

WATER



COMMONWEALTH ENVIRONMENTAL WATER HOLDER

2010-2011 Business Plan

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1 Overview

This business plan has been prepared for the use of the Commonwealth Environmental Water Holder (CEWH) and the Environmental Water Branch within the Australian Government Department of Sustainability, Environment, Water, Population and Communities (the Department). It outlines how we will meet obligations under the *Water Act 2007* (Cwlth) (the Act) to manage the Commonwealth's environmental water holdings.

1.1 About the business plan

The objectives of the CEWH, as set out in Part 6 of the Act, are:

- to manage the Commonwealth environmental water holdings
- to administer the Environmental Water Holdings Special Account.

The business plan will guide the CEWH's activities in 2010–11 to deliver efficient management of the Commonwealth's environmental water, so as to maximise environmental outcomes, and meet obligations under the Act and other relevant legislation. This 2010–11 document builds on business plans prepared in 2008–09 and 2009–10.

The plan addresses the:

- overview for 2010–11, including priority activities
- nature, functions and relationships of the CEWH, as laid down by legislation
- use of environmental water, including the criteria for assessing 2010–11 environmental watering actions
- management of environmental water holdings
- governance and financial management of the CEWH.

We welcome your views on the 2010-11 business plan.

Please forward your comments to cewh@environment.gov.au

1.2 Outlook for 2010-11

Allocations against the Commonwealth's holdings in 2010–11 are expected to be higher than those in 2009–10 because the water holdings are larger, the seasonal outlook is better in terms of rainfall and there is more water being held in storages.

The Commonwealth's environmental water holdings are larger this year (738 gigalitres, as at 1 July 2010) than they were a year ago (64 gigalitres). Existing acquisitions are registered to the Commonwealth and new acquisitions are being made under the *Restoring the Balance in the Murray–Darling Basin* and *Sustainable Rural Water Use and Infrastructure* programs.

The seasonal outlook is better than it was at the same time last year. Predictions made in early July 2010 indicated that rainfall over most of the Murray–Darling Basin for the next three months is 50 per cent or slightly more likely to be above the long-term average. In the longer term, current trends and outlooks modelled by the Bureau of Meteorology suggest that the chance of a La Niña weather pattern occurring in 2010–11 is now more likely than not—suggesting that there will be higher than average rainfall across the entire Basin.

Compared with the previous year, more water is being held in storages across the River Murray System. For example, as at 1 July 2010, Murray–Darling Basin Authority (MDBA) storages² (including the Menindee Lakes) were 3,975 gigalitres (or 43 per cent of capacity), which is significantly higher than this time last year (1,639 gigalitres or 18 per cent of capacity), but lower than the long-term average for MDBA storages at the end of June (5,530 gigalitres).

Nevertheless, allocations are expected to be below the long-term average, as inflows and storages are still well below the long-term average level, and not just in the southern Basin. Major storages in other catchments are also very low. As at 1 July 2010, Blowering and Burrinjuck in the Murrumbidgee were 44 per cent of their capacity, Wyangala in the Lachlan was 7 per cent, Burrendong in the Macquarie was 17 per cent, Keepit and Split Rock in the Namoi were 16 per cent, and Copeton in the Gwydir was 7 per cent.

The availability of larger allocations will enable the scope of environmental watering to expand to protect or restore a broader range of environmental assets. The CEWH will be able to consolidate environmental watering activities undertaken in previous years and more. For example, the number of sites watered will be increased and larger volumes will be provided to sites. In addition, in-channel flows down rivers and streams, and potentially larger floodplain inundation events, will be possible.

Key operational factors that will influence the functions of the CEWH in 2010–11 include:

- an increasing portfolio of water holdings across the northern and southern Murray— Darling Basin
- continuing variation in water management arrangements between the various classes of water entitlements in different states
- a variety of water and environmental water management bodies
- the release of the proposed Murray–Darling Basin Plan
- increasing community awareness of environmental water management.

The long-term average of 5,530 GL for the end of June 2010 is modelled assuming the current level of regulation and development along the river, and using 118 years of rainfall and streamflow data.

² 'MDBA controlled storages' only refers to Dartmouth, Hume, Lake Victoria and Menindee lakes — see www.mdba.gov.au/water/waterinstorage.

1.3 Approach in 2010–11

In 2010–11, the CEWH will cooperate with Basin state governments, and other environmental water managers, local groups (such as catchment management authorities, natural resource management boards and environmental water advisory groups) and landholders to identify possible environmental watering options against objectives for use, which will vary according to seasonal conditions.

These options will be assessed by the CEWH against the following criteria:

- the ecological significance of the asset
- the expected ecological outcomes from the proposed watering action
- the potential risks of the proposed watering action at the site and at connected locations
- the long-term sustainability of the asset(s), including appropriate management arrangements
- the cost-effectiveness and operational feasibility of the watering.

Decisions about the use of environmental water in 2010–11 will continue to be informed by advice from the Environmental Water Scientific Advisory Committee.

The CEWH will enter into arrangements with Basin state governments and others to deliver the water, and to monitor the ecological responses and report to the Commonwealth on outcomes.

Priority actions in 2010–11 will strengthen our capacity to protect and restore environmental assets. We will:

- continue to provide advice to the Water Efficiency Division of the Department on environmental priorities to inform water entitlement acquisitions (Section 3.2)
- examine the potential to establish long-term arrangements with Basin state governments and others to provide water to particular high-priority environmental assets; consider multi-year water proposals that can be incorporated into longer term planning (Section 3.5)
- report in mid 2010–11 on outcomes from the use of water in 2009–10 (Section 3.6)
- with input from the Environmental Water Scientific Advisory Committee and stakeholders, develop a longer term monitoring and evaluation framework aligned with the requirements of the Murray–Darling Basin Plan (Section 3.6)
- investigate ways to improve our ability to forecast water available for use (Section 4.2)
- continue to monitor developments with respect to the characteristics of licences and their water accounts, and advocate for arrangements that better meet the needs of water users, such as simplified and more timely transfer processes (Section 4.2.1)
- in cooperation with the New South Wales and Queensland governments, develop water shepherding arrangements in priority areas in the Murray–Darling Basin in those states, and examine the scope for similar arrangements in other Basin jurisdictions (Section 4.2.1)

- review the holdings with respect to their adequacy in meeting environmental objectives in an efficient manner and consider the need for operating rules that relate to the trade of the holdings (Section 4.2.2 and Section 4.4)
- begin to consider additional works and measures that will enable the Commonwealth to make more efficient use of its environmental water holdings (Section 4.3)
- prepare a pilot report in accordance with the *Preliminary Australian Water Accounting Standard* (Section 5.2.1)
- implement the recommendations, as appropriate, from the review of the holdings register (Section 5.2.2)
- in cooperation with MDBA, improve available information on the environmental assets that will potentially require watering in the Murray–Darling Basin (Section 3.1)
- work on an integrated systems approach to the Basin's aquatic ecosystems (Section 5.4.2).

