Australian Government

Department of the Environment, Water, Heritage and the Arts

Submission to the Productivity Commission

Draft research report

Market Mechanisms for Recovering Water in the Murray-Darling Basin

19 February 2010

INTRODUCTION

1. The Department of the Environment, Water, Heritage and the Arts (the Department) welcomes the opportunity to provide comments to the Productivity Commission (the Commission) on the draft report *Market mechanisms for recovering water in the Murray-Darling Basin.*

2. The Department agrees with many of the comments made by the Commission in its draft report and welcomes the Commission's endorsement of using market mechanisms to recover water for the environment.

3. The Department agrees that there are potential benefits which can be gained from further water market reform, such as the removal of barriers to trade, including the four per cent limit on out-of-area trade of water entitlements. These reforms will benefit all water entitlement holders, as well as environmental water recovery initiatives including the Restoring the Balance in the Murray-Darling Basin (RtB) program.

4. The Department concurs with the Commission's view that other inputs apart from water (such as changes to land management practices) may be needed to achieve environmental outcomes. A whole of system approach to the management of environmental assets is required, and the Commonwealth Environmental Water Holder (CEWH) takes such issues into account in managing environmental water holdings. More detail on the CEWH's activities is provided in this submission.

5. The Department also concurs with the Commission's finding that using the buyback to address unrelated objectives, such as achieving distributional goals, system rationalisation, and reducing the salinity impacts of water use is likely to compromise its effectiveness and efficiency. Other more direct instruments would generally achieve these objectives at a lower cost.

6. The Department has focussed this submission on responding to those draft findings which in the Department's view require further consideration. It is the Department's view that some of these require more complete analysis of the costs and benefits of the options being considered. Others would benefit from greater acknowledgement of the established roles and responsibilities of various government agencies, and on the stated objectives of key government programs. The submission has two sections: the first provides information and commentary on the key subjects raised in the Commission's draft research report; the second section proposes minor amendments/corrections to the information contained in the draft report.

PART 1. – FURTHER INFORMATION

Restoring the Balance in the Murray-Darling Basin program

7. The objective of the RtB program is to achieve a permanent re-balancing of the system between water available for the environment and consumptive use, by purchasing permanent water entitlements from irrigators. The water allocated to these entitlements can be actively managed each year for environmental purposes, providing a lasting change in the allocation of water to the environment.

Tender arrangements

8. As noted in the Department's Submission to the Commission *Issues Paper*, the principal mechanism used to purchase water entitlements from potential sellers is a discriminatory price tender. Sellers are able to offer separate parcels of water at different prices through separate bids so long as the total volume of water offered for sale does not exceed the total volume of water available on the licence to which the water is attached. Sellers may choose to utilise the services of a broker or solicitor to lodge their sell offer. In the 2008-09 tender, around 57 per cent by value of offers pursued were submitted through a broker or solicitor. Sellers who choose to use a broker may have done so either to ease the administrative burden associated with preparing a sell offer, and/or to capture the agents' knowledge of the market and their expertise in preparing sell offers and satisfying RtB program requirements.

9. In the 2007-08 and 2008-09 rounds of water purchasing, offers of water received by the Department were assessed on a rolling basis. In 2009-10 offers will be assessed after the close of each tender. Offers will be ranked against each other, and accepted, in order of the degree to which they represent value for money, subject to also satisfying other program criteria.

10. Water purchase tenders in 2009-10 are focused on the southern connected Murray system because this is judged to be the highest priority for environmental water purchasing at this time. The first 2009-10 southern connected system tender included: New South Wales Murray, Murrumbidgee and Lower-Darling catchments; South Australian Murray; and the following regulated catchments: Murray; Kiewa; Goulburn; Campaspe and Loddon.

11. The southern connected system is ranked as a high priority for environmental water recovery on the basis of the number and significance of environmental assets within these catchments that need watering, or are expected to need watering in the future; how the water resources are allocated; and whether the catchments are known to require additional water to maintain or improve environmental values and the provision of environmental services. Water entitlements from the tributary catchments listed above can also be used across the southern connected system.

12. The first tender for 2009-10 opened on 11 January 2010 and closed on the 29 January 2010. There will be two further southern connected system tenders in 2009-10, beginning in early March and late April 2010.

13. There are some entitlement types which the Government will not be accepting in 2009-10. This is due to concerns such as the ability to trade these entitlements separately from land, or their likely future water yield. Further details of the 2009-10 round of water purchasing, including the Program Guidelines and Information Pack for the first 2009-10 southern connected system tender, can be found on the Department's website at

www.environment.gov.au/waterpurchasing. Information about subsequent tenders will be announced on that website.

14. Some catchments have been excluded from the 2009-10 southern Basin tenders on the basis that the environmental benefit from water recovered from these sources is less certain than elsewhere in the southern connected system due to delivery issues and/or relatively lower priority watering needs within the tributary catchment. The catchments excluded from the first southern connected system tender were: Wimmera-Mallee, Broken, Avoca and Ovens.

15. There are other key differences in the 2009-10 round of water purchasing as compared to 2008-09, including that:

    - the Government will not be purchasing water entitlements with an encumbrance such as Snowy Borrow;
    - the Government will not be purchasing combined applications involving more than one licence;
    - the Government will not be purchasing volume or price changes once an offer has been assessed;[1] and
    - there is a limit on the volume of water entitlements that will be purchased from New South Wales.

16. As mentioned above, one option that was available in the 2008-09 round of water purchasing which is not available in 2009-10 tender is that of allowing applicants to submit offers which combine more than one licence. The Commission has suggested in their draft report that allowing irrigators to bid several combinations of entitlements and prices as part of a single bid could improve the efficiency of the tender (draft finding 8.2). In practice, an applicant can do this through the current tenders, but the offers need to be submitted on separate forms.

17. The Department has developed an online application form to reduce both manual processing times and errors associated with manual processing. The online form is being used in the 2009-10 tenders, and should make the application process simpler for both applicants and the Department.

Irrigator Led Group Proposals

18. The Government is inviting groups of irrigators to work with their irrigation water provider and other directly affected parties to develop proposals to sell their water entitlements to the Commonwealth and decommission their shared off-farm irrigation delivery infrastructure. Working together has the potential to provide a number of benefits for the parties involved, including:

    - allowing irrigators to sell their water entitlements and restructure their businesses;
    - Allowing irrigation water providers to decommission inefficient channels, pipelines and other infrastructure. The Australian Government will consider making a contribution towards the cost of infrastructure works where such a contribution could be justified in terms of key Water for the

[1] Prior to assessment, applicants can withdraw the original offer and submit a new offer up to the close of the tender.

Future priorities (particularly 'taking action on climate change' and 'using water wisely');

- providing the Australian Government with the opportunity to make value for money purchases of water entitlements under the RtB program that can be used to protect and restore environmental assets;
- where infrastructure is to be decommissioned, there may be savings in conveyance water, which can be retained by the irrigation water provider to benefit the business and/or remaining irrigators, or sold to the Commonwealth, thereby enhancing returns to irrigators selling their entitlements; and
- where irrigation supply infrastructure is to be removed, irrigators may be able to negotiate reductions in any termination fees charged by their water provider.

Non-binding bids

19. One suggestion made in the draft report was that the effectiveness and efficiency of the tender would be improved by making offers to sell binding on potential sellers (draft finding 8.3).
20. The Department's preference so far has been to allow sellers to make non-binding bids because this reduces the costs of participation in the tender, which in turn is anticipated to encourage a greater volume of offers. Under the current arrangements, a seller does not need to seek legal advice on the sale contract until they learn that their sell offer is being pursued. If bids were binding, it is likely that sellers would need to review or obtain advice on the standard sale contract prior to lodging a bid. This cost and effort would be wasted for sell offers which were unsuccessful.
21. This is not an insignificant issue because the average success rate during the 2008-09 tender averaged around 65 per cent for the Southern Basin and 26 per cent for the Northern Basin. In some individual rounds, the success rate was zero. Because many bids may be unsuccessful, the Department feels that reducing the cost of participation is important.
22. While the use of non-binding bids might be perceived as resulting in high administrative costs to the Department as a result of withdrawals, the estimated administrative cost of preparing trades that were subsequently withdrawn by the seller prior to contracts being exchanged (at which point the trade becomes legally binding on both parties) amounted to less than 0.02 per cent of the total value of trades secured as at 31 January 2009.
23. The Department considers that the suggestion to move to binding bids is not supported by a complete assessment of the benefits and costs of such a change.

Due diligence

24. The Commission has suggested that the efficiency of the conveyancing process could be improved by exchanging sale contracts prior to commencement of the due diligence process, that the current due diligence process should be assessed for potential duplication with current state approval processes, and that sources of duplication be removed (draft finding 8.4).

25. The Department has chosen to conduct due diligence prior to entering into a sale contract with the vendor for two key reasons. First, complete information on the owners of the entitlement is collated as part of the due diligence process so that the contract can be issued to the correct legal entity. Second, the due diligence process encompasses more than a search of the relevant state water register. It also includes other searches which could reveal encumbrances (such as searches on land titles). In some instances, these additional searches have revealed that the water entitlement was subject to bankruptcy or other legal proceedings. Other due diligence checks include determining if there are any regulatory barriers which could prevent the sale, and confirming that (where applicable) appropriate power of attorney, trustee or executor arrangements are in place.

26. The due diligence checks have proven to be important in preventing legally binding contracts being exchanged for trades where issues would have affected overall value for money or prevented the completion of the trade. In the 2008-09 tender, twelve trades totalling 3,189 megalitres of entitlements worth $4,668,892 were not pursued by the Department as a result of issues uncovered by the due diligence process.

