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Performance Audit

# **Funding and Management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project**

Department of the Environment

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Office of the Auditor-General for Australia



Canberra ACT  
21 April 2015

Dear Mr President  
Dear Madam Speaker

The Australian National Audit Office has undertaken an independent performance audit in the Department of the Environment titled *Funding and Management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project*. The audit was conducted in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit to the Parliament.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's website—<http://www.anao.gov.au>.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ian McPhee'.

Ian McPhee

The Honourable the President of the Senate  
The Honourable the Speaker of the House of Representatives  
Parliament House  
Canberra ACT

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### **Audit Team**

Mark Simpson

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# Abbreviations and Glossary

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ANAO	Australian National Audit Office
Basin states	Queensland, New South Wales, Victoria, South Australia and the Australian Capital Territory
CEWH	Commonwealth Environmental Water Holder
CEWO	Commonwealth Environmental Water Office
COAG	Council of Australian Governments
Due diligence	A comprehensive appraisal of an acquisition by a prospective buyer, primarily to establish assets, risks and evaluate its fair value and/or benefits to be derived from its purchase
Environment	Department of the Environment (previously the Department of Sustainability, Environment, Water, Population and Communities)
EWP	Environmental Watering Plan
GL	Gigalitres (one GL is 1000 ML or one billion litres)
HoA	Heads of Agreement
IGA	Inter-governmental Agreement
LMP	Land Management Plan
Lowbidgee	Lower Murrumbidgee flood plain/irrigation district
LTAAY	Long Term Average Annual Yield
MDBA	Murray–Darling Basin Authority
ML	Megalitres (one ML is one million litres)

NOW	NSW Office of Water
NWI	National Water Initiative
PAC	Project Advisory Committee
PCG	Project Control Group
PIIOP	Private Irrigation Infrastructure Operators Program
Ramsar Convention	The Ramsar Convention is an inter-governmental treaty signed in 1971 that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
SDL	Sustainable Diversion Limit
SPP	State Priority Project
SRWUIP	Sustainable Rural Water Use and Infrastructure Program
Water shepherding	Water shepherding involves the delivery of a calculated volume of water from a particular location to a downstream site usually for environmental use
WIMOP	Water Infrastructure Management and Operation Plan
WMPA	Water Management Partnership Agreement
WSP	Murrumbidgee Water Sharing Plan



# Summary and Recommendations



# Summary

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## Introduction

1. The Murray–Darling Basin (the Basin) is an area of national environmental, economic and social significance. The Basin comprises Australia’s three longest rivers—the Darling, the Murray and the Murrumbidgee—and nationally and internationally significant wetlands, billabongs and floodplains. The Basin as a whole covers one-seventh of Australia’s land mass and extends across four states—Queensland, New South Wales (NSW), Victoria and South Australia and the Australian Capital Territory (the Basin states). Thirty-nine per cent of Australia’s national income derived from agricultural production is generated in the Basin, and it is home to over two million people.<sup>1</sup>

2. Throughout much of the twentieth century, the natural flows of the river systems in the Murray–Darling Basin were disrupted by the construction of infrastructure and the allocation of water resources for irrigation, livestock and domestic supply. It is now recognised that irrigation infrastructure and an over-allocation of water for consumptive use are having unintended environmental consequences.<sup>2</sup> Over time, reduced flows have caused a range of significant environmental problems, including: increased salinity and algal blooms; diminished native fish and bird populations; and poor wetland health.<sup>3</sup>

## Water reform

3. Over a number of years there have been significant reforms aimed at improving the management of water resources and addressing the imbalance between consumptive and environmental water use in the Basin, including the: Council of Australian Governments’ (COAG’s) agreement to the National Water Initiative (NWI) in 2004—Australia’s blueprint for water reform, and the commencement of the *Water Act 2007* in March 2008.

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1 Murray–Darling Basin Authority, 2013, *Explore the Basin: About the Basin*, available from <<http://www.mdba.gov.au/explore-the-basin/about-the-basin>> [accessed 1 August 2014].