2 The Commonwealth Environmental Water Holder—nature, functions and relationships

This section sets out the appointment, functions and activities of the Commonwealth Environmental Water Holder (CEWH), and the relationships that the office has with the Environmental Water Branch and the rest of the Australian Government Department of Sustainability, Environment, Water, Population and Communities (the Department), with the Murray–Darling Basin Authority (MDBA) and with the Environmental Water Scientific Advisory Committee.

2.1 The Commonwealth Environmental Water Holder

The CEWH is appointed under s. 115 of the *Water Act 2007* (Cwlth) (the Act) with statutory functions set out in Part 6 of the Act, which are performed on behalf of the Commonwealth. The position holder must be engaged under the *Public Service Act 1999*. The appointee can delegate any of his or her powers under the Act to an employee of the Senior Executive Service (s. 117).

In 2008, the Secretary of the Department (the Secretary) appointed Ian Robinson to the position of CEWH—he also holds the position of the First Assistant Secretary of the Water Governance Division.

There are legislative limits on directions that the Minister or Secretary can give to the CEWH. Any directions must be reported in the CEWH annual report (s. 114) (refer to Section 5.4.3). The Minister may also, with Parliament's approval, make operating rules (s. 109) about water trading. Operating rules are intended to provide general direction on water trading.

2.2 Functions and activities of the Commonwealth Environmental Water Holder

Section 105(1) of the Act explains that the statutory functions of the CEWH are to:

- manage the Commonwealth environmental water holdings
- administer the Environmental Water Holdings Special Account.

Managing the holdings involves:

- two core operational activities
 - establishing the holdings and refining the holdings over time to ensure that they can efficiently service environmental water priorities—s. 105(2)(a–b)
 - making water allocations available for use in environmental watering activities—
 s. 105(2)(d–e)
- three core administrative activities
 - managing the Environmental Water Holdings Special Account—ss. 111–113

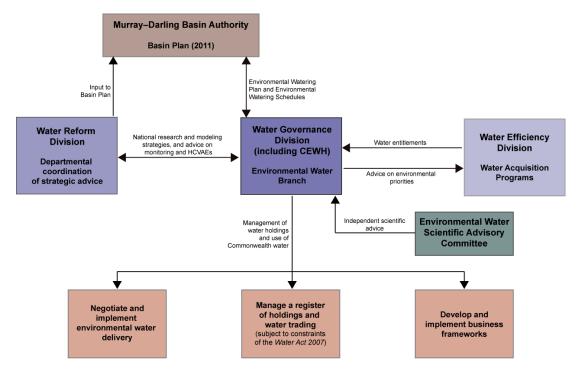
- maintaining a record of the holdings—s. 105(2)(c)
- producing an annual report—s. 114.

The CEWH is to protect or restore the environmental assets of the Murray–Darling Basin, and other areas outside the Basin where the Commonwealth holds water, to give effect to relevant international agreements referred to in s. 4 of the Act. The CEWH must manage the holdings in accordance with relevant environmental water plans (the Basin environmental watering plan and plans listed in the regulations), the Minister's operating rules and the environmental watering schedules to which the CEWH is party—s. 105(4).

The CEWH will monitor, evaluate and report on outcomes from use of the holdings to inform an adaptive management approach to the use of the holdings, follow good governance and risk management processes, and actively engage with internal and external stakeholders.

2.3 Organisational relationships

The CEWH's relationships with other organisations contribute to the efficient and effective management of environmental water. Figure 1 shows the responsibilities within the Department, together with the role of the MDBA.



CEWH = Commonwealth Environmental Water Holder; HCVAE = high conservation value aquatic ecosystem

Figure 1 Key environmental water responsibilities

2.3.1 Relationships with the Environmental Water Branch

The CEWH is supported by officers from the Environmental Water Branch within the Water Governance Division of the Department (s. 116).

In 2010–11, the Environmental Water Branch will comprise five sections:

- Environmental Water Policy
- Program Evaluation and Reporting
- Water Holdings and Portfolio Management
- Northern Basin Delivery
- Southern Basin Delivery.

The Environmental Water Policy section provides advice on the development of improved business and operational frameworks for the Commonwealth's environmental water, provides secretariat services to the Environmental Water Scientific Advisory Committee, and coordinates Branch input to the MDBA as they develop the Basin Plan.

The Program Evaluation and Reporting section's key responsibilities are overall program evaluation, reporting and information management. This includes the design of the monitoring and evaluation program, and the management of all information that is made available to the public, including the CEWH website, annual report and business plan.

The Water Holdings and Portfolio Management section is responsible for the administration of the water holdings register and the Environmental Water Holdings Special Account. This includes budgeting for, and reporting on, the holdings and associated costs. The section also manages the water portfolio, which includes advising on its composition, acquisitions, trading and carryover strategies.

The Northern Basin Delivery section manages discussions with Basin states and others about environmental watering options, and provides advice to the CEWH on environmental priorities in the northern Basin—the part of the Basin that is in Queensland and in New South Wales, covering the Border Rivers region and the Barwon–Darling river systems. This section is also responsible for providing advice and arrangements for protection of the Commonwealth's environmental water in unregulated systems.

The Southern Basin Delivery section manages discussions with Basin states and others about environmental watering options in the southern Basin—the part of the Basin that is in Victoria, South Australia, the rest of New South Wales and the Australian Capital Territory. This section provides advice to the CEWH on environmental priorities to which water should be allocated, manages the delivery arrangements, and works with delivery partners and others to monitor outcomes of the use of the Commonwealth's environmental water. This section is also responsible for Basin-wide operations, as they are applicable to the CEWH, and provides advice to *The Living Murray* environmental watering group.

The Environmental Water Branch had a staffing complement of 25 officers as at early July 2010, but staffing numbers will increase during the year. The Department meets the costs of employing these staff.

2.3.2 Relationships within the Department of Sustainability, Environment, Water, Population and Communities

The Department's Water Group comprises three divisions:

- Water Governance
- Water Efficiency
- · Water Reform.