27. In short, the Department considers that draft finding 8.4 is not supported by the evidence discussed above.

Outcome of water purchasing activities in 2008-09

28. As at 31 January 2010, the RtB program had secured the purchase of 797 GL of water entitlements valued at $1.27 billion (see Attachment A for further details). These entitlements are expected to yield an average of 532 GL of water per year for the environment. Information on the outcomes of the RtB program is regularly updated on the Department's website.

29. The National Water Commission's Australian Water Markets Report 2008-09 notes on page 7 that Commonwealth purchases accounted for just 3.9 per cent of entitlement trade registered in the Basin. This understates the relative size of the 2008-09 water purchase tender because only a relatively small volume of tender purchases, 41 GL, had been settled and registered in the name of the Commonwealth by the end of the 2008-09 financial year. This was only a small proportion, 5 per cent, of total purchases pursued as a result of the Department's 2008-09 tender. While the majority of purchases made through the 2008-09 tender will appear on the water registers in 2009-10, this will still represent a relatively small proportion of trade, provided trades by other entities remains at the level seen in the previous year.

30. Water purchases made through the RtB program include the provision of funding to assist the NSW Government with its purchase of Toorale Station (Barwon-Darling and Warrego catchment) and its water entitlements.

31. Some points to note regarding the information provided at Attachment A are:

- The average price paid, per trade, is provided for only those catchments where contracts have been exchanged with five or more sellers, so as to protect the privacy of information relating to individual sales. For catchments where contracts have been exchanged with fewer than five sellers and water has been purchased from Twynam Agricultural Group, only the volume of the Twynam purchase is shown as this information has previously been publicly released.
- The average prices paid are not an indicator of what the Australian Government is willing to pay for future purchases of water entitlements. The prices the government pays for water entitlements are influenced by market price movements, the reliability of entitlements, expected environmental benefits and the cumulative volume of water entitlements acquired in each catchment.
- There is a time delay, that may be some months, between an offer being accepted and when contracts are exchanged.
- The volumes and price of Murray Irrigation Limited (MIL) transactions have been adjusted to account for the conveyance water component (17 per cent) of the MIL entitlements as defined prior to 1 July 2009. The changes make MIL entitlements equivalent to NSW General Security entitlements held on the Murray River. The MIL website www.murrayirrigation.com.au has an explanation of the change to the MIL entitlements before and after 1 July 2009.
- It is not possible to compare the average annual volume of water that will be recovered in each catchment by just comparing the entitlement volumes that have been purchased because the average yield varies across both catchments and entitlement types. To account for these variations in reliability, estimates are provided of the annual volume of water that is expected to be available for environmental use, for each entitlement type in each catchment.

Purchasing ahead of the Basin Plan

32. The Commission raised concerns in a number of areas of the draft report over the sequencing of purchasing ahead of the Basin Plan. The Department shares the Commission's assessment that there is widespread recognition that some of the Basin's water resources need to be redirected to the environment. Given this and the magnitude of the problem, the Department considers that it is important that it begins to secure water entitlements for the environment ahead of the Basin Plan, so as to commence rebalancing of the system and provide immediate environmental benefits. This will also help smooth the transition to the lower levels of consumptive water use expected under the Basin Plan.

33. The Basin Plan is scheduled to be made in 2011 and will include new scientifically based sustainable limits on the amount of water that can be diverted from rivers and from groundwater. Irrigation communities will need to adjust to new diversion limits as they are adopted into State water sharing plans from their respective review dates, beginning in 2012.

34. Water purchased for the environment prior to the water sharing plans being revised will mean that the impact of lower sustainable diversion limits on irrigators will be less than it would otherwise have been. The MDBA has released a fact sheet titled 'Sustainable Diversion Limits (SDLs) and the Impacts of Environmental Water Purchases', which discusses this issue.

Approach to purchasing

35. The Commission's analysis could be seen as implying that the water purchase program has not been underpinned by a strategic approach. In fact, a strategic approach is adopted, so a more detailed explanation of the framework used by the Department has been provided below.

36. Ahead of the finalisation of the Basin Plan, the Australian Government is adopting a conservative approach in setting environmental water recovery requirements and determining purchase priorities in the Murray-Darling Basin (the Basin). The MDBA's Issues Paper on the development of the sustainable diversion limits explains how the sustainable diversion limits in the Basin Plan will be defined as the level of water which can be taken from a Basin water resource without compromising the key environmental assets, key ecosystem functions, productive base and key environmental outcomes of the water resource.

37. The environmental outcomes sought from the Australian Government's purchase program include addressing overall system health as well as key environmental values and assets. The Department consults with the MDBA on implementation of the RtB program and endeavours to prioritise water purchasing in a way which will result in a portfolio of environmental entitlements which is consistent with the direction and content of the Basin Plan, which is scheduled to be made in 2011.

38. This first step in setting environmental water recovery requirements and purchase priorities for the purchase program is to estimate the environmental watering needs of each catchment in the Basin. This is done using the best available science by:

    - drawing on the results of the Murray-Darling Basin Commission Sustainable Rivers Audit which assessed the environmental health of the riverine ecosystems;
    - using results from the CSIRO Sustainable Yields project to gauge climate change risks posed to the environment; and
    - referring to studies which estimate the unmet watering needs of particular catchments or environmental assets where they are available, such as the scientific analyses underpinning *The Living Murray* initiative.

39. In completing this step, it is recognised that it is sometimes feasible to source water for an environmental asset from any of a number of upstream tributaries. In the case of the southern connected Murray system, this is dealt with by estimating the environmental water recovery requirements for the connected system as a whole, with nested in-catchment objectives set where the choices become more constrained.

40. The second step in establishing purchase priorities for the Government's buyback program involves consideration of the volume of water already provided for the environment in the relevant water sharing plan, as well as:

- potential water savings from Australian Government investments in more efficient off and on farm water use through the Sustainable Rural Water Use and Infrastructure program; and
- .the volume of environmental water recovered, or likely to be recovered, including through other government environmental water recovery programs, such as NSW Riverbank and *The Living Murray*

41. Information on environmental water holdings across the MDB is provided in a report published by COAG on a six-monthly basis. The report is compiled by the MDBA and confirmed by the Basin Officials Committee before submission to COAG. The latest report lists each jurisdiction's registered holdings to the end of June 2009 (http://coag.gov.au/coag_meeting_outcomes/2009-12-07/docs/murray-darling_basin_report.pdf). COAG has agreed that future reports will include information about the use of recovered water for environmental purposes.

42. The information from the two steps described above is used to develop some water recovery objectives for the Australian Government water purchasing program. However, these recovery objectives are further moderated by considering the impact of any delivery constraints which may serve to reduce the potential incremental environmental benefit of water acquisitions as the environmental water entitlement portfolio grows.

43. The Department does not believe it would be appropriate to publicly release the recovery objectives as these are being refined continually. Also, announcement of definitive volumetric targets could be seen as pre-empting the work of the MDBA in establishing the environmental watering plan and sustainable diversion limits under the Basin Plan.

44. The focus of environmental water purchasing within these established recovery objectives is then discussed with the Commonwealth Environmental Water Holder to ensure purchases continue to be directed at the catchments with the highest priority environmental needs. Purchasing is restricted to those entitlement types whose reliability profiles match identified environmental needs.

45. Once it is decided in which catchments water purchasing will be conducted, the purchase program uses three criteria to assess value for money, namely:
    - the entitlements offered must provide water in a catchment where it is known that additional water is needed for the environment;
    - the water allocated to the entitlements can be delivered to target environmental assets; and
    - the cost of the sell offer, taking into account the offer price, transaction costs and any environmental water delivery costs.

46. The Department regularly reviews progress with environmental water recovery, and weighs up the relative priority for further purchases in each catchment or, in the case of the southern connected system, in each sub-catchment.

47. A case in point is the Gwydir catchment. Toward the end of the 2008-09 tender, the Department decided to cease making any further purchases in the Gwydir catchment for the time being. Water purchases were approaching the recovery objective for that catchment, taking into account other environmental water recovery initiatives there. As a result, further purchases in the Gwydir were deemed to be of lower

priority than purchases elsewhere in the Basin. The relative priority of further purchases in the Gwydir catchment will be reviewed, especially once the proposed Basin Plan is released.

48. The prioritisation framework described above represents a conservative approach to environmental water purchasing which is consistent with the approach being taken to developing the Basin Plan. It uses the best available science to ensure purchases are justified by environmental need, while also endeavouring not to acquire more water than would likely need to be acquired to reduce diversions to the lower sustainable diversion limits anticipated in the Basin Plan. The framework aims to result in a well-balanced portfolio of entitlements which can be used to address the priority environmental watering needs across the Basin, through time.

49. The MDBA has recently confirmed that the approach the Department is taking in determining catchment purchase priorities, and in assessing individual offers is broadly consistent with the approach the Authority is taking to developing the Basin Plan.

50. The Department will continue to work with the MDBA to ensure the approach to environmental water purchasing remains consistent and compatible with the approach being taken to develop the Basin Plan. In particular, the Department will take account of new information as it becomes available, for example, as a result of the release of the proposed Basin Plan in 2010.

Governance

51. The Commission has commented that there would be potential benefits in water purchasing decisions being made at arms length from the Minister. This is in fact already the case. The arrangements in place for the procurement of water entitlements through the RtB programs achieve this independence. The Department administers the RtB program and has been given delegations by the Minister to make decisions on water entitlement purchasing. The Minister approves the general approach to the procurement of water entitlements. However, the Minister is not involved in the operation of the tenders or in decisions on which entitlements to purchase, and does not intervene in the day-to-day operation of the program.

Impediments to trade

52. The Department supports the Commission's view that there are benefits to be gained from further water market reform, such as the removal of barriers to trade including the four per cent limit on out-of-area trade of water entitlements. The Government considers that the best way to make progress is by working with Basin State Governments through an agreed approach to Basin reform.