2 Around 40 per cent of the Basin’s natural river flow is diverted for human use, including for irrigated agriculture, in an average non-drought year.

3 Department of the Environment website, available from <<http://www.environment.gov.au/topics/water/commonwealth-environmental-water-office/about-commonwealth-environmental-water/what-it>> [accessed 1 August 2014].

4. On 3 July 2008, the Australian Government and the Basin states signed an Inter-governmental Agreement on Murray–Darling Basin Reform (the IGA). The IGA aimed to increase the productivity and efficiency of Australia's water use, to service rural and urban communities, and to ensure the health of river and groundwater systems. The IGA provides for the Basin states and the Australian Government to enter into Water Management Partnership Agreements (WMPAs) to 'give effect to the urgent need to undertake water reforms in the Basin, to deliver a sustainable cap on surface water and groundwater diversions across the Murray–Darling Basin and to ensure the future of communities, industry and enhanced environmental outcomes'.<sup>4</sup>

5. The Australian Government's portfolio of water entitlements is intended to meet environmental needs, with diversions and extractions from the Murray–Darling Basin to be reduced to sustainable levels by 2019 under the Basin Plan. To implement the required level of reductions in diversions and extractions, successive governments have committed to 'bridging the gap' by securing water entitlements for environmental use. The target for surface water recovery under the Basin Plan, or the volume of the 'gap', is 2750 GL.<sup>5</sup>

6. As part of the IGA on Murray–Darling Basin Reform, Australian, state and territory governments agreed to develop State Priority Projects (SPPs). The SPPs were to deliver substantial and lasting returns of water to the environment, secure the long term future for irrigation communities, and deliver value for money outcomes. The funding for SPPs has been provided under the Sustainable Rural Water Use and Infrastructure Program (SRWUIP). To date, SPPs have been funded in each of the Basin states with project funding ranging from \$7 million to \$953 million, with individual water entitlements purchased from these funds ranging from 0.5 GL to 133 GL.<sup>6</sup> The largest acquisition by the Australian Government of water entitlements under an SPP was the Nimmie-Caira System Enhanced Environmental Water Delivery Project (Nimmie-Caira project).

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4 Department of the Environment website, available from <http://www.environment.gov.au/resource/water-management-partnership-agreement-commonwealth-australia-and-state-new-south-wales> [accessed 1 August 2014].

5 There is, however, flexibility built into the Basin Plan to account for actions that enable environmental outcomes to be achieved with less environmental water or without economic detriment.

6 The water recovery volume in GL is expressed as a long-term average annual yield (LTAAY) to reflect actual water allocations over time from regulated water systems. LTAAY is a method used to standardise the calculation of expected water recovery from different water access entitlement categories.

## Nimmie-Caira project

7. In July 2012, the NSW Government submitted a business case to the Australian Government seeking funding for the Nimmie-Caira project as an SPP.<sup>7</sup> The business case identified around 32 000 hectares of water-dependent vegetation on the Nimmie-Caira site, including red gum and black box communities and sensitive wetlands. The business case also identified the potential to restore cleared land and floodways to re-connect and re-integrate areas of water-dependent vegetation. It was recognised that the site had extensive irrigation infrastructure that could, with some modification, be utilised for watering high priority environmental sites within the local district, as well as downstream. The NSW Government proposed that 381 GL of supplementary water entitlements<sup>8</sup>, which equated to 173 GL of long-term average annual yield (LTAAY), would be transferred to the Australian Government to make a contribution towards ‘bridging the gap’ to the sustainable diversion limits (SDL) under the Basin Plan.<sup>9</sup>

8. The then Australian Government agreed to fund the Nimmie-Caira project in June 2013. Under a Heads of Agreement (HoA), the Australian Government agreed to provide up to \$180.1 million to the NSW Government to purchase the land and water entitlements from 11 property owners in the Nimmie-Caira area, and for the NSW Government to undertake extensive infrastructure works and develop long term land management arrangements on the site. Under this agreement, the Australian Government would own the water entitlements previously held by the landholders while the NSW Government would own the land.