Water Efficiency manages the *Restoring the Balance in the Murray–Darling Basin* and the *Sustainable Rural Water Use and Infrastructure* programs, which are part of the Australian Government's *Water for the Future* initiative. The entitlements acquired by the Commonwealth under these programs become part of the Commonwealth's environmental water holdings.

Water Reform is responsible for coordinating a national approach on research and modelling strategies for water. This division is also responsible for developing frameworks for monitoring river and wetland health (including as they relate to Australia's international obligations), the identification of high conservation value aquatic ecosystems, and providing advice on the water market, charge and trading rules. The division also coordinates input from the Department to the MDBA in the development of the Basin Plan, and to the Basin Officials Committee.

Close consultation occurs across the Water Group and more broadly across the Department, to ensure that information is available for each area to perform its role.

2.3.3 Relationships with the Murray-Darling Basin Authority

The MDBA is responsible under the Act for developing the Basin Plan—a strategic plan for the integrated and sustainable management of water resources across the Murray—Darling Basin. The Basin Plan, which is to be developed by 2011, will include an environmental watering plan. The CEWH must manage the holdings in accordance with this environmental watering plan—s. 105(4)(a)—once the Basin Plan is adopted. The MDBA must consult with the CEWH and other environmental water managers in developing and implementing the environmental watering plan (ss. 28–29).

The MDBA is responsible for identifying and accounting for environmental water under the Basin Plan, and for monitoring against targets that measure progress towards achieving environmental objectives.

The MDBA also manages a portfolio of environmental water that has been secured by *The Living Murray* river restoration program, to be used for the watering of six 'icon sites' in the Murray River system. The Department is represented on *The Living Murray* environmental watering group, which advises the MDBA on the use of *The Living Murray* water. The involvement of the Department in the environmental watering group helps to coordinate the use of environmental water from the Commonwealth, *The Living Murray* and state sources.

2.3.4 Relationships with the Environmental Water Scientific Advisory Committee

The Environmental Water Scientific Advisory Committee was established to advise the CEWH and the Department on the use of environmental water, including:

- methods for determining relative priority of environmental assets
- areas that merit additional investigation, including additional research
- assessment of the benefits of the use of environmental water.

The Environmental Water Scientific Advisory Committee is chaired by Professor Barry Hart. It comprises eminent scientists and experts in fields, such as hydrology, limnology, river operations management, river and floodplain ecology, and the management of aquatic ecosystems.

2.4 Communications and stakeholder engagement

Many individuals and organisations have an interest in Commonwealth environmental water activities and cooperate with the CEWH to achieve the best possible outcomes:

- other Australian Government agencies
- Basin state governments
- river operators, catchment management authorities and environmental water advisory groups
- landholders
- research institutions
- community members.

The Commonwealth's approach to managing and using its environmental water is set out in this business plan, which is updated at the start of each water year and made available to the public.

Details of the decisions made throughout the year on water use are made available on the CEWH website.³ Details of the Commonwealth's environmental water holdings are also available on the website—these figures are updated monthly.

Each year, the CEWH produces an annual report (refer to Section 5.3). A report on the outcomes from the use of the Commonwealth's environmental water was made available for the first time in 2009–10.⁴ A similar report is planned for 2010–11.

We will continue to seek the views of stakeholders as our business frameworks develop.

³ www.environment.gov.au/water/policy-programs/cewh/index.html

⁴ www.environment.gov.au/water/publications/action/cewh-outcomes-report-2008-09.html

The CEWH and representatives from the Department make regular visits to locations throughout the Basin. These and other meetings provide the opportunity for discussions with members of the community, and with irrigation, environmental and other organisations.

An active approach to stakeholder engagement will continue through 2010–11. We welcome approaches from individuals and groups to discuss the possible uses of environmental water.

3 Water use

The function of the Commonwealth Environmental Water Holder (CEWH) is to protect or restore the environmental assets of the Murray–Darling Basin and in other areas outside the Basin where the Commonwealth holds water, so as to give effect to relevant international agreements.

The CEWH must manage the holdings in accordance with relevant environmental water plans (the Basin environmental watering plan and plans listed in relevant regulations), the Minister's operating rules and environmental watering schedules to which the CEWH is party.

This section defines environmental assets, provides guidance on how environmental asset priorities will be included in water-acquisition actions, identifies watering options, clarifies decision-making processes on water use and delivery, and indicates how environmental watering will be monitored and assessed.

3.1 Defining environmental assets

Under the Water Act 2007 (Cwlth) (the Act), environmental assets are defined as:

- · water-dependent ecosystems
- ecosystem services
- sites with ecological significance.

The relevant international agreements are the:

- Convention on Wetlands of International Importance (Ramsar Convention)
- Convention on Biological Diversity (Biodiversity Convention)
- United Nations Convention to Combat Desertification (Desertification Convention)
- United Nations Framework Convention on Climate Change (Climate Change Convention)
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
- migratory bird agreements that Australia has signed with China, Japan and South Korea.

The Act further defines relevant international agreements as any other international convention to which Australia is a party, and that is relevant to the use and management of the Murray–Darling Basin water resources and is prescribed by the regulations of the Act.

The range of actions that would give effect to these agreements is very broad; for example, although specific wetlands in the Basin are listed under the Ramsar Convention, this convention requires signatory states to generally promote the wise use of all wetlands within their territory. Similarly, the Biodiversity Convention requires signatory states to promote the protection of ecosystems and natural habitats, and the maintenance of viable populations of species in natural surroundings in general.

International agreements provide guidance on the definition of environmental assets for the purposes of the CEWH. Consequently, potential environmental assets may include, but are not limited to: the Ramsar List of Wetlands of International Importance, wetlands listed in *A Directory of Important Wetlands in Australia*, and aquatic ecosystems that are known to support listed threatened species and communities, including migratory birds or the waterways that support the function of these ecosystems.

In 2010–11, we will continue to use and improve information on the environmental assets that will potentially require watering in the Murray–Darling Basin. This work will be undertaken with the Murray–Darling Basin Authority (MDBA) and in consultation with other Commonwealth entities, Basin state governments, environmental water holders and managers, local groups (such as catchment management authorities), landholders and research institutions.

3.2 Environmental asset priorities in acquisition programs

In 2010–11, the Environmental Water Branch will continue to provide the Water Efficiency Division with advice on environmental priorities to inform water entitlement acquisitions under the *Restoring the Balance in the Murray-Darling Basin* and *Sustainable Rural Water Use and Infrastructure* programs. The proposed Basin Plan will also be a potential source of guidance on environmental watering priorities.