53. The Government considers that the irrigation industry, the community and the environment are best served by the water market working as openly and efficiently as possible. Water market reform helps ensure that water can move its highest value uses, including for the environment. Further detail on the Government's view on potential impediments to trade; how such impediments affect the use of particular market mechanisms; and Government programs and initiatives designed to reduce and/or remove these barriers, were outlined in detail in the Department's Submission to the Commission *Issues Paper*.

54. The Basin States have agreed to the implementation of a Basin Plan, which is scheduled to be made in 2011. The ACCC's draft advice proposes the phased

removal of the 4 per cent limit from 2011 to 2014. The MDBA will have regard to the ACCC's final advice in drafting trading rules in its draft plan, which it will then provide to the Australian Government.

55. The four per cent limit has been a substantial constraint on environmental water purchases. The agreement the Australian Government reached with Victoria in June 2009 partially relaxes this constraint. The agreement allows the Australian Government to additional purchases for the environment without these purchases counting towards the four per cent limit. Under this agreement, the Australian Government has already been granted trade approval for more than 48 GL of the 60 GL which were agreed to be exempt from the 4 per cent limit in 2008-09. A further 60GL of exemptions must be granted in 2009-10 under the agreement.

56. In September 2009, the NSW Government agreed to lift its embargo on water trade for the environment in return for the Australian Government limiting its water purchases under RtB from NSW to set volumetric limits each year over the five years from 2008-09. As part of the agreement, both governments also committed to developing and implementing effective water shepherding arrangements to ensure that water purchased can be used to meet high priority environmental needs.

Alternate purchase mechanisms

57. The Department is open to utilising water purchase mechanisms other that the current tender process where these can be demonstrated to be cost effective.

58. The Commission has commented in its report that where active markets for water entitlements exist, acquiring water entitlements directly from those markets is likely to be more efficient than utilising alternative purchase mechanisms (draft finding 8.1).

59. The Department is interested in the potential for acquiring water entitlements directly from the market, and has made preliminary investigations into this option as a method of complementing the current tender mechanism.

60. A key issue is the incomplete market coverage offered by existing trading exchanges. The decentralised market (with several exchanges competing for the same customers) means that each exchange represents only a portion of the market, making full market coverage via this mechanism difficult. For example, the water exchange operated by Murray Irrigation Limited (MIL) is only available to MIL shareholders. Consequently, the MIL exchange provides incomplete coverage for NSW River Murray entitlements. The advantage of the tender approach adopted by the Department is that all entitlement holders (and their brokers) have the opportunity to submit a sell offer, thereby providing complete coverage of the water entitlement market in the area covered by a tender.

61. Another issue is that the standard sale contracts used by regional exchanges or trading houses (which all users must agree to use in order to participate) may not be appropriate for the Australian Government. There is no standard water sale contract universally used across the industry. In some cases, buyers are only given a very short period in which to sign a sale contract which is too short to conduct the necessary due diligence checks, or to meet other requirements set out in the Commonwealth Procurement Guidelines.

62. Before contemplating the use of such exchanges for Commonwealth purchases, the terms and conditions, including liability and indemnity, in use, need to be reviewed thoroughly to ensure they are appropriate for a public agency dealing with public

money. The Department would also need to consider the cost to the purchasing program of using a trading exchange. In some cases, costs can be very substantial, especially when exchanges charge a percentage of the purchase price. In these instances, a tender process may be a more cost effective option for the Department.

63. Similar concerns to those canvassed for trading exchanges apply to utilising brokers as a complementary mechanism to the tender process. Other potential issues may arise if brokers are representing both a major buyer and sellers.

Sustainable Rural Water Use and Infrastructure Program

64. The Australian Government has committed $5.8 billion under SRWUIP to increase water use efficiency in rural Australia. Investment is being principally focused on projects that:
    - deliver substantial and lasting returns of water for the environment,
    - secure a long-term future for irrigation communities, and
    - deliver value for money in the context of the first two tests.

Program Objectives

65. SRWUIP and RtB are complementary programs under the Water for the Future initiative.

66. More than $4.4 billion has been committed to date under SRWUIP to significant state-based water infrastructure projects and investment, most of which in return for a share of water savings, in modernisation of privately owned irrigation operations in the Murray-Darling Basin. This figure includes election commitments funded under the National Partnership Agreement on Water for the Future, as agreed by First Ministers.

67. Importantly, SRWUIP supports irrigation operators and their communities to undertake irrigation modernisation planning. Regions which account for close to 70 per cent of the total volume of irrigation entitlements in the Basin now have a formal modernisation plan that expressly accounts for the future impact of climate change and needs for water use efficiency. Nearly $5 million has been provided for this purpose to date.

68. In its draft report, the Commission says that funding infrastructure upgrades is 'generally not a cost-effective way for governments to recover water for the environment' and 'is unlikely to be an effective or efficient means of sustaining irrigation communities' (draft finding 6.4). Further, the Commission has recommended that only those infrastructure projects which recover water at approximately the market price should be approved.

69. The Department believes that the benefits flowing from investing in rural water infrastructure include benefits beyond those considered in the draft report. In creating SRWUIP, the Government has broader objectives that go beyond recovering water for the environment.

70. Both SRWUIP and RtB are assisting in easing the transition to a likely future of reduced water availability. Estimates of expected future water availability are based on the best science available to government and the broader community (CSIRO Sustainable Yields reports). From this work, it is clear that an adequate water allocation for the environment is at least partly dependent on irrigated

agriculture, particularly in the Murray-Darling Basin, moving to a smaller footprint in the future. This smaller footprint will arise both from a withdrawal of irrigation from uneconomic areas, as well as the more efficient use of water.

71. The prudent implementation of the infrastructure programs will mitigate the risk of imposing a greater adjustment burden in the future on communities and regional economies.

72. Limiting infrastructure investment to projects which can be delivered for the current water market price per megalitre is, in the Department's view, unrealistic. However, the Department's assessment of prospective projects under SRWUIP is directed at ensuring fit-for-purpose, value for money investments which, overall, secure the strongest possible outcomes in terms of both water savings and placing irrigated agriculture onto a more sustainable footing. The business case information requirements for State Priority Projects (see attachment C) provide clearly enunciated criteria which must be addressed by project proponents.

73. SRWUIP aims to produce water savings through a variety of means. These include engineering solutions to improve the off-farm efficiency of water delivery such that irrigators receive the same volume of water to their farm gate after the change as they did before. The reduced delivery losses are the 'savings'. Other irrigation technology solutions aim to improve the efficiency of water application to the crops such that more units (or value) of crop produced per unit of water. The reduced total use of water is the 'saving'. In other cases, modifications to farming practices can improve on-farm water use efficiency.

74. There are important socioeconomic issues involved in taking a consistent approach to capital investment in water infrastructure in rural communities across the Murray-Darling Basin. These arise as a result of the differing approach to the ownership of water infrastructure between the states, particularly for irrigation water delivery system infrastructure. For Victoria and Queensland, much of the infrastructure is state-owned, whilst in NSW and South Australia the majority is privately owned and managed (for NSW and SA, this was the result of privatisation and corporatisation of these systems during the 1980's and 90's).

75. Regardless of the ownership model, a relevant factor has been providers' reluctance to impose adequate user charges to maintain the infrastructure in the face of protests from water users. These issues have seen some systemic market failures in infrastructure provision for at least three decades. One of the key the objectives of the National Water Initiative is to resolve them.

76. As a result, the scale of investment needed to improve water use efficiency, deal with overallocation and rationalise the overall footprint of irrigation, is almost certainly beyond the current capacity of the private sector or state-owned entities. Nor can it sensibly be costed at the market price of projected water savings. Future maintenance and upgrade costs should however be fully met from user charges, consistent with the National Water Initiative. This will require a level of diligence from state governments and their pricing regulators in particular, to ensure that the current problems are not repeated in the future.

77. For SRWUIP-funded projects, the character and volume of water savings is generally to be determined ahead of investment approval. Decisions on the

subsequent use of the shares of those savings fall to the relevant parties to the investment. For example, irrigators may choose to use to sell their share of water savings, to use the savings for increasing production or to shift production methods as a result of the infrastructure investment. The Commonwealth's share of water savings are being added to the Commonwealth Environmental Water Holdings for use in watering environmental assets.

Governance Framework

78. The framework for SWRUIP-funded State Priority Projects is established by the Intergovernmental Agreement on Murray-Darling Basin Reform, July 2008, (IGA) between the Commonwealth and the Basin States (including the ACT). The IGA sets out the government's investment principles for State Priority Projects. Similarly, the National Partnership Agreement on Water for the Future, and specific Implementation Plans for SRWUIP projects, mirror the State Priority Project investment principles. Critically too, State Priority Project funding is also conditional on the States meeting specified milestones in implementing water reforms. The nexus between reform performance and payment for infrastructure projects is a key feature of the IGA and the subsequent bilateral agreements between the Commonwealth and each Basin State.

79. The 2004 Intergovernmental Agreement on a National Water Initiative, signed by all States and Territories, represents a commitment by governments to increase the efficiency of Australia's water use, resulting in a greater certainty for investment and productivity for rural and urban communities and the environment.

80. Water for the Future involves both a reaffirmation and acceleration of implementation of National Water Initiative (NWI) commitments.

81. It is also the case that for major water reforms to succeed, the support and assistance of all governments, irrigation communities and other stakeholders is needed. The mix of initiatives and obligations embedded in the IGA and related instruments are the package which has been agreed to achieve this. The trade-off for not being economically optimal is the benefit of having many rural industries, regional communities and conservation groups working together with the government to achieve balanced environmental, economic and social outcomes.