9. The Department of the Environment (Environment) is responsible for monitoring and funding the project, with Executive oversight provided through the department’s Climate Change and Water Group Project Board, chaired by a departmental Deputy Secretary. The New South Wales Office of Water (NOW) is responsible for the day-to-day project delivery. The implementation of the project is informed by a Project Control Group (PCG,

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7 The Nimmie-Caira site is located in the lower reaches of the Murrumbidgee River floodplain in NSW, east of the township of Balranald and comprised 19 properties (owned by 11 landholders) totalling 84 417 hectare.

8 Supplementary water entitlements are of lower value than general or high security water entitlements, as the diversion of water is only allowed during periods of supplementary flow—that is, where the flow is greater than that required to meet downstream consumptive needs.

9 The SDL is the maximum amount of water that can be taken for consumptive use.

involving representatives from Environment and the NOW) and a Project Advisory Committee (PAC, involving local community representatives as well as PCG members).

10. The achievement of the overall objectives for the Nimmie-Caira project is dependent on the NSW Government meeting the milestones established in the HoA and project schedule. As at December 2014, the Australian Government had provided \$120 million to the NSW Government for the purchase price of land and water entitlements, with an additional \$4.5 million provided following the completion of three project milestones.

## **Audit objective and criteria**

11. The objective of the audit was to assess the effectiveness of the arrangements established by the Department of the Environment for the funding and management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project.

12. To form a conclusion against this objective, the ANAO adopted the following high level criteria:

- appropriate arrangements to assess the merits of funding the proposed project were implemented; and
- sound arrangements for the management and delivery of the project were established.

13. In March 2013, the Senate Standing Committee on Rural and Regional Affairs and Transport completed a report into the *Management of the Murray-Darling Basin*. In its report, the Committee recommended that the Australian National Audit Office (ANAO) review the Nimmie-Caira buyback proposal prior to its approval. In response to the recommendation, the Auditor-General advised the Chair of the Committee that an audit would not be undertaken at that time as the due diligence process was being completed by Environment and an audit had the potential to delay negotiations between the Australian and the NSW governments. Once the agreement between the Australian and NSW Governments was endorsed in 2013 and the transfer of water entitlements to the Australian Government was finalised in June 2014, an audit was scheduled to commence in the second half of 2014.

## Overall conclusion

14. The Nimmie-Caira System Enhanced Environmental Water Delivery Project (Nimmie-Caira project) is a State Priority Project funded by the Australian Government to ‘bridge the gap’ between business-as-usual and more sustainable water diversions in the Murray–Darling Basin. The Australian Government approved \$180.1 million in funding for the Nimmie-Caira project in June 2013. The project is to be completed in mid-2018. The 133 GL of water entitlements acquired by the Australian Government under the project represents the largest parcel of entitlements obtained across a range of programs and projects established to ‘bridge the gap’.<sup>10</sup>

15. The proposal to fund the Nimmie-Caira project as an SPP was outlined in a business case submitted to the Australian Government by the NSW Government in July 2012. The NSW Government initially sought funding of \$185 million for the project, which incorporated \$120 million sought by landowners for land and water entitlements, as well as funding for infrastructure works, land management arrangements and project management costs.<sup>11</sup> The funding requested for the land and water entitlements (\$120 million) was presented by the NSW Government on an ‘all or nothing’ basis—that is, the price was not negotiable.

16. Environment ‘market tested’ the \$120 million asking price for the land and water entitlements using two independent valuers. The independent valuations obtained were subsequently subjected to a review by the then Australian Valuation Office (AVO). On the basis of this review, the fair market value for the land and water assets in current use was determined by Environment to be \$103.1 million—meaning that the asking price included a price premium of \$16.9 million.

