - d) improving the in-stream ecology of some major inland NSW rivers.
22. Initially focus on purchase of water access licences and the management of associated water for the benefit the Macquarie Marshes, the Lowbidgee and Gwydir wetlands, and wetlands in the Lachlan valleys.
23. Purchase water in other rivers where significant conservation values are at risk, particularly where market opportunities arise and opportunities to collaborate with others exist.
24. Work closely with government agencies, catchment management authorities and other bodies to improve environmental water management processes and maximise the benefits of providing additional water for the environment.

25. Work with, and build upon, existing environmental water management programs in these areas.
26. Build on the outcomes from environmental water rules within existing water-sharing plans.
27. Operate within the existing water management framework to strengthen, deepen and diversify water access markets.
28. Generate sufficient revenue from the trade of water allocation to meet statutory charges, and, potentially, other operational costs, by the end of the initial five-year funding period.