Government Investment Principles and Assessment Processes

82. The Government's investment principles for rural water infrastructure are articulated in the various guiding documents for SRWUIP funded programs, i.e.:

    - the 2008 IGA and the bilateral water partnership agreements which flowed from it (for State Priority Projects),
    - guidelines for DEWHA-managed programs such as the On Farm Irrigation Efficiency Program and the private irrigation infrastructure programs in NSW and South Australia, and
    - relevant Implementation Plans under the National Partnership Agreement on Water for the Future.

83. All project proposals that are submitted for Australian Government funding are assessed against the criteria specified for the relevant programs, each of which reflect the core objectives of SWRUIP.

84. Project proponents must demonstrate in the proposal that the project:

    - secures a long-term sustainable future for irrigation communities, in the context of climate change and reduced water availability in the future. The project must demonstrate both short-term (2012) and long-term (2030) benefits;
    - secures and delivers benefits for the environment and maintains or improves river and wetland health. The project must demonstrate both short-term (2012) and long-term benefits; and
    - delivers value for money.

85. Project proposals are subject to rigorous assessment that includes a technical analysis against economic, social and environmental criteria, often using external experts, including the National Water Commission, to advise the Department's assessment processes, .

86. The Commission has raised the need to sequence water purchasing and infrastructure investments so as to avoid the occurrence of 'stranded assets'. The Department is very aware of this issue and places emphasis on ensuring all SRWUIP proposals are based on sound long term plans at an appropriate scale. Modernisation plans are an important mechanism to help irrigation water providers consider their future business in a strategic, integrated manner so that investments in irrigation infrastructure are as efficient and cost-effective as possible.

87. Due diligence processes provide for rigorous assessment of project design and economic viability in a future with less water. Business cases must factor in analysis of the long term future of an irrigated area.

88. Funding has been provided to Irrigation Water Providers (IWPs) to seek professional independent advice to enable them to develop modernisation plans to improve water use efficiency and adapt to a future with less water. A modernisation plan considers issues such as:

    - Land use, water availability and climate change pressures
    - Current level of water use efficiency
    - Options to increase on and off-farm efficiency
    - Opportunities to improve metering
    - Existing irrigation and future strategy for the irrigation district
    - The compatibility of agricultural activities undertaken with the biophysical characteristics of the area
    - Options to close down or restructure the delivery system.

89. The Irrigation Modernisation Planning Assistance Program (IMPA) has now facilitated modernisation planning for most large Basin Irrigation Water Providers. IMPA activities to date have assisted in the identification of potential projects under a range of 'Water for the Future' programs including Irrigator-led

Group Proposals, NSW Private Irrigation Infrastructure Program and potentially the Private Irrigation Infrastructure Program for South Australia

Return Flows

90. The Commission raises concerns about potential decreased reliability for water irrigation and environmental users through reduced return flows. The Australian Government in its assessment of projects takes return flows into consideration using reliable scientific information when it is available.

91. Regrettably, in many situations, particularly with groundwater systems, there is little or no reliable scientific information on the time delay between a change in the volume of groundwater recharge and the associated change in return flows to the system. It is also often the case that there is no information available on the influence on the quantum, timing and quality of return flows of a number of contributing factors such as drought, localised rain events, and sub-surface geological character. Nevertheless, the Department's assessments of rural water infrastructure projects make every reasonable effort to consider issues such as the potential impact of the projects on return flows.

Community preferences

92. The Commission has raised the need to incorporate community preferences in the decision making process for allocating funding and the quantum being allocated (draft finding 4.2, 6.1). The Department considers that the procedure set out in the Water Act 2007 for allocating water between environmental needs and consumptive users is a reflection of community preference in that it is a procedure mandated by Parliament. The procedure is also reflected in the Government's $12.9 billion investment in the Water for the Future initiative. The Department suggests that this aspect of the finding be reworded accordingly.

93. Water for the Future has four key objectives:

    - Taking action on climate change
    - Using water wisely
    - Securing water supplies, and
    - Supporting healthy rivers.

94. There is ongoing and extensive community consultation on Water for the Future as a whole, and on the specific individual projects and programs which are funded under the initiative. For each of the programs managed by the Department, there has been extensive consultation on program design and delivery.

95. A major focus for consultations are ongoing Community Information Sessions. The Department held eleven of these forums throughout the Murray-Darling Basin from October to December 2009 aimed at improving community understanding of the Water for the Future program. These 'town hall' meetings are to be followed up every six months or so and extended to urban and other areas outside the Basin.

96. The Community Information Sessions were organised by the Department and were supported by attendance from the Murray-Darling Basin Authority, the Australian Government Department of Agriculture, Fisheries and Forestry, Centrelink, and State Government agencies involved with water.

97. Overwhelmingly, the sessions were very positively received with the vast majority of people indicating they had improved their understanding of water reform policies and programs, they would attend other sessions in the future, and they would recommend the sessions to friends and contacts.

98. Attendees indicated they appreciated the chance to speak directly with senior managers about issues of concern and felt they had an ability to raise their questions and that these had been well answered. More than 500 people attended the sessions in total. Almost 75 per cent of participants were farmers involved in both irrigated and non-irrigated agriculture.

99. The sessions followed a similar format - a short presentation followed by an open question and answer session and then a series of concurrent break-out topical discussion groups on water purchasing, infrastructure upgrades, and the Murray-Darling Basin Plan. This format proved to be very successful as it allowed participants to interact with presenters to get more in-depth information on topics they were most interested in.

100. Consultation activities also include regular meetings between the Water Group and expert stakeholder panels including ones on irrigation, water purchasing and environmental watering. Meetings are held every six months or so, at which views are obtained and exchanged to help improve the design and delivery of Water for the Future policies and programs.

101. Activity in this area also includes Ministerial tours to the northern and southern parts of the Basin to meet with key stakeholder groups as well as regional meetings on the CoAG reform agenda, specific infrastructure programs, and water purchasing.

102. To support ongoing contact between the Water Group and a range of regional stakeholders, including catchment management authorities, peak industry bodies, and water service providers, a group of senior departmental officers has been tasked with being regional contacts, providing a conduit for people obtain information about Water for the Future programs.

The Government's Approach

103. From an economic perspective, the policy of moving to a more sustainable water management regime needs to include a range of mechanisms and not just the purchase of water entitlements on market.

104. The Department is of the view that the Commission's draft report could take a broader approach to policy options for recovering water and the achieving other objectives of the Water for the Future initiative through non-market means and in particular through infrastructure programs. The broader context of successful policy development and implementation needs to be recognised. For the Murray-Darling Basin this includes working with a diverse range of stakeholders on a challenging array of issues, to develop initiatives that aim to significantly improve the security of the long-term water supply in the MDB and the environmental health of the river system.

Coordination of RtB with SRWUIP

105. In its Submission to the Commission *Issues Paper,* the Department outlined the way in which the RtB and SRWUIP programs are being delivered in a coordinated way to help irrigation communities adjust to a future with less water.

106. Projected savings from SRWUIP are taken into account in determining catchment purchase objectives for the RtB program. This is explained earlier in this submission in the section on the approach to water purchasing.

Environmental Water Holdings

107. Water entitlements recovered through both the RtB program and SRWUIP form part of the Commonwealth environmental water holdings which are managed by the CEWH.

108. Under the RtB program, the Government is focusing on the acquisition of water entitlements. Permanent water entitlements are being purchased in preference to other temporary products, such as seasonal allocations, or alternatives such as five year options contracts or leases, because only the purchase of water entitlements can lead to a permanent rebalancing of the volume of water available for the environment and for production.

109. The Commission noted in its draft report that the Department should consider using the RtB program to acquire a portfolio of other water products, such as seasonal allocations, in order to address immediate watering needs. However, as explained in the following section, the RtB program is only one element within a broader strategic approach to environmental watering.

110. RtB's focus is on permanent rebalancing of the system, to improve the health of the Basin system over the long term. Acquiring permanent entitlements is the most effective and efficient way of doing this. In addition, the price of seasonal allocations has been extremely sensitive to demand and supply. Entering the allocation market would immediately inflate the price for everyone in the market, adversely affecting irrigators who are looking to buy water to sustain their crops in the current drought.

111. The Commission's draft report rated various water products on their effectiveness and efficiency, but appears to have done so on the basis that the RtB is itself an environmental watering program, operating with short term objectives when in fact its purpose is to achieve a permanent rebalancing of the system.

112. In its draft report, the Commission rates various water products against each other (see Table 7.1 of the draft report). The Department's view is that Commission's ratings of various products do not reflect the RtB program's objectives. Purchasing seasonal allocations could rapidly exhaust the program budget without achieving any permanent reallocation of water to the environment. It would provide temporary relief only.

113. The Department believes the products should have been evaluated against the RtB program's objective, which is to achieve a permanent rebalancing of the system. Against that objective, purchasing permanent entitlements would be rated as high against both the efficiency and effectiveness criteria, whereas seasonal allocations would be rated as low. Covenants could only be considered if they were perpetual and delivered real value for money. The effectiveness of fixed term environmental services contracts would be low to moderate as they would not deliver enduring outcomes. Further, they would likely involve high transaction, compliance and monitoring costs which would reduce their efficiency relative to other options.

114. As discussed earlier in this submission, the Commonwealth is managing the RtB in a way which is dynamic and adaptive and avoids purchasing entitlements that have limited capacity to deliver environmental benefits.

115. The flexibility sought by the Commission in terms of the ability to address short, medium and long-term environmental watering needs has already been built into the CEWH's role and is already evident in the evolving framework for use of environmental water which the CEWH has developed.

116. The CEWH has powers that can be used over the longer-term to provide significant flexibility in meeting short, medium and long-term watering needs. These include the ability to buy and sell seasonal allocations, trade options, and enter into environmental contracts. These powers are provided for in Part 6 of the Water Act, and in particular: subsection 105(2), which sets out the functions of managing the holdings (and explicitly includes the use of options contracts); and subsection106(2), which provides for water trading for environmental benefit.