17. Environment considered that, in the circumstances, an additional price premium was justified. The acquisition of water entitlements through the project avoided the higher costs of purchasing entitlements elsewhere in the Basin<sup>12</sup> and provided a long term public benefit and value through the

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10 While the project involved the acquisition of 173 GL of water entitlements, only 133 GL have been recognised by Environment as contributing to ‘bridging the gap’ because it considered that 40 GL was already used for environmental watering. The position taken by Environment is being contested by the NSW Government and is currently subject to review, with resolution expected by 2016.

11 The NSW Government also agreed to provide a 10 per cent contribution to the project through additional water entitlements that were to be provided through another SPP—the Basin Pipes Project.

12 Acquiring entitlements from upstream irrigators was estimated to cost an additional \$53.6 million.

opportunity to create the largest wetland restoration project in the Murray–Darling Basin. The project also had the potential to provide less restricted<sup>13</sup> environmental watering opportunities for priority sites in the local area with limited access and the opportunity to re-credit water after it had passed through the site to meet environmental watering priorities further downstream (the latter value was estimated by Environment at \$11 million).<sup>14</sup> A contribution from the NSW Government to the project of 10 per cent (in the form of an increase in water entitlements transferred to the Australian Government from another SPP) further offset the premium paid by the Australian Government for the land and water entitlements.<sup>15</sup> In sum, Environment considered that the additional benefits exceeded the premium of \$16.9 million over the estimated fair market value.

18. Overall, Environment established a reasonable basis on which to assess the fair market value of the land and water entitlements. The department initially obtained modelling from the Murray–Darling Basin Authority to confirm the reliability of the water supply over time (in the form of the long term average annual yield from the entitlement). Subsequently, advice was obtained from two private sector valuation firms, with additional scrutiny of this advice provided by the then Australian Valuation Office, to arrive at a fair market value of \$103.1 million (comprising \$44 million for the land and \$59.1 million for the water entitlements). The department did not, however, seek an independent assessment of the premium (\$16.9 million) to be paid over and above the assessed fair market value to meet the fixed asking price of \$120 million for the land and water assets. Obtaining an independent opinion in relation to the value of the additional benefits would have provided greater assurance to the department and the Minister in relation to the merits of paying an additional premium over the assessed fair market value. Further, there was scope for the department to have subjected the remaining elements of the proposed project relating to offsets, project planning and management, and infrastructure configuration (valued at \$60.1 million) to greater scrutiny as part of the due diligence process.

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13 The ability to inundate land for environmental watering activities with fewer adverse third party impacts was a consideration by Environment in its due diligence assessment.

14 This re-crediting was only possible because of the existing infrastructure assets on the Nimmie-Caira site.

15 A project variation to the NSW Basin Pipes Project (funding of \$137 million) increased the contribution the project was required to make to the Australian Government by 13 per cent.



19. Environment's advice to the decision-maker (the then Minister for Sustainability, Environment, Water, Population and Communities) was clear in terms of the price premium and the basis on which the department considered that it was justified. Over the course of the due diligence process, the department was also able to negotiate a modest reduction in the total funding initially sought for the project (\$185 million), with \$180.1 million ultimately approved. The funding decision by the Minister was appropriately documented and was made in accordance with the requirements for approving expenditure under the financial management framework. The decision to fund the project was made on the basis that the NSW Government was required to meet 31 conditions that were considered necessary by Environment to manage the inherent risks identified for the project.<sup>16</sup>

20. The Heads of Agreement (HoA) between the Commonwealth and the NSW Government (incorporating the 31 conditions of approval) and separate project schedule of milestones, timeframes and payments provided an appropriate framework within which to deliver the project. The large upfront payment for the land and water entitlements did, however, reduce the leverage available to Environment to encourage timely performance by the NSW Government. Further, there has been limited information provided to stakeholders, including the local community, in relation to the delivery of the project and the anticipated outcomes from the substantial investment by the Australian Government.