This approach is designed to ensure that, as far as possible, acquisitions match the environmental priorities to which the CEWH will allocate water. Further information on the acquisition programs is provided in sections 4.1.1 and 4.1.2.

3.3 Identifying watering options

The CEWH's approach to using environmental water aims to achieve the best environmental outcomes across the Basin. It is based on the framework for determining Commonwealth environmental watering actions, which was finalised and published in 2009–10, incorporating feedback from public consultation. The approach first involves identifying possible watering options against objectives for use, which vary according to seasonal conditions (Table 1).

Table 1 Proposed ecological watering objectives

	Extreme dry	Dry	Median	Wet
Ecological watering objectives	Avoid damage to key environmental assets	Ensure ecological capacity for recovery	Maintain ecological health and resilience	Improve and extend healthy and resilient aquatic ecosystems
Management objectives	 Avoid critical loss of threatened species and communities Maintain key refuges Avoid irretrievable damage or catastrophic events 	Support the survival and growth of threatened species and communities, including limited small-scale recruitment Maintain diverse habitats Maintain low-flow river and floodplain functional processes in sites and reaches of priority assets	Enable growth, reproduction and small-scale recruitment for a diverse range of flora and fauna Promote low-lying floodplain—river connectivity Support mediumflow river and floodplain functional processes	Enable growth, reproduction and large-scale recruitment for a diverse range of flora and fauna Promote higher floodplain–river connectivity Support high-flow river and floodplain functional processes
Management actions	Water refugia and sites supporting threatened species and communities Undertake emergency watering at specific sites of priority assets Use carryover volumes to maintain critical needs	Water refugia and sites supporting threatened species and communities Provide low flow and freshes in sites and reaches of priority assets Use carryover volumes to maintain follow-up watering	 Prolong flood/high-flow duration at key sites and reaches of priority assets Contribute to the full range of in- channel flows Use carryover to provide optimal seasonal flow patterns in subsequent years 	 Increase flood/high-flow duration and extent across priority assets Contribute to the full range of flows, including over bank Use carryover to provide optimal seasonal flow patterns in subsequent years

Potential watering options are identified in cooperation with Basin state governments, and other environmental water managers and local groups (such as catchment management authorities, natural resource management boards and environmental water advisory groups), as well as landholders who put forward proposals for the Commonwealth's consideration.

3.4 Assessing and deciding on use

Once potential watering options have been identified, the CEWH uses criteria developed in conjunction with the Environmental Water Scientific Advisory Committee and other stakeholders to prioritise watering events.

3.4.1 Decision-making process

Potential watering options are assessed by the CEWH against criteria. For 2010–11, the criteria are the:

- ecological significance of the asset
- expected ecological outcomes from the proposed watering action
- potential risks of the proposed watering action at the site and at connected locations
- long-term sustainability of the asset, including appropriate management arrangements
- cost-effectiveness and operation feasibility of the watering.

See Attachment 1 for further details on the assessment criteria.

Decisions about the use of environmental water in 2010–11 will continue to be informed by advice from the Environmental Water Scientific Advisory Committee. For further information on the scientific advisory committee, see Section 2.3.4.

Decisions about when and how watering actions occur will take account of the natural hydrological cycles of environmental assets. For most assets, water will be delivered during spring to early summer, and/or autumn, although there is some flexibility in timing, depending on asset location within the Basin. Watering decisions will also recognise the requirement for drying sequences, which are equally important for the integrity of many ecological communities.

Water allocations against the holdings will, where possible, build on other environmental water to deliver the most effective overall environmental outcome. Options will be reviewed regularly throughout the year, and ongoing advice will be obtained on the condition of environmental assets and their relative needs.

3.4.2 The Basin Plan and the environmental watering plan

The MDBA is responsible for the preparation and implementation of the first Murray—Darling Basin Plan, which includes an environmental watering plan. The CEWH is required to act in accordance with the environmental watering plan once it is developed. The objectives of the Basin Plan—to protect and restore key environmental assets and key ecosystem functions—are already strongly aligned with those of the CEWH. This consistency in objectives, along with collaborative work between the MDBA and the CEWH on matters of mutual interest, will ensure that there is a smooth transition in operations during and after the Basin planning process.

3.5 Environmental water delivery

Following decisions on use, the CEWH will enter into arrangements with the relevant Basin state governments, and with other environmental water holders or catchment management authorities, to optimise delivery of water for the environment. The delivery phase also involves coordination with river operators.

In regulated rivers, water is currently delivered to the location of priority environmental assets using water trading. As the volume of water held for the environment increases, instream watering will become critical for efficient delivery of water to meet environmental objectives. This means that environmental watering will need to be integrated into river operations.

In unregulated rivers, water shepherding (used in conjunction with water trading) will be required to ensure that instream environmental flows are directed to priority environmental needs and are protected from consumption.

In 2010–11, the CEWH will examine the potential for establishing long-term arrangements with Basin state governments and others to provide water to particular high-priority environmental assets. The content of these arrangements may include:

- general recognition of the priority status of the site or complex
- ecological objectives and targets
- agreed watering plans (e.g. volume, frequency, timing)
- commitments on respective volumes and ratios of water to be delivered, given water availability
- agreement on mechanisms for the transfer of water allocations to partners' accounts
- delivery arrangements (e.g. operation of pumps or other infrastructure)
- monitoring, evaluation and reporting arrangements
- agreements on cost distribution.

As environmental outcomes are often dependent on follow-up watering and sequences of flow events, another focus in 2010–11 will be to consider multi-year water proposals that can be incorporated into longer term planning.

3.6 Evaluating environmental outcomes

Arrangements are in place between the CEWH and delivery partners and others for monitoring ecological responses and reporting to the Commonwealth on environmental outcomes. Monitoring and reporting on outcomes is being undertaken to determine the ecological impacts of the Commonwealth's environmental watering program and to inform an adaptive management approach to the use of the Commonwealth's environmental water holdings.

Although the Commonwealth environmental watering program is at an early stage, monitoring of environmental responses has already detected encouraging changes, including improved tree growth, decreased salinity, and other benefits to a range of plants and animals. An inaugural report on the preliminary outcomes from the first use of Commonwealth environmental water in 2008–09 was published in March 2010 and is

available on website of the Australian Government Department of Sustainability, Environment, Water, Population and Communities (the Department).⁵

Ecological outcomes can take time to materialise and further benefits will be reported over time. Outcomes from the use of water in 2009–10 will be reported on in mid-2010–11.