117. In addition, subsection 105(2e) of the Water Act provides for the CEWH to enter into contracts or arrangements in relation to the use of water from the holdings thus (where necessary) providing scope for the contracting and direction of activities directly related to the use of Commonwealth holdings. Further to this, the portfolio in the southern connected Basin, and, subject to shepherding arrangements, some northern entitlements, can be flexibly managed to provide through time for environmental outcomes at a wide range of sites.

118. The portfolio is being established based on sound environmental objectives. The water purchase program is acquiring, for Commonwealth Environmental Water Holdings, a diversified portfolio that meets the needs of the environmental assets in the Murray-Darling Basin. Over time, further consideration will be given by the CEWH to using the relevant powers provided in the Water Act (e.g. trading) to ensure that the portfolio of water entitlements continues to achieve maximum environmental outcome based on all relevant information.

119. In its draft report, the Commission has suggested that transparency would be improved by more information being published on the CEWH's existing and planned water holdings (draft finding 9.1). Existing environmental water holdings have been published on the Departments website since May 2009 and are updated monthly (refer http://www.environment.gov.au/water/policy-programs/cewh/holdings.html). Appendix B shows CEWH holdings at 31 January 2010.

120. The nature and extent of the Commonwealth's planned environmental water purchases and holdings will continue to vary due to factors including receipt of new information and acquisition of water by other environmental water holders. In addition, publication of Commonwealth intentions in terms of planned holdings would be seen as pre-empting the Basin Plan, and could also lead to sellers seeking price premiums based on this information. The Department therefore disagrees with part of the Commission's draft finding 9.1: that there are benefits to publishing planned holdings.

121. Some have questioned whether the CEWH should continue to hold entitlements for environmental use, or whether it would be better to convert the entitlements to an equivalent volume of planned environmental water which would be prescribed in the relevant water sharing plan. The Commission's draft report asks what the role of the

CEWH should be once the Basin Plan has been put in place (request for information).

122. One factor which bears on this is how the different types of environmental water, including 'held environmental water' (such as the Commonwealth Environmental Water Holdings) fit into broader arrangements and reforms.

123. Traditionally environmental water has been provided for in state water resource plans or as rules based water. This provision of water is not sufficient given the over allocation that has occurred and the impact of climate change. In any case environmental water has also traditionally been less secure in drought years when the pressure has been to allocate proportionally more to consumptive use. The National Water Commission (NWC) in its 2009 Second Biennial Assessment of Progress in Implementation of the National Water Initiative observes that it is 'increasingly concerned about the security of environmental water access entitlements and rules-based environmental water, particularly during drought'.

124. A logical response to this issue of security is for governments to purchase water entitlements in the market and to manage the water allocations accruing to those entitlements through time. The entitlements will receive equivalent treatment as other entitlements including equivalent annual allocations etc i.e. they will have equal security to water entitlements that are used for consumptive purposes.

125. Another benefit of maintaining a portfolio of held environmental water is that this water can be managed actively within operational constraints to be delivered to particular sites at specific times. Active management has a number of aspects but it includes the potential to carryover water to subsequent years, to complement and add to natural and other flows, and to extract the water from the river channel and to deliver it to neighboring wetlands and floodplains. Active management can be facilitated through existing water trading arrangements and through the use of existing infrastructure or new infrastructure designed specifically to achieve environmental outcomes.

126. Held environmental water is not equivalent to rules based water. The intent of purchasing a portfolio of water entitlements is to complement and add to existing environmental water and for this supplementation to be actively managed from a Basin-wide perspective to achieve the most effective environmental outcomes for the system as a whole – an approach unique to the Commonwealth. Active management allows the CEWH flexibility to adapt to local and climatic conditions and to use existing infrastructure and water trading rules to achieve environmental outcomes, so that for a given amount of water a larger environmental outcome will be achieved. Increasingly the focus will be broader than individual sites and more on ensuring connectivity, for example between rivers and floodplains.

127. When the Basin Plan is in place the CEWH is required to manage the environmental water holdings in accordance with the MDBA Environmental Watering Plan. The MDBA has indicated that this plan will contain principles to be applied in environmental watering, and principles and methods which will set the priorities for applying water. Within the scope of the plan there will be an on-going management role in regard to managing held environmental water because the principles will need to be applied to individual watering decisions that take into account prevailing conditions across the Basin.

Environmental Watering

128. To date a total of 76GL has been allocated by the CEWH to environmental use in the Murray-Darling basin as at 31 January 2010.

129. While the CEWH has provided water to many iconic sites, including the Ramsar-listed Hattah-Kulkyne Lakes and Riverland site, and Lake Albert (part of the Coorong and Lakes Alexandria and Albert site) water has also been provided to numerous smaller sites that have been targeted because of their particular ecological values and need for environmental water (see the CEWH website for the full list of sites watered: http://www.environment.gov.au/water/policy-programs/cewh/watering/index.html). Whilst wider benefits result from the use of environmental water the CEWH makes decisions based on the legislative requirements of 'protecting or restoring the environmental assets of the Murray-Darling Basin... so as to give effect to relevant international agreements.' (*Water Act 2007*)

130. Detailed information on the management and use of Commonwealth environmental water was provided in the Department's 16 November Submission to the Commission *Issues Paper.*

131. The CEWH's criteria for prioritising environmental watering action includes: 'The long-term sustainability of the asset(s) including appropriate management arrangements. Issues to be considered include:

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

132. In prioritising environmental watering actions, the CEWH gives consideration to state government environmental watering priorities as well as the actions to be undertaken through The Living Murray (TLM) program. The Department's Environmental Water Branch (EWB), which supports the CEWH, also has representation on the TLM Environmental Watering Group.

133. As to the issue of coordinating with state governments, local environmental managers and others, as has been identified in the Commission's draft report, the CEWH has already watered sites in conjunction with TLM and state environmental water holders. As outlined above, 76GL of Commonwealth water has already been agreed for use. The watering actions that are occurring are also receiving 140GL of water from other delivery partners – demonstrating that coordinated use of water is occurring.

134. The CEWH works closely with jurisdictions and local environmental managers in managing and using the Commonwealth's environmental water in the Murray-Darling Basin. For each 'round' of Commonwealth watering, input for environmental watering decisions is sought from Basin jurisdictions who in turn consult with Catchment Management Authorities and other local stakeholders, such as environmental watering groups. This input informs the CEWH's consideration and includes delivery arrangements and costs for proposed uses. Jurisdictions

provide this input in the context of their own planned use of environmental water and that of TLM. In addition, the Commonwealth is an active member of the TLM Environmental Watering Group (EWG) and participates in the planning and determination of the use of TLM water. The CEWH is an independent observer at EWG meetings.

135. Once the CEWH has independently considered and determined the best use of Commonwealth water, decisions are notified to jurisdictions and in the vast majority of cases the water is delivered by the jurisdictions and/or local managers who also undertake the monitoring and evaluation, given their existing and localised environmental management responsibilities and expertise. The EWB is currently working towards formal agreements with Basin jurisdictions that add to those already in place and cover the arrangements for, and governance of, Commonwealth environmental watering actions. For example, the agreement with NSW has provided for regular Commonwealth participation in local environmental water advisory groups such as the group in the Macquarie Marshes. The importance of establishing and maintaining these cooperative working relationships is also reflected in the CEWH 2009-10 Business Plan.

136. In addition, the Commonwealth is also an active member of the TLM Environmental Watering Group (EWG) and participates in the planning and determination of the use of TLM water. The CEWH is an independent observer at EWG meetings. The Water Act also provides (Sections 28 and 31) that a key role of the MDBA is to coordinate the management and delivery of existing and future environmental water through the Environmental Watering Plan which, in turn, the CEWH is required to comply with.

137. The CEWH's environmental watering actions are only one element within a broader strategic, whole of Government approach, to environmental watering. The South Australian Government's draft discussion paper 'Murray Futures: Lower Lakes and Coorong Recovery', which is available for download at http://www.environment.sa.gov.au/cllmm/index.html, provides an example of the ways in which the Australian Government has provided funding for both short-term, medium-term and longer-term solutions to address an environmental watering problem. The paper discusses a number of activities (some of which have already been carried out, and some of which are proposed as future options) that could be implemented over varying timeframes to improve the environmental health of the Lower Lakes and Coorong. The role of the CEWH and the purchase of water entitlements under the Restoring the Balance program are mentioned as part of these activities (p52).

138. Under SRWUIP, infrastructure works that would aid environmental watering can be funded. The South Australian State Priority Project 'Riverine Recovery' is an example. The primary objective of the project is to develop an adaptive management regime for wetlands and other water courses along the River Murray within South Australia. This project is expected to yield environmental benefits not confined to the transfer of water entitlements to the CEWH.

139. Other examples of the Commonwealth contributing to infrastructure works that improve the efficiency of environmental watering include:

- $158 million through the Living Murray initiative. This investment is supplemented by relevant jurisdictions and is being used primarily for

infrastructure including regulating structures, water delivery channels and fishways. Projects include the construction of a regulator on the Chowilla Floodplain, a permanent pumping station at Hattah Lakes, and channels, levees and regulators to deliver environmental flows to Koondrook-Perricoota.

- The NSW Rivers Environmental Restoration Program (RERP), a NSW and Australian Government initiative. This $189 million joint initiative involves purchasing water, developing systems and infrastructure to improve environmental water delivery and purchasing wetlands on private lands for inclusion in reserve systems. The wetland restoration has focussed on the Gwydir Wetlands, Narran Lakes, Macquarie Marshes, Lachlan Wetlands and Lowbidgee Floodplain.