21. To date, progress has been considerably slower than envisaged, with project implementation being pushed back by at least seven months, and critical project initiatives are now overdue. A key contributing factor to the delays was the difficulty experienced by the NSW Government in building its staffing resources to meet the expected workload and milestones in the Heads of Agreement. In advice to Environment in February 2014, the NOW indicated that the required staffing resources to plan and deliver its project commitments were yet to be fully established. Departmental oversight to effectively manage progress was also adversely affected by a 12 month delay to the approval of the project plan by Environment's Climate Change and Water Board. As a

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16 Key risks related to possible delays in relation to critical implementation activities.

result, the Board was not well placed to provide direction during the early implementation phase of the project.<sup>17</sup>

22. In August 2014, Environment elevated the overall risk rating for the project to Tier 1 (the highest risk category). Senior government officials from Environment and the NSW Government are now meeting more regularly with the aim of getting the project ‘back on track’. To realise the expected benefits from the project, including value for money from the acquisition of the land and water entitlements, close cooperation will be required between Environment and the NSW Office of Water (NOW)—particularly in relation to managing the higher residual risks that remain. These include potential delays to the completion of the Water Infrastructure Management and Operation Plan and the land management plan for the site.

23. The difficulties experienced in the early implementation stages of the Nimmie-Caira project (including the delays to the commencement of the ecological survey and the cultural heritage survey) highlight the importance of clearly articulating project management arrangements in the design phase of inter-governmental projects supporting Water Management Partnership Agreements, particularly those involving significant risk exposure and complexity, and including agreed arrangements in project schedules.

24. The ANAO has made two recommendations designed to improve engagement with stakeholders for the remainder of the Nimmie-Caira project and to strengthen project management arrangements in future inter-governmental projects of this nature.

## Key findings by chapter

### Project Assessment (Chapter 2)

25. The business case prepared by the NSW Government for the Nimmie-Caira project formed part of an agreed COAG process designed to ‘bridge the gap’ in terms of water diversions in the Murray–Darling Basin. The

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17 In the absence of a project plan, the department advised that it established some project controls such as regular reporting to the Board, meetings with senior officers and weekly meetings with the NOW. While the Board received a monthly high-level report on the progress of all NSW SPP’s, the information included in these reports on the Nimmie-Caira project was limited.

business case outlined the scope of the project, the significant project elements and the overall benefits from the proposal.<sup>18</sup>

26. Commonwealth water purchases have generally focused on water entitlements that are held separately from land. NSW undertook a separation of the Nimmie-Caira entitlement in 2012, through the promulgation of the Water Sharing Plan for the Murrumbidgee Regulated River Water Source<sup>19</sup>, which was initiated prior to the lodgement of the Nimmie-Caira business case in July 2012. This formed part of a broader process of reform within the Murray–Darling Basin that has been supported by COAG since 1994 and recommitted to under the National Water Initiative in 2004. The conversion of licences for the Nimmie-Caira site in 2012 was based on the maximum historical level of diversion and in proportion to the area of land owned by each landholder. There was no indication that the conversion of the Nimmie-Caira entitlements was inconsistent with the agreed national water reform agenda.<sup>20</sup>

27. As for all SPPs, the Australian Government was required to undertake a due diligence assessment in accordance with the three criteria established under the IGA: economic and social; environmental; and value for money. While the assessment of the economic and social criterion by Environment was limited, additional studies that had been completed at the time indicated that the net social and economic impacts of the Nimmie-Caira project would most likely be positive in the longer term. However, the extent of any impact will not be known until the options for site management are agreed and finalised in the land management plan, which is scheduled for completion in mid-2015.

28. In assessing the environmental criteria, Environment identified the site as supporting significant rookery and breeding sites for birds protected under

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18 The benefits included the enhanced environmental outcomes from environmental watering to support important habitat for rare and endangered species, such as migratory birds, amphibians and fish.

19 Proposed amendments to the Murrumbidgee Regulated River Plan to include the Lowbidgee Flood Control and Irrigation District were placed on public exhibition from 26 April to 4 June 2012. The plan was formally amended in October 2012.