With input from the Environmental Water Scientific Advisory Committee and stakeholders, the Department is developing a longer term monitoring and evaluation framework that will align with the requirements of the Murray–Darling Basin Plan being developed by the MDBA.

Once the Basin Plan is operational, annual reports of the CEWH will provide details of achievements against the objectives of the MDBA environmental watering plan.

⁵ www.environment.gov.au/water/publications/action/cewh-outcomes-report-2008-09.html

4 Managing the holdings

The Commonwealth Environmental Water Holder (CEWH) manages Commonwealth water holdings with the objective of optimising their composition and administration to maximise environmental outcomes. This section details the two core operational activities for managing the holdings:

- building and administering the holdings
- making holdings allocations available for environmental watering activities.

4.1 Building the holdings

The holdings are defined as water rights, water delivery rights, irrigation rights, similar rights, interests in relation to such rights, and rights held in trust or donated, owned by the Commonwealth for the performance of functions related to s. 108 of the *Water Act 2007* (Cwlth) (the Act). The water holdings include all Commonwealth water acquired or held for the purpose of protecting or restoring the environment. The sources of holdings are:

- Commonwealth purchases of water rights
- water saved or acquired from Commonwealth funding of irrigation improvements or other activities
- · donations.

4.1.1 Commonwealth purchases of water rights

The Water Efficiency Division manages the acquisition of water rights on behalf of the Commonwealth. Water rights acquired under the \$3.1 billion *Restoring the Balance in the Murray–Darling Basin* program will become holdings for the purposes of Part 6 of the Act when ownership is transferred to the Commonwealth. Some acquired holdings may require additional transactions (such as conversion from shares in an irrigation corporation to state-issued water rights) to ensure that they can be used effectively. These processes are managed by the Water Efficiency Division, but are subject to consultation with the CEWH.

Proposed acquisitions are reviewed by an assessment panel, using criteria agreed by the Minister. The *Restoring the Balance in the Murray–Darling Basin* program is managed by Australian Government Department of Sustainability, Environment, Water, Population and Communities (the Department)—not the CEWH—under guidelines approved by the Australian Government.

⁶ More information about this program is available at www.environment.gov.au/water/policy-programs/entitlement-purchasing/index.html.

The criteria currently used in Commonwealth acquisition assessments consider the:

- capacity of the entitlement to provide water in catchments where there is scientific evidence that water needs to be recovered for the environment
- capacity to deliver water from the water right to service priority environmental assets
- value for money—the financial cost of acquiring and managing the right.

The aim of these criteria is to ensure that the programs acquire entitlements that can be used effectively to improve the health of the Basin's rivers, wetlands and floodplains.

4.1.2 Acquisition of water rights from investments in water savings

The Sustainable Rural Water Use and Infrastructure program is a national program to which the Australian Government has allocated \$5.8 billion to fund infrastructure improvements within and outside the Murray–Darling Basin.

A portion of the water savings from these projects will become part of the Commonwealth environmental water holdings.

Investment will be principally directed towards projects that:

- secure a long-term sustainable future for irrigation communities
- deliver sustainable and lasting returns of water to the environment to secure real improvements in river health
- deliver value for money in the context of the first two conditions.

4.1.3 Donations

The Act provides for the crediting of the Environmental Water Holdings Special Account with gifts or bequests, and for water rights donated by private individuals and others to form part of the Commonwealth's environmental water holdings.

4.2 Administering the holdings

The CEWH will collect and regularly update data on the acquisition of entitlements under the *Restoring the Balance in the Murray–Darling Basin* and *Sustainable Rural Water Use and Infrastructure* programs, or other Commonwealth-funded activities. It will ensure that the Commonwealth environmental water holdings register (Section 5.2) is kept up to date.

Water allocations accruing to the holdings, transfers and water use are reported on water accounts for each licence (water right) issued by the relevant state agency or irrigation corporation. The CEWH will regularly review these accounts and use them to update the holdings register at least once a month.

The holdings register will be used in conjunction with allocation announcements and forecasts made by state agencies, historic allocation announcements and climate forecasts to predict likely future water-holding positions. These forecasts will be kept updated and will assist with determining the most effective watering opportunities.

During 2010–11, we will further investigate ways to improve our forecasting capability.

4.2.1 Administering water accounts

Water accounts for each licence in the holdings have characteristics that differ in:

- conditions on using allocations
- processes for ordering water
- linkages to water-use approvals
- rules and processes for trading water allocations
- water-accounting rules, such as carryover, maximum-use provisions and water-order debiting.

Transfers of allocations between licences in the holdings will continue to be important, particularly in the southern-connected rivers of the Basin, to enhance water-delivery capacity, enable the CEWH to take advantage of water carryover, and reduce the constraints imposed by any jurisdictional or institutional boundaries.

In 2010–11, the Commonwealth will continue to monitor developments with respect to the characteristics of licences and their water accounts, and advocate for arrangements that better meet the needs of water users (e.g. simplified and more timely transfer processes). Another focus will be to realise administrative efficiencies through rationalising the number of licences and accounts in the holdings.

Also in 2010–11, the Commonwealth will develop, in cooperation with the New South Wales and Queensland governments, water-shepherding arrangements in the Murray—Darling Basin with a focus on priority unregulated river systems, such as the Barwon—Darling system in New South Wales and the Lower Balonne system in Queensland.

Water-shepherding arrangements providing for the legal protection, effective use and accurate accounting of Commonwealth environmental water are required to ensure that the substantial Commonwealth investment under *Water for the Future* is protected and the objectives of the Act are met. In the year ahead, we will also examine the scope for shepherding arrangements in other Basin jurisdictions and seek to ensure that the Basin Plan and the Murray–Darling Basin Agreement provide for shepherding of water for the environment.

4.2.2 Making water available for use

Arrangements for making water available for use under different delivery partnerships depend on the rules of the relevant jurisdiction or corporation, the preferences of the delivery partners, the location of the watering activity, and trade-offs between efficiency and flexibility.

One approach to making water available in situations where holdings are located in the same jurisdiction is to link the holding account to the delivery partner's works or water delivery approval, thus allowing the partner to order water under the terms of an agreement.

Alternatively, the CEWH may use allocation transfers to:

- transfer allocations to a partner's account, providing them with authority to use it under an agreement
- recover water from a partner's account where it cannot be used under the agreement within a water-accounting period.

A further option is to use term transfers or tagged trading to transfer allocations to a watering partner, and to allow them to use water under the terms of an agreement.