Natural resource management

140. The Commission in its draft findings noted that recovering water is necessary in most cases, but not always sufficient to achieve desired environmental outcomes in the Basin (draft findings 6.1 and 9.3). The Department is well aware of this and takes into account other natural resource management issues, such as land management, in achieving environmental outcomes. For example, the approach the South Australian Government is taking to respond to the need to improve land management practices, through, for example, fencing, feral animal control and weed control is considered by the CEWH in prioritising environmental watering actions. Further details can be found on pages 58-59 of the South Australian Government's draft discussion paper on 'Murray Futures: Lower Lakes and Coorong Recovery'.

141. Natural resource management actions are eligible for funding under the Caring for our Country initiative. Caring for our Country includes in its outcomes for 2008–2013:'Deliver actions that sustain the environmental values of:

    - priority sites in the Ramsar estate, particularly sites in northern and remote Australia
    - an additional 25 per cent of (non-Ramsar) priority coastal and inland high conservation value aquatic ecosystems including, as a priority, sites in the Murray-Darling Basin.'

142. Caring for our Country will target funding towards actions that address identified key threats to the environmental values of priority high conservation value aquatic ecosystems through implementing on-ground management actions by 2013. This includes activities such as:

    - containment and management of weeds
    - reducing grazing pressures by fencing off access to the aquatic ecosystem
    - targeted control of pest animal species
    - revegetation of habitats for significant flora and fauna.

143. Other regulations and safeguards are provided through state legislation and the EPBC Act.

144. Joint Commonwealth-State government funded MDBA programs also focus on natural resource management. These programs focus on investment in infrastructure, capital works and land management practices to help manage the far-reaching Murray-Darling river catchments as effectively as possible.

Risk Assignment

145. In the draft report the Commission comments that there is currently a level of uncertainty regarding the relationship between the RtB program and the establishment of the sustainable diversion limits under the Basin Plan; and between the RtB program, the sustainable diversion limits and the risk assignment framework (draft finding 6.2).

146. The Basin Plan, which is scheduled to be made in 2011, will establish the sustainable diversion limits for different Water Resource Plan Areas and may include sustainable diversion limits for parts of these areas. The MDBA's *Sustainable Diversion Limit's Issues Paper* outlines its intended process for setting the sustainable diversion limits.

147. The Basin Plan will identify any reductions to diversion limits, together with the amount of any reduction attributable to changes in Commonwealth Government policy and improvements in knowledge about the environmentally sustainable level of take.

148. The Commonwealth is required, through sections 76 and 82 of the *Water Act 2007*, to endeavour to manage the impact of the Commonwealth's share of the reduction, and may take steps to ensure entitlement holders do not suffer a reduction in the allocation or reliability as a result of the Commonwealth's share of the reduction.

PART 2 - MINOR AMENDMENTS/UPDATES

Suggested additions to draft report

The following section includes minor additions to the draft report

p9: Suggest replacing some statistics in Table 1.1 with those from the following updated budget table. There are no publicly proposed budget adjustments, so no data has been provided for the 'proposed' heading in the table in the draft report.

Table1.1 Budgeted expenditure for Restoring the Balance Buybacks.

	Revised [a] $m
2007-08	45.5
2008-09	432.5
2009-10	1237.8
2010-11	254.4
2011-12	249.5
2012-13	510.5

[a] Current budget allocation as at 31st December 2009 and incorporating budget adjustments provided in the Appropriation (Water Entitlements and Home Insulation) Bill (No.1) 2009-10 and Appropriation (Water Entitlements) Bill (No.2) 2009-10.

Note: Numbers include both Administered and Departmental funds.

p.11 Suggest deleting the final sentence of *Small Block Irrigators Exit Grant Package* and replacing with 'At the end of January 2010, 16.8 GL of of an expected total of 21.2 GL of entitlements had been recovered.'

p.33, First dot point on Water for Rivers, suggest adding: 'The Australian Government has also committed an additional $50 million to assist Water for Rivers to achieve its recovery target for the Snowy River.'

p.46 The trade figures used in the draft report could be updated by referring to the National Water Commission's Australian Water Markets Report 2008-2009.

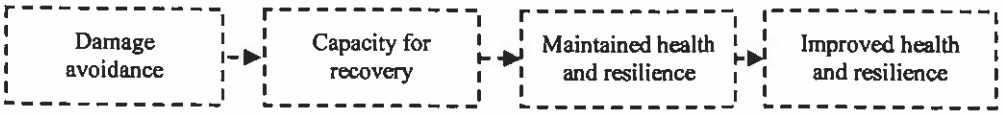
p.60 In relation to the point concerning the opportunities for private donations to be used achieve environmental outcomes, it is useful to note that under subsections 108(2b) and 112(1e) of the Water Act 2007 the Commonwealth Environmental Water Holder (CEWH) is empowered to accept donations of water and gifts or bequests of monies that are then able to be deployed in achieving environmental outcomes through the Commonwealth Environmental Water Holdings.

p.68, Box 4.5 – the information in this Box could be updated by referring to the criteria for assessing 2009–10 environmental watering actions which is available at: http://www.environment.gov.au/water/policy-programs/cewh/criteria-2009-10.html

p.68: The statement on the objectives which guide the CEWH's watering priorities is not accurate. The objectives which the draft report refers to are relevant only in extreme dry conditions, as are currently being experienced in the southern Basin. Objectives and management actions have been developed for four different water resource availability scenarios. These are outlined below:

Watering objectives under different water resource availability scenarios

	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 medium flow 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 incl. over-bank - Use carryover to provide optimal seasonal flow patterns in subsequent years



Depending on the water resource availability, the objectives that guide the CEWH's environmental watering priorities can change from year to year, as well as from catchment to catchment.

p.69. Box 4.6 refers to Australia's obligations as a Contracting Party to the Ramsar Convention. It should be noted that the Ramsar Convention places broad obligations on Contracting Parties to as far as possible promote the wise use of all wetlands within their territory and to promote the conservation of wetlands and waterfowl (whether listed or not) more generally, as well as protecting the ecological character of listed sites.

p178. The Commonwealth is already working to resolve institutional impediments to shepherding environmental water in unregulated systems (draft finding 7.1). For example, the Memorandum of Understanding in relation to Water for the Environment which was signed by the Commonwealth of Australia and NSW last September, committed both parties to working towards a further bilateral water shepherding agreement with the objective to:

> ... optimise the use of all water for the environment, to provide the capacity to deliver water to high priority environmental assets, and, in the case of in-stream environmental watering, to provide protection for environmental flows to pass through the system as far as transmission losses allow.

p191 – Figure 9.1 Commonwealth water governance arrangements

Suggest that this figure be re-titled 'Key Environmental Water Responsibilities – DEWHA and MDBA'. This is because the diagram does not represent all Commonwealth water governance arrangements. An updated version of this figure is available in the CEWH Business Plan 2009–10 (available at: http://www.environment.gov.au/water/publications/action/pubs/cewh-business-plan-2009-10.pdf).

p.201 The role of the CEWH and use of the Commonwealth Environmental Water Holdings are set out in the *Water Act 2007*. As the Restoring the Balance and SRWUI Programs progress towards their end dates, the Commonwealth will own a very large portfolio of water which will continue to require active management in order to optimise environmental benefits.

Suggested amendments/updates to original wording of draft report

The following section includes minor amendments and updates to the draft report. Original wording is shown in plain text with suggested updates written in italics.

p9-10 :

The tenders

The principal mechanism used in the 2007-08 and 2008-09 rounds of the RTB program was a rolling tender, under which DEWHA invited holders of entitlements to bid the price and quantity of entitlements they would be willing to sell (box 1.2). Bids were assessed against common criteria (chapter 4) *in a series of rounds* throughout the tender period. *If the bids were compliant with program guidelines, assessed to be value for money and subsequently passed due diligence, DEWHA proceeded* to an exchange of contracts.

Four tenders under the program have now been *completed.* The first tender occurred in *2007-08* and purchased approximately 24 GL of entitlements of varying reliability. *In 2008-09, three* further tenders *were* conducted, one focusing on the *southern* part of the Basin, and the *other two* on the *northern* part of the Basin. Although these tenders closed at the end of June 2009, trades are still being settled. *As at 31 January 2010, approximately 797 GL of entitlements had been purchased under the 2008-09 tenders.*

The most recent tender opened in January 2010, focusing on the southern connected Murray system. The mechanism used in the 2009-10 tender was the same in many respects as in 2008-09, but there were some differences, including that:

1. *Bids were assessed against each other at the end of the tender round.*
2. *Bids were accepted in order of best value for money, subject to passing other criteria.*

Although purchases have been made throughout the Basin, one single purchase stands out. This was the purchase of a package of water entitlements amounting to 240 GL of varying reliability for $303 million from the Twynam Agricultural Group.

Box 1.2 **The Restoring the Balance tender 2007-08 and 2008-09**

The principal market mechanism utilised *in 2007-08 and 2008-09* under Restoring the Balance *was* a sequential tender for water entitlements. The key features of this mechanism *included*:

- Repeated format — each tender *was* conducted over a number of discrete rounds.
- Open format — each tender *was* open to all eligible participants in the market.
- Rolling tender — the bids *constituted* non-binding expressions of interest by the potential water sellers, and rebidding *was* allowed. DEWHA *carried* out periodic assessments of the bids in a series of rounds typically every two weeks, rather than assessing all bids against each other at the very end of the tender.

- Reserve price — a benchmark market price for each entitlement type was determined and bids that *were at or under that price, subject to passing other criteria, were accepted until the (2008-09) tender became fully subscribed.*

- Discriminatory price — successful participants in the tender *were* paid the price that they bid, rather than a uniform market clearing price.

- Sealed bids — the bids were not revealed to the market during or after the tender, *although the Department provided aggregated information on its website.*

The design of the Restoring the Balance tender is very similar to most past and current environmental water recovery tenders undertaken in Australia.