20 The separation of land and water entitlements formed part of the national water reform agenda. Jurisdictions have been progressively separating (unbundling) land and water entitlements, with priority given to water systems with high levels of diversions. The National Water Commission's National Reform Assessment in 2014 recommended that opportunities for further unbundling should be considered on a case-by-case basis where there is the potential for a market to develop. *Australia's Water blueprint: national reform assessment 2014*, National Water Commission, September 2014, Section Chapter 5 'Future of water reform', 5.2.2 Water entitlements and planning, available from: <http://nwc.gov.au/publications/topic/assessments/australias-water-blueprint-national-reform-assessment-2014> [accessed 9 February 2014].

international migratory bird agreements. The Lower Murrumbidgee area (Lowbidgee) was also registered in the directory of important wetlands for Australia and was recognised in the Basin Plan as being a key environmental asset. The site was also recognised as having cultural significance for local Indigenous communities.

**29.** A key consideration in Environment’s assessment of the value for money of the proposed project was the reliability of the water allocated against the entitlements over time. This assessment was particularly important as the proposal involved supplementary water entitlements rather than general or high security water. Environment’s assessment was based on the LTAAY to be derived from the supplementary entitlement as this was considered to provide greater certainty as to the reliability of water allocated against the entitlements. Historically, there has often been a significant variation between entitlement and actual allocation for water users, particularly in NSW. While the LTAAY from the 381 GL to be obtained under the project equated to 173 GL, only 133 GL was assessed by Environment as counting towards ‘bridging the gap’ targets as it considered that 40 GL was already committed to pre-existing environmental watering purposes. This assessment has been contested by the NSW Government and is subject to further consideration in 2016.

**30.** Environment also tested the assumptions and claims in the business case to establish the fair market value of the proposed acquisition. The assessment of fair market value was challenging because of limited market data on land and water transactions in the Lowbidgee and the lack of any alternative sites or projects of an equivalent scale. To inform its assessment, the department sought the expertise of two independent valuers with their valuations then being assessed by the then Australian Valuation Office.

**31.** The department’s assessment indicated a premium of \$16.9 million (comprising a 10 per cent premium that had been considered acceptable by the Australian Government for large water acquisitions plus an additional premium) over and above the estimate of fair market value. This premium was justified by Environment on the basis of the scale of the purchase against the targets in the Basin Plan, the ability to re-credit water once it was returned to the river and the potential to provide better environmental watering capability for assets in the Murrumbidgee and Murray Rivers. Obtaining an independent opinion on the merits of the additional premium over and above the assessed fair value for the land and water entitlements would have provided greater assurance to the department and the Minister. While acknowledging the

premium paid above fair market value, the overall project proposal provided significantly lower cost than buying water in the open market from upstream irrigators, which was estimated to cost an additional \$53.6 million. In addition, the acquisition of Nimmie-Caira water entitlements was achieved at less than a quarter of the average cost of other funded 'bridging the gap' projects.

### **Project Advice and Approval (Chapter 3)**

32. In the broader water recovery policy context, the Nimmie-Caira project proposal coincided with the then Government's focus on achieving an agreement among the Basin states to the Murray–Darling Basin plan. A pre-condition for the NSW Government to commit to the Basin Plan was an agreement to fund the Nimmie-Caira project. While the Minister was made aware of the pre-condition, it was not explicitly referenced in the advice from the department regarding approval.

33. Environment provided a number of briefings to the Minister highlighting the emerging issues and risks that would need to be managed through conditions to the HoA if the project was to be approved. In particular, the briefings emphasised the importance of water shepherding<sup>21</sup> arrangements, the re-crediting of return flows to the Lowbidgee system for utilisation downstream and the long term management plan that covered land use and management in perpetuity to protect key environmental assets.

34. The final briefing in June 2013 provided the Minister with the basis for making a decision on the project. The brief included proposed conditions of funding based on the due diligence report<sup>22</sup>, with a recommendation of funding up to \$180.1 million (with \$120 million being for the purchase by the NSW Government of the Nimmie-Caira land and water assets from the 11 landowners as a single transaction). As part of its briefing to the Minister, the department enclosed both a cost benefit framework and a risk assessment for the project.