During 2009–10, the principal method of making water available for use was through trade-allocation transfers. In 2010–11, various approaches will again be assessed to determine optimal methods for individual watering events, and the methods most suitable for longer term arrangements.

4.2.3 Works and measures to deliver water

During 2010–11, pumping and the use of minor diversion structures may be necessary for some of the watering actions, particularly in the southern-connected Basin, where conditions remain dry and river levels are low. Works and measures are less likely to be required where the target of watering is an instream asset or a terminal wetland.

The Australian Government has contributed \$167.5 million of the \$280 million allocated for works and measures through *The Living Murray* initiative to improve the efficiency of environmental water use in the southern-connected part of the Basin. During 2010–11, additional works and measures will be considered to enable the CEWH to make more efficient use of the Commonwealth environmental water holdings.

4.3 Reviewing and optimising the holdings

Section 106 of the Act allows the CEWH to dispose of water (seasonal allocations) and holdings (entitlements) in limited circumstances.

The CEWH may only dispose of seasonal allocations and/or entitlements if:

- they are not required to meet environmental objectives in a given water accounting period and cannot be carried over to the next accounting period—s. 106(1); or
- the proceeds of the disposal are used to purchase other seasonal allocations and/or entitlements that improve the capacity of the holdings to meet the environmental objectives—s. 106(2).

In 2010–11, we will review the holdings with respect to their adequacy in meeting environmental objectives in an efficient manner.

4.4 Operating rules

The Act allows the Minister to make operating rules by legislative instrument that may relate to the trading of the holdings. These rules can relate to purchasing, disposing of, and otherwise dealing in water and water access rights, either directly or through contractual arrangements.

In 2010–11, we will consider the need for operating rules.

5 Governance and financial management

The Commonwealth Environmental Water Holder (CEWH) is a statutory position and operates in accordance with the *Water Act 2007* (Cwlth) (the Act). As such, any actions are governed by various legislative requirements, including administering the special account and producing an annual report for the Commonwealth Minister.

5.1 Budget and financial management

The CEWH is a statutory position in the Australian Government Department of Sustainability, Environment, Water, Population and Communities (the Department). The Environmental Water Holdings Special Account is an account established by the Department under s. 111 of the Act as a special account for the purposes of the *Financial Management and Accountability Act 1997* (Cwlth). The holdings and any contractual commitments are administered assets and liabilities of the Department.

The functions and activities of the CEWH are conducted in-line with established Departmental financial arrangements. Given these arrangements, the CEWH has the resources, staff and support of the Department to effectively manage the Environmental Water Holdings Special Account. The Department has made arrangements to support the CEWH in the following areas:

- financial systems for managing expenses
- the holdings register and the special account
- legal and technical advice on the CEWH's functions
- staffing
- the provision of funding for Departmental expenses.

5.1.1 The Environmental Water Holder Special Account

The Act specifies that the CEWH is to administer the Environmental Water Holdings Special Account on behalf of the Commonwealth. The CEWH may delegate some or all of this administration to a Senior Executive Officer in accordance with s. 117 of the Act.

Section 112 of the Act specifies the allowable credits, which are:

- appropriations for the special account
- amounts received by the Commonwealth in the performance of the CEWH's functions
- amounts received from Basin states
- amounts received from the sale of property paid for from the special account
- donations.

Allowable debits are specified in s. 113(2–3) of the Act, and comprise the costs and expenses incurred by the CEWH in performing statutory functions and meeting the expenses of administering the special account. The largest costs are holding and use costs,

which comprise fixed and variable components. The variable component depends on the annual amount of water allocated to the entitlement and the amount of water used.

The Department supports the operation of the special account through its financial management and reporting functions. At the beginning of the 2010–11 financial year, the special account had a balance of \$4.99 million.

The Act requires the CEWH to report annually on the management of the special account. The CEWH will undertake this function in conjunction with the Department, which is required to report on the special account in its financial statements.

The special account is audited as part of the audit of the Department's financial statements.

5.1.2 Financial commitments and obligations

Holding and using water, and agreements with watering partners, will create financial obligations for the Commonwealth in the form of:

- holding and delivery charges
- (potential) agreements to provide funding for the delivery of water
- other contractual commitments.

5.1.3 Departmental budget

The salary costs of the CEWH and officers of the Department assisting the CEWH cannot be paid from the special account and are, therefore, paid from funding from the Department.

The budget for 2010–11 provides for an increase in departmental officers assisting the CEWH from the current number of 25 to 42.

5.2 Asset management

The assets managed by the CEWH are accounted for, valued and reported. An up-to-date report of the extent of the holdings is maintained in the holdings register and data on water trading is maintained in state registers.

5.2.1 Accounting, valuation and reporting of the holdings

The CEWH will work closely with the Chief Financial Officer of the Department to ensure the holdings are appropriately recorded and reported.

Rights acquired for the holdings are intangible assets in accordance with the Australian accounting standard on intangible assets (*AASB 138 Intangible Assets*). These will be recognised on the Department's balance sheet if they meet the recognition criteria in AASB 138: that it is probable that expected future economic benefits will flow to the entity from the rights and that the cost of the rights can be measured reliably.

Rights that are recognised will be valued at cost (or given fair value, for assets acquired at no or nominal cost). If an active market exists, then the standard AASB 138 requires entitlements to be valued using the revaluation model.

An active market is a market in which all the following conditions exist:

- the items traded in the market are homogenous
- willing buyers and sellers can normally be found at any time
- prices are available to the public.

During 2009–10, the Department received advice from KPMG confirming that water markets do not, at present, meet the criteria for an active market. As such, water rights will either be valued at cost or at 'fair value' at the time they are acquired. Water rights are regarded as intangible assets with an indefinite useful life and will continue to be tested annually for impairment under the Australian accounting standard *AASB 136 Impairment of Assets*. Any significant prolonged decline in the market price of the rights acquired will result in a write-down in the value of the rights on the Department's balance sheet.

Water allocations are not identified as separate assets. Consistent with the classification of permanent water licences as intangible assets, water allocations are considered analogous to a future income stream 'built-in' to the value of the underlying water entitlement asset. In other words, the value of the water licence equals the discounted expected value of future water allocations.

In 2010–11, the Environmental Water Branch will prepare a pilot report in accordance with the *Preliminary Australian Water Accounting Standard*.

Details of the Commonwealth's environmental water holdings are available on the Department's website and are updated on a monthly basis.⁷

5.2.2 Holdings register

As required under s. 105(2)(c) of the Act, the CEWH maintains an up-to-date record of the holdings in the form of a register. The register is a list of the entitlements held and the credits available to their associated water-allocation accounts—an entitlement register and a water-account register.