Attachment A: Purchases secured under the RtB program

Purchases secured under the RtB program in the Murray-Darling Basin as at 31 January 2010						
Catchment	**Entitlement Type**	**2007-08 Purchases (ML)**	**2008-09 Purchases (ML)**	**Expected average annual volume of water available for the environment (ML)**	**Average price paid per trade 2008-09 ($/ML)[c]**	**MDBC Sustainable Rivers Audit Health Rating**
QLD Border Rivers	Medium Priority		6,832	2,255	$2,276	Moderate
QLD TOTAL[b]			**6,832**	**2,255**		
Gwydir	General security	2,916	85,604	31,867	$2,242	Poor
	Supplementary		16,324	3,102	NA	
Barwon-Darling[a]	Unregulated		22,275	22,275	$836	Poor
Warrego[a]	Unregulated		8,106	8,106	NA	Poor
Namoi	General security		5,777	4,448	$2,057	Poor
Macquarie	General security	884	60,331	25,710	$1,266	Very Poor
	Supplementary		1,888	397	$161	
Lachlan	High security	300	NA	300	NA	Very Poor
	General security	7,214	74,457	34,302	$692	
Murrumbidgee	General security		64,359	41,190	$1,118	Very Poor
	Supplementary		20,821	2,915	$218	
NSW Other	Various		3,210	961		
NSW TOTAL (includes Murray)[b]		**16,264**	**533,108**	**317,291**		
Campaspe	High reliability	635	4,416	4,799	$2,375	Very Poor
Goulburn-Broken	High reliability	650	80,487	77,080	$2,391	Very Poor
	Low reliability	370	9,220	3,356	$195	
Ovens	High reliability	50	0	48	N/A	Poor
Loddon	High Reliability		1,029	978	$2,383	
VIC Other			851	317		

VIC TOTAL (Includes Murray) [b]		**7,662**	**196,747**	**179,856**		
Murray	VIC Above Choke - High reliability	5,104	30,850	34,156	$2,188	Poor - Very Poor
	VIC Below Choke - High reliability	500	58,858	56,390	$2,377	
	VIC Above Choke - Low reliability	160	5,780	1,426	$191	
	VIC Below Choke - Low reliability	193	5,257	1,308	$200	
	NSW General security - above choke [d]	1,780	144,005	118,086	$1,320	
	NSW General security-below choke	3,170	25,633	23,330	$1,276	
	NSW High Security-below choke		318	302	$2,279	
	SA High security	427	35,689	32,504	$2,384	
SA TOTAL [b]		**427**	**35,689**	**32,504**		
TOTAL [b]		**24,353**	**772,376**	**531,905**		

[a] This table separately reports Warrego entitlements from Toorale. In previous versions these entitlements have been reported as Barwon Darling entitlements. This was because the Warrego entitlements at Toorale are at the bottom of the Warrego River system, which runs into the Darling River. All the water accruing to these Warrego entitlements is available for use in the Barwon Darling catchment.

Note that as the Toorale titles are currently held by NSW on behalf of the Commonwealth until they are able to be transferred separate from the land, they do not appear in the following table of Commonwealth Environmental Water Holdings (see Attachment B).

[b] Figures have been rounded.

Attachment B: CEWH environmental water holdings at 31 January 2010

River System	Security	Registered entitlements [1,2,3](ML)
QUEENSLAND		
Border Rivers	High	
	Medium	5,325.0
	Unsupplemented	500.0
Moonie	Unsupplemented	1,100.0
Nebine	Unsupplemented	1,000.0
Warrego	Unsupplemented	8,000.0
Total QLD	High	
	Medium	5,325.0
	Unsupplemented	10,600.0
NEW SOUTH WALES		
Gwydir	High	
	General	70,921.0
	Supplementary	16,744.2
Lachlan	High	390.0
	General	79,605.0
Macquarie/Cudgegong	High	
	General	47,265.0
	Supplementary	1888.4
Murray	High	
	General	109,575.0
Murrumbidgee	High	
	General	47,606.0
	Supplementary	20,820.0
Namoi (upper)	High	
	General	105.0
Namoi (lower)	High	
	General	4,700.0
Total NSW	High	390.0
	General	359,777.0

River System	Security	Registered entitlements [1,2,3](ML)
	Supplementary	39,452.6
VICTORIA		
Campaspe	High	4,275.1
	Low	
Goulburn	High	39,614.9
	Low	6,331.9
Loddon	High	215.0
	Low	177.1
Murray	High	57,363.8
	Low	6,526.0
Ovens	High	50.0
Total Victoria	High	101,518.5
	Low	13,035.0
SOUTH AUSTRALIA		
Murray	High	33,446.7
Total SA	High	33,446.7
TOTALS		
	High	135,355.2
	General/Low	378,137.0
	Supplementary	39,452.6
	Unsupplemented	10,600.0
GRAND TOTAL		**563,544.8**

1 Notes:

1. Formal transfer of ownership to the Commonwealth takes place on registration of the entitlement by the relevant State water authority. The entitlement becomes part of the Commonwealth environmental water holdings at that time.

2. Registration can occur a number of months after the exchange of contract, so the amount in the holdings differs from exchanged contract figures reported by the Restoring the Balance in the Murray-Darling Basin program.

3. Allocations of water against these entitlements are made periodically and will depend on seasonal conditions and the amount of water held in storages.

Australian Government

Department of the Environment, Water, Heritage and the Arts

Water for the Future

Basin State Priority Projects: Business Case Information Requirements

This document provides further advice to the Murray Darling Basin States and the ACT to assist with the preparation of the business case required for each priority project. Priority projects were announced at the Council of Australian Governments (COAG) meeting of 3 July 2008. Analysis of the business case forms a critical part of the Commonwealth's due diligence assessment of each project. Basin States and the ACT should also refer to the Murray-Darling Basin Intergovernmental Agreement (the IGA) of 3 July 2008 when preparing their business cases.

Contents

Introduction and Background

At the Council of Australian Governments' (COAG) meeting on 3 July 2008, the Commonwealth agreed in principle to provide funding to the priority projects listed in clause 4.11.2(a)-(e) of the IGA, subject to due diligence.

Funding of priority projects is conditional on the Commonwealth undertaking a due diligence assessment of projects in accordance with clause 4.12 and Schedule E of the IGA. Should the Commonwealth agree to contribute funds, then payments will be made subject to achieving agreed progress in relation to the achievement of reform outcomes by each Basin State and in accordance with clauses 4.13 and 4.14 of the IGA.

The priority projects listed in clause 4.11.2(a)-(e) of the IGA may encompass a number of sub-projects. To commence the due diligence process, the Commonwealth requires the Basin States and the ACT submit a separate business case for each sub-project so that each can be assessed in its own right. The Commonwealth also requires a detailed project plan for each sub-project to be submitted with the business case.

Addressing Commonwealth Due Diligence Criteria

Business cases must provide sufficient information to enable the Commonwealth to commence due diligence assessment of each sub-project. The criteria by which this assessment will be undertaken are described in Schedule E of the Intergovernmental Agreement on Murray-Darling Basin Reform of 3 July 2008 and are reiterated below.

1. Economic and social criteria

Projects must be able to secure a long-term sustainable future for irrigation communities, in the context of climate change and reduced water availability into the future:

- projects must contribute towards regional investment and development, secure regional economies and support the local community; and
- must demonstrate a long-term economic and environmental benefit that can be sustained over a 20 year horizon, preferably supported by an irrigation modernisation plan consistent with the Commonwealth's guidelines for irrigation modernisation planning assistance.

2. Environmental criteria

Projects must deliver substantial and lasting returns of water to the environment to secure real improvements in river health:

- projects must be based on technically valid calculations of net water savings, with projections to take into account the impacts of climate change;
- projects must be able to deliver water in the form of a secure and transferable water entitlement to the Commonwealth Environmental Water Holder; and,
- the Commonwealth's share of water saved must be capable of being used for purposes that reflect the Commonwealth's environmental priorities.

3. Value for money criteria

Projects must deliver value for money in the context of the first two criteria:

- As an example, projects must have a suitable dollar per megalitre benchmark against local/regional water market prices and represent cost- and time-effective strategies for achieving water savings;
- projects must demonstrate a positive cost-benefit outcome for a range of investment scenarios, compared with a no change option; and
- there must be clearly defined, and agreed, cost sharing arrangements.

4. Water reform criteria

All activities associated with the funding of projects must be in accordance with Council of Australian Governments and National Water Initiative agreements.

Jurisdictions or other parties must make progress towards key water reforms, including those previously agreed to by jurisdictions under the National Water Initiative, including, but not limited to:

- competitively neutral and independently regulated water market and trading arrangements across the southern connected Basin;
- water charging regimes that reflect the full cost of supply to end users, including environmental externalities where feasible and practical;
- publicly accessible and compatible water register arrangements across all Basin jurisdictions (including a national water register information database); and
- strategic investment to accelerate development of a best practice and consistent Basin water modelling platform, noting that the Murray-Darling Basin Authority will be developing such a platform in consultation with Basin States;
- compliance with any other COAG water and National Water Initiative reforms.

5. Other due diligence criteria

- Projects must be consistent with best practice and other national approaches and standards being adopted for planning and implementation of Water for the Future.
- Projects will need to integrate with Basin State water planning documents and processes.
- Projects involving irrigation systems will require independently-conducted water loss hotspot assessment and modernisation plans.
- Funding will be provided for on-ground works related expenditure only and not for financial restructuring or other purposes not directly related to on-ground works.
- Suitable project management capability and capacity must be demonstrated.