35. The cost benefit framework appropriately addressed the costs and benefits of the proposal for the purchase price of land and water assets. However, the analysis did not include coverage of the costs and benefits of the

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21 Water shepherding involves the delivery of a calculated volume of water from a particular location to a downstream site for use for the environment.

22 The 31 conditions of funding included the timely transfer of the Nimmie-Caira water entitlements to the Australian Government and specified project planning and implementation arrangements, such as the requirement for ecological and cultural heritage surveys of the site to be undertaken.

remaining \$60.1 million relating to the offsets, project planning and management<sup>23</sup> and infrastructure reconfiguration. While the allowed contingency of \$9.9 million provided some capacity to absorb any cost escalations, it would have been prudent to have advised the Minister more fully of the risks of purchasing the site without a comprehensive register of assets.

36. The department's risk assessment, which was aligned with the findings of the due diligence report, had a strong emphasis on managing project delays—two of the nine risks specifically focussed on possible delays relating to critical implementation steps. The measures proposed to reduce the risks were specifically highlighted for the Minister's consideration. Nevertheless, seven of the nine residual risks (following treatment) remained high (one) or medium (six). The Minister approved up to \$180.1 million in funding for the Nimmie-Caira project on 24 June 2013 subject to the 31 conditions of funding determined by the department during the due diligence process.

#### **Project Establishment and Implementation (Chapter 4)**

37. Since the approval of the Nimmie-Caira project and the endorsement of the HoA, a number of important implementation actions have been undertaken. The NSW government purchased both the land and water entitlements from the private owners and has been responsible for the development and maintenance of the infrastructure and ongoing management to ensure that environmental flows are being delivered as agreed. Project governance arrangements have been established, defining the roles and responsibilities, timeframes, and the management of risks. In addition, the transfer of water access entitlements to the Australian Government was completed in June 2014.

38. Although progress has been made on implementing some aspects of the project, communication about project developments with stakeholders, including the local community, has been limited in relation to the delivery of the project. Sound stakeholder engagement will help to manage expectations, inform the community of the project's progress, and enable greater community input. This will be particularly important as key project milestones and actions anticipated in 2015, such as the ecological and cultural heritage surveys and

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23 Project management costs amounted to \$5 million, which represents 2.8 per cent of the total project costs. Environment, in its due diligence assessment, considered that these costs were reasonable and consistent with other SPP project costs.

land management plan, will have a high level of community interest and impact. The development of a communication and engagement strategy will better place both governments to more effectively engage with stakeholders and communicate project developments.

39. To date, the progress of the project overall has been affected by ongoing delays. It took some eight months after the Heads of Agreement was endorsed by Commonwealth and State Ministers, for the NOW to consider that it was in a position to properly plan and deliver on its commitments. Early project milestones were not delivered as stipulated in the project schedule and key milestones are overdue. In approving its project plan in August 2014, Environment elevated the project from a Tier 2 to a Tier 1 risk category (the highest risk category) signalling its uncertainty as to whether NSW would meet its obligations based on progress at that point. Environment's Executive was advised that the project had been 'significantly delayed with little or no progress made against agreed milestones' and that, if it was not rectified, the consequence would be that 'the project will not achieve agreed long term outcomes'. The level of project oversight was, however, hindered by the delayed endorsement of the Nimmie-Caira project plan—some twelve months after the project was approved.

40. Delays in delivering the project are having a cumulative impact that is affecting the sequencing of project elements and is putting at risk the delivery of the project within the agreed timeframe.<sup>24</sup> The full benefits of the project, including from environmental water use, will only be realised by implementing the water delivery infrastructure changes and the long-term land and water management arrangements. If these are not completed, there is a significant risk that the project will not achieve established objectives. As such, ongoing senior management collaboration and oversight by the Australian and NSW governments will be necessary to successfully deliver the project.