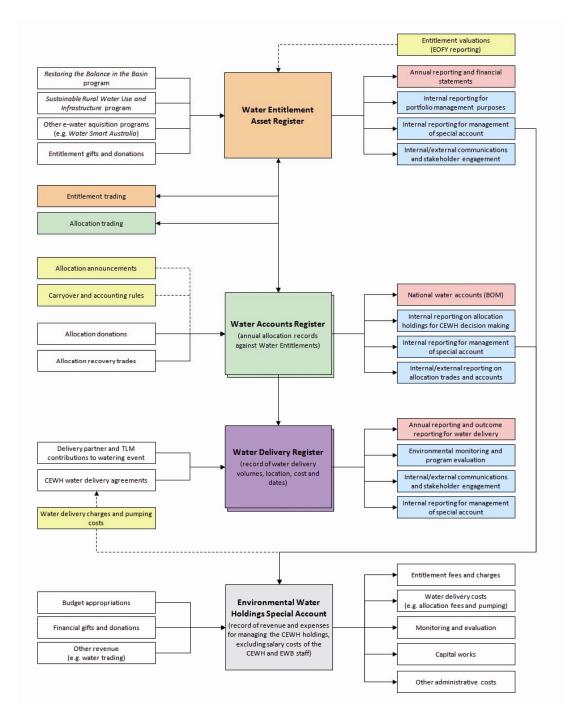
The register of holdings provides information on:

- water-delivery activities
- · transfer and trading records
- allocation account management
- costs incurred in managing the holdings.

Figure 2 is a schematic diagram of the register.

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⁷ www.environment.gov.au/water/policy-programs/cewh/index.html



BOM = Australian Government Bureau of Meteorology; CEWH = Commonwealth Environmental Water Holder; EOFY = end of financial year; EWB = Environmental Water Branch; TLM = *The Living Murray*

Figure 2 A schematic of the environmental water holdings register showing information management and data flow

An independent review of the register was undertaken in 2009–10 to determine its suitability for managing the expected continued growth in the holdings. The review suggested areas for development to ensure that the register continues to meet the needs of the CEWH in the future. In 2010–11, the review's recommendations will begin to be implemented, as appropriate.

5.2.3 Market information

Data on the trade in water entitlements and allocations is recorded in state-managed registers. This information is used in relation to:

- valuation of the holdings
- identification of opportunities for trading allocations and entitlements
- responding to requests for information.

5.3 The annual report

The CEWH is required to provide the Minister with an annual report as soon as practicable following 30 June of each year—s. 114(1). The annual report must provide information on achievements against the objectives of the environmental watering plan, management of the special account, and any directions that the Minister and the Secretary have given to the CEWH—s. 114(2).

The Minister must cause a copy of the annual report to be tabled in each House of the Parliament within 15 sitting days of that House after the day on which the Minister receives the report, and cause a copy to be given to the relevant minister for each of the Basin states on or before the day the report is first tabled in a House of the Parliament. The annual report is published in the Department's annual report in accordance with the *Public Service Act 1999* (Cwlth). Annual legislation reports about Acts that the Department administers are also reported on in the annual report.

5.4 Governance

The CEWH is governed by the procedures and policies of the Australian Government, and within the governance contexts of internal reporting requirements and a risk management framework.

5.4.1 Confidentiality of information and conflicts of interest

The procedures and policies of the Australian Government and the Department will continue to be complied with for the handling of confidential information and conflicts of interest. In January 2010, the Department engaged the services of an expert probity advisor to specifically provide assurance of compliance with relevant government policies and legislation. In particular, the *Financial Management and Accountability Act 1997*, the *Commonwealth Procurement Guidelines* (CPGs) and the *Commonwealth Grant Guidelines* (CGGs) for all Water Group grant, funding agreement and procurement processes.

5.4.2 Knowledge and information management

The CEWH maintains records in accordance with established requirements of the Department and the Australian Government, including:

- any directions from the Minister or the Secretary, and the response to those directions
- watering agreements, the activities undertaken through those watering agreements, and their outcomes
- dealings in holdings and holdings allocations
- advice received on environmental watering priorities.

Knowledge needs are focused around six key themes:

- environmental assets and their water requirements
- freshwater ecosystem regionalisation and aquatic asset prioritisation
- environmental watering scenario generation
- ecological prioritisation
- monitoring and evaluation
- portfolio management.

Throughout 2010–11, these needs will be pursued, including through the development of the *National Water Knowledge and Research Plan*, and with CSIRO and the Bureau of Meteorology, among others.

In order to assist in achieving maximum environmental benefit from the Commonwealth's water holdings, the CEWH will be working with the Murray–Darling Basin Authority (MDBA) during 2010–11 to develop an environmental asset database. The database will provide a consistent and easily accessible source of up-to-date information on environmental assets in the Basin. The database is expected to be operational by the end of 2010–11 and, in conjunction with the water holdings register, will be a key support tool for managing the Commonwealth's water holdings.

In 2010–11, a major focus of the CEWH will be to develop the understanding and capacity to prioritise environmental water use from the perspective of the Basin as an integrated system. This approach recognises the connected nature of the Basin's aquatic ecosystems, and the need to consider complementary water use at different times and locations in order to achieve the best outcome for the Basin as a whole. It builds on and helps implement the Department's framework for determining Commonwealth environmental watering actions.

5.4.3 Directions from the Minister and the Secretary

Any directions from either the Minister or the Secretary will be formalised in writing to ensure that these are implemented consistently within the limits and requirements of legislation.

5.4.4 Internal reporting

The CEWH will ensure that the Water Group executive, Deputy Secretary, Secretary and the Minister are kept regularly informed about:

- the use of Commonwealth environmental water holdings
- forecast positions in relation to the holdings and their use
- the development of tools and resources to assist us in meeting any statutory requirements.

5.4.5 Risk management

Risk management underpins the Department's approach to achieving its objectives. As such, the Department has an internal risk identification and management process that involves a regular formal review. Environmental watering risks will change over time as the holdings, watering arrangements and systems mature. The CEWH is guided by these processes.

5.4.6 Panel of environmental water management service providers

In 2010–11, the Department will establish an Environmental Water Management Services Panel to assist us in managing the Commonwealth's environmental water holdings.