- Project specifications must include:
  - appropriate governance arrangements for the project to ensure it delivers on time, within budget and against all key objectives;
  - compliance with relevant state environmental legislation and the *Environment Protection and Biodiversity Conservation Act 1999*;
  - compliance with other relevant jurisdictional legislation;
  - indemnification of the Commonwealth against any environmental or other third party damage caused by the project;
  - no responsibility to the Commonwealth for any past, present or future taxation liabilities arising from investments;
  - warranties on investments; and
  - no allocation of responsibility to the Commonwealth for any legal contracts already entered into, except where explicitly agreed.

Projects must be consistent with the provisions of the Commonwealth *Water Act 2007* and the *Water Amendment Bill 2008.*

The Commonwealth may take into account other relevant matters where necessary in undertaking its due diligence. In particular, the Commonwealth may also assess:

- the overall potential of the project to deliver against the Commonwealth's broader investment objectives as noted in clause 4.9 of the IGA:
  - implement water saving infrastructure projects;
  - return water to the environment and restore river health; and
  - adapt to climate change in an environment of reduced water availability.
- for the ACT, projects that implement measures to reduce salt inflows to the Murrumbidgee River and contribute significantly to improving water quality in rivers and streams in lieu of projects that generate water savings. The Commonwealth may not to take into account some criteria, where they are justifiably not relevant to this project.

The statements set out below outline the minimum information expected to be provided by the Basin States and the ACT in each business case. Each business case must provide sufficient detail on the project to enable the Commonwealth to:

- assess the overall potential of the project to deliver against the Commonwealth's broader investment objectives as noted in clause 4.9 of the IGA;
- assess the project against the Commonwealth investment principles referred to in clause 4.10 of the IGA, and
- commence a due diligence assessment of the project as referred to in clause 4.12 and Schedule E of the IGA.

It is expected that the Basin States and the ACT will, where required, commission suitably qualified, independent persons or organisations to carry out detailed studies to inform the development of each business case. These studies should be made available to the Commonwealth to inform its due diligence assessment.

Description of the Priority Project and Project Area

1. Except where already defined in the detailed project plan, detail the sub-project. This must include at a minimum:

- A project title.
- Details of the project location, including adequately detailed maps.
- A description of the project and nature and sequence of activities to be undertaken.
- Details of any infrastructure or assets owned or operated by another entity, and evidence of their co-operation with the project.
- Evidence of stakeholder support for the project.
- A description of relevant/related activities that are not included in the scope of the project.
- An estimate of the net water savings to be achieved and the amount of these savings to made available to the Commonwealth Environmental Water Holder.
- A description of any other environmental outcomes (for example, water quality impacts) that will also be achieved.
- An estimate of the total cost of the project, and the proportion of the total cost requested from the Commonwealth.
- An estimate of key milestones and the time required to implement the project.

2. Except where already defined in the detailed project plan, provide background on the region in which the sub-project is based. This must include at a minimum:

- an overview of the project area, including:
  - current social, economic, environmental, biophysical characteristics and anticipated trends;
  - description of current industry characteristics, including dryland and irrigated agriculture (if appropriate) and anticipated trends; and
  - description of water use, including irrigated agriculture (if appropriate) and anticipated trends.
- details on water related infrastructure investments that have been recently or are currently being made in the project area including:
  - the timeframe and value of investment;
  - the rationale for prior investments and the current status of these investments (including remaining useful life and annual asset maintenance expenditure); and
  - existing planned investment schedules.
- Details on any other major investments made in the project region in the last five years that are related to, or may impact on, the project.

- Details on how the project will integrate with statutory water planning and NRM planning documents and processes.

Addressing the Commonwealth Investment Principles

Economic and social criteria

3. Outline how the project will be able to secure a long-term sustainable future for irrigation communities, in the context of climate change and reduced water availability in the future. The priority project business case must demonstrate short-term (to 2012) and long-term (to 2030) environmental and economic benefits, including (at a minimum):

- Details of the extent to which the project will contribute to regional employment.
- Details of how the project will sustain industry in the region.
- Details of additional first order value-added (not flow-on or multiplier effects), or reduction in costs of production resulting from implementation of the project.
- How the project will attract other investment in the region, and the expected quantum of additional investment.
- Details of how the project will include processes consistent with the methodology of the Commonwealth's Irrigation Modernisation Planning Assistance Program. Guidelines for this Program are available at http://www.environment.gov.au/water/programs/off-farm/index.html

Environmental criteria

4. Outline how the project will deliver substantial and lasting returns of water to the environment to secure real improvements in river health. This must include at a minimum:

- Details that demonstrate how the project is based on technically valid calculations of net water savings, including the use of processes consistent with the methodology of the Commonwealth's 'Hotspots' Assessment Program where applicable. Details of the Program are available at http://www.environment.gov.au/water/publications/action/irrigation-hotspots.html
- Details that demonstrate how water savings projections consider the appropriate climate and development scenarios from the CSIRO Murray-Darling Basin Sustainable Yields Project to take into account the impacts of climate change over the life of the project.
- Details of the projected water savings, including volume and availability, and the characteristics of the anticipated water entitlements (for example, from regulated or unregulated systems, general or high security, ground or surface, permanency and transferability).
- Details about how these characteristics contribute to securing the anticipated water entitlements for exclusive environmental use.
- Details about how the water savings can be transferred (including details of the anticipated timing of the transfer) to the Commonwealth Environmental Water Holder.
- Details about how the project will achieve other environmental outcomes (for example, water quality impacts) that secure real improvements in river health and high priority environmental assets.
- Evidence of compliance with all relevant State and local environmental law, including environmental impact assessment processes.
- Evidence that the project is environmentally sustainable (for example, (but not limited to), demonstrating that the project will not have an adverse impact on matters of National Environmental Significance as defined under the *Environment Protection and Biodiversity Conservation Act 1999*).

For the ACT project, in addition to the above, an outline is also required of how the project will deliver substantial and lasting improvements to river health from reduced salt loads. This must include:

- Details of the nature of salt producing activities and options to reduce salt concentrations;
- Details on how the projected water quality changes will lead to improved river health; and
- Details on how any climate change issues associated with project options (eg desalination facilities) are proposed to be managed.

Value for money criteria

5. Describe how the project is value for money, particularly with regard to the cost of the water transferred to the Commonwealth. All benefits resulting from the

project, including water savings, must be clearly demonstrated. Demonstration of value for money must include the following information at a minimum:

(i) *Cost details*

- Provide details of the respective costs of the water that is to be recovered as savings through the project.
- Provide an analysis that benchmarks the cost per megalitre of the estimated water savings against the relevant regional market price for permanent water purchases. This analysis should be provided both for:
  - The total volume of water savings in terms of the total investment in the project (from all funding sources).
  - The volume of water savings transferred to the Commonwealth Environmental Water Holder in terms of the Commonwealth investment in the project.

(ii) *Budget details*

- Provide details of project expenditure timeframes. This must include at a minimum a detailed project budget that indicates the employment, capital and operational costs of the project.

(iii) *Cost sharing arrangements*

- Provide a clear description of the proposed cost sharing arrangements for the project. In general, cost sharing will be on the basis of 50:50 funding up to a maximum of 90:10 (Commonwealth:State), where water savings are returned proportionally to the level of investment. You must also provide details of how the project is to be funded, including the funding contributions from:
  - Australian Government
  - State/Territory
  - Charges or levies on users
  - General revenue measures
  - CMAs or other regional bodies
  - Other sources (please specify these).
- The business case should acknowledge that Commonwealth funding will be limited to only that specified in the final funding contract.

(iv) *Cost-benefit analysis*

- Provide a cost-benefit analysis to demonstrate that the priority project will provide a net benefit to the Australian economy and the Australian public. The cost-benefit analysis provided should:
  - be undertaken in accordance with the Australian Government Department of Finance and Deregulation publication *Handbook of Cost-Benefit Analysis* which is available from the following web site: http://www.finance.gov.au/publications/finance-circulars/2006/01.html

- provide an assessment of options against a base case (such as 'do nothing' or 'do minimum' scenario).

(v) *Technical feasibility*

- Provide evidence to show that the project is technically feasible. This may include consultancy reports, environmental impact studies, legal assessments, land surveys and mapping, water or town planning documents prepared by various levels of government, water use efficiency initiatives or the outputs from community consultation in relation to water issues. In addressing this requirement, copies of supporting documents and references such as letters and reports should be provided.
- Provide evidence of compliance with relevant Commonwealth, state and local legislation, including the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, or outline the process to obtain these approvals.
- Provide details of the engineering, economic and financial assessment of the proposed on-ground works.

(vi) *Financial viability*

- Provide details about the long term financial viability of the project. This must include at a minimum:
  - Details on the estimated ongoing operations and maintenance costs, including any expenditure for periodic upgrades, over the short term (to 2012) and long term (to 2030) if possible.
  - Details of how the ongoing operations and maintenance costs will be met, including details of whether the project will generate its own ongoing revenue stream to cover these costs and specify who will bear these costs.
    - This should cover both the short term (to 2012) and long term (to 2030).
    - Details of the analysis to verify the viability of the revenue stream should be provided.
  - If irrigators and primary producers are to be the major contributors to operations and maintenance costs, indicate the likely process for achieving these contributions.
- Provide details of the principal assumptions that underpin the assessment of financial viability of the project as outlined in the point above. For example, assumptions regarding climatic conditions; water availability, agronomic and irrigation practices and trends, industrial developments, urban, other land use issues, charges on recreational users of riverine or other environmental assets.
- Where the project involves infrastructure or assets owned or operated by another entity, provide sufficient material to demonstrate unequivocally the financial viability of that entity.

(vii) *Risk assessment*

- Provide details on the risks associated with the project, how the risks were identified and assessed, and how these risks will be managed. Demonstrate how the processes for managing the risks associated with the project meet Australian Standard AS/NZS 4360:2004: Risk management.

Lead Agency and Contact

Provide details of the lead agency and appropriate contact officers for the priority project.

Further Information

The Commonwealth's contact for further information and any enquiries is as follows:

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