41. Given the specific provision of administrative funding (\$5 million) to NSW for project management capability, there was scope for Environment to have more clearly articulated its expectations in relation to the management

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24 The NSW Government advised Environment in August 2014 that the finalisation of the ecological and cultural heritage surveys would be delayed by seven months, with a likely completion date of February 2015. This delay has affected the delivery of the Environmental Watering Plan, which will need to be revisited once the survey work is completed.

arrangements for a project of this complexity.<sup>25</sup> In particular, the linking of administrative funding to the achievement of project management milestones (such as the early assignment of sufficient staff resources) in the project schedule would have helped to encourage timely performance and helped to mitigate some of the risks to the achievement of project objectives. Environment should consider such approaches for any future projects where significant risks to the achievement of program objectives arise from delayed implementation.

## Summary of entity response

42. Environment's summary response to the proposed report is provided below, with the full response provided at Appendix 1.

The Department welcomes the report's overall findings regarding the effectiveness of the arrangements established by the Department for the funding and management of the Nimmie-Caira project. It is pleasing to note the report considers the project the most cost effective water recovery project administered by the Department. The Department agrees with both audit recommendations and considers that overall the report provides a balanced assessment of the implementation of the Nimmie-Caira project.

The Department notes the Audit Office's assessment that there would have been merit in obtaining additional independent advice on the value of the premium paid over and above estimates of fair market value of the land and water entitlements for agricultural use. While the Department acknowledges the importance of independent assessment of public expenditure, in this instance the Department judged that further independent advice was not required given the large environmental and administrative benefits associated with the purchase and the avoided higher cost of acquiring the water from alternative sources.

43. The NSW Office of Water's response to an extract of the proposed report is also provided at Appendix 1.

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25 In addition to the \$5 million provided to NSW for project management, an additional \$200 000 was also provided for the administration of the Project Control Group and the Project Advisory Committee.



# Recommendations

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**Recommendation No. 1**  
**Paragraph 4.36** To improve communication and engagement with stakeholders, the ANAO recommends that the Department of the Environment:

- a) strengthens its efforts to work with the NSW Office of Water to finalise and implement a communication and engagement strategy for the Nimmie-Caira Enhanced Environmental Water Delivery Project as a priority; and
- b) establishes the requirement that a communication and engagement strategy be developed, where appropriate, as part of any future State Priority Project Heads of Agreements.

**Environment's response:** *Agreed*

**Recommendation No. 2**  
**Paragraph 4.66** To support the effective delivery of any State Priority Projects delivered in support of Water Management Partnership Agreements, the ANAO recommends that the Department of the Environment, on a risk basis:

- a) specifies expectations in future funding agreements in relation to the use of administrative funding provided to underpin project implementation; and
- b) links the provision of administrative funding to project performance.

**Environment's response:** *Agreed*



# **Audit Findings**



# 1. Background and Context

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*This chapter provides background information and context for the Nimmie-Caira System Enhanced Environmental Water Delivery Project and its implementation by the Department of the Environment. It also outlines the audit approach.*

## The Murray–Darling Basin

**1.1** The Murray–Darling Basin (the Basin) is an area of national environmental, economic and social significance. The Basin comprises Australia’s three longest rivers—the Darling, the Murray and the Murrumbidgee—and nationally and internationally significant wetlands, billabongs and floodplains. The Basin covers one-seventh of Australia’s land mass and extends across four states—Queensland, New South Wales, Victoria and South Australia, and the Australian Capital Territory (the Basin states). Thirty-nine per cent of the national income derived from agricultural production is generated in the Basin, and it is home to over two million people.<sup>26</sup>

**1.2** Throughout much of the twentieth century, infrastructure was constructed and water resources were allocated within the Murray–Darling Basin for irrigation, livestock and domestic supply that disrupted the natural flows of the river system. Around 40 per cent of the Basin’s natural river flow is diverted for human use, including for irrigated agriculture, in an average non-drought year. It is now recognised that irrigation infrastructure and an over-allocation of water for consumptive use are having unintended environmental consequences. Over time reduced flows have caused a range of significant environmental problems, including:

- increased salinity;
- increased algal blooms;
- diminished native fish and bird populations; and
- poor wetland health