6 Glossary

Allocation	A volume of water allocated for use in any year under a water right.			
Basin Plan	The plan for water management in the Murray–Darling Basin under Part 2 of the <i>Water Act 2007</i> (Cwlth), to be developed by the Murray–Darling Basin Authority and passed into legislation by the Minister.			
Entitlement	Common name for a water right issued under state and territory legislation.			
Environmental watering plan	Part of the <i>Basin Plan</i> that deals with managing water designated for the protection and restoration of environmental assets, as detailed in s. 28 of the <i>Water Act 2007</i> (Cwlth).			
Holdings	All water rights owned by the Commonwealth, except those that are not for the purpose of water management under the Water Act 2007 (Cwlth). The holdings include all Commonwealth-owned water rights that are held for the purpose of protecting or restoring environmental assets.			
Gigalitres (GL)	One billion litres, or one square kilometre of one-metre-deep water.			
Operating rules	The Minister may, with the approval of the Australian Parliament, make operating rules that provide general direction to the Commonwealth Environmental Water Holder around <i>water trading</i> . This is found in s. 109 of the <i>Water Act 2007</i> (Cwlth).			
Planned environmental water	Water or <i>water rights</i> designated for specific environmental purposes under state water-management regimes.			
Southern- connected rivers	Rivers located within the southern part of the Murray–Darling Basin with permanent (or near permanent) hydrologic connection, allowing water from upstream catchments to be used in downstream catchments. The major southern-connected rivers include: • Murray River • Murrumbidgee River • Darling River downstream of Menindee Lakes • Goulburn River • other rivers of northern Victoria within the Murray–Darling Basin.			
Special account	The Environmental Water Holdings Special Account established under s. 111 of the <i>Water Act 2007</i> (Cwlth), which is to be managed by the Commonwealth Environmental Water Holder.			
Tagged trading	 A trading arrangement under which every <i>allocation</i> under a <i>water right</i> is made available for use in a catchment that is different from the source catchment. The <i>water right</i> retains its original source location and characteristics. A person who has obtained a <i>water right</i> by tagged trading owns the water right in the source catchment, but may also need a water-use right in the delivery catchment. Intrastate tagged trades are made under state legislation. Interstate trades are made under state 			
-	legislation and the Murray–Daring Basin Agreement.			
Term transfer	A fixed-term transfer of <i>allocations</i> under a <i>water right</i> to another person.			
Water right	Any water right (or share in a water right) conferred under state law to hold or take a nominal volume of water from a water resource, usually in the form of an annual allocation. The actual volume of each allocation varies from year to year, depending on the amount available. Water rights issued in each state are referred to by different names: • entitlement (New South Wales) • water share (Victoria) • supplemented allocation (Queensland) • water-holding allocation (South Australia).			
Water shepherding	Water shepherding provides for the legal protection, effective use and accurate accounting of Commonwealth environmental water to ensure that the substantial Commonwealth investment under <i>Water for the Future</i> is protected and the objectives of the <i>Water Act 2007</i> (Cwlth) are met.			
Water trading	Transfer of water or a <i>water right</i> from one person to another. Water trading includes purchasing, disposing of, and otherwise dealing in water and <i>water rights</i> .			
Water year	The 12-month period during which a volume of water is allocated to a <i>water right</i> . The water year is typically 1 July – 30 June, with some exceptions in the northern Murray–Darling Basin.			

7 Table of Amendments

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Attachment 1 Criteria for assessing 2010-11 environmental watering actions

In undertaking its activities, the Commonwealth Environmental Water Holder (CEWH) is required to act consistently with the requirements of the *Water Act 2007* (Cwlth) (the Act). The relevant functions are outlined in s. 105. This includes a requirement that the environmental water holdings be managed in accordance with the environmental watering plan of the Murray–Darling Basin Authority (MDBA). Close consultation is occurring with the MDBA to ensure that use of Commonwealth water is consistent with the emerging objectives of the environmental watering plan that is currently being developed.

A long-term framework for the prioritisation of environmental water allocations has been prepared in consultation with delivery partners, interested stakeholders and experts, and the Environmental Water Scientific Advisory Committee.⁸

The framework includes ecological objectives that will change under the different water availability scenarios (extreme dry, dry, median, wet). Proposed watering actions will need to be supported by available evidence, and be consistent with current water availability scenarios and the framework.

Commonwealth environmental water is being acquired to supplement existing flows. Proposals for use of the water will not be agreed to if this use substitutes for other water uses, including historical system operations (e.g. provision of water for conveyance, stock and domestic, or planned environmental water).

Through adaptive management processes, the CEWH will consider any opportunities for a more informed and diverse range of water uses as knowledge and modelling. All 2010–11 proposals will be assessed against the criteria listed here.

1 The ecological significance of the asset(s)

Issues to be considered:

- the presence of threatened species and ecological communities, and listed migratory species; and
- ecological and conservation values of the asset(s), including those recognised by international agreements.

2 The expected ecological outcomes from the proposed watering action

Issues to be considered:

• how well defined and realistic the objectives are for the proposed watering action;

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⁸ www.environment.gov.au/water/policy-programs/cewh

- the consistency of these objectives with the overall CEWH ecological objectives for the current forecast water availability scenario;
- the current health of the asset(s);
- the improvement in health of the asset(s) expected from the watering action;
- the Basin-wide significance of the ecological response from the watering action;
- any secondary environmental effects expected to result from the watering action (e.g. connected system benefits); and
- the change in the health of the asset(s) expected if environmental water is not provided.

3. The potential risks of the proposed watering action at the site and at connected locations

Issues to be considered will include:

- how thoroughly the potential risks have been assessed for the proposed watering;
- the adequacy of measures proposed to minimise these risks; and
- the likelihood and consequence of variance from the expected ecological outcome (including negative impacts on biota and water quality).

4. The long-term sustainability of the asset(s) including appropriate management arrangements

Issues to be considered will include:

- the adequacy of long-term management and delivery arrangements;
- the existence of complementary natural resource management activities supporting the long-term management arrangements, including those that improve water quality; and
- the effectiveness of monitoring, evaluation and reporting arrangements for the watering activity including clear links to the defined objectives.

5. The cost-effectiveness and operational feasibility of undertaking the watering

Issues to be considered will include:

- the amount of Commonwealth water and resources needed, including relative to the contribution of the state and delivery partner the arrangements for the delivery of water to the asset(s), including the potential for transmission losses and the adequate accounting of flows;
- opportunity to supplement natural flows or other water releases; and
- the operational feasibility of undertaking the watering action (e.g. channel capacity, infrastructure constraints, etc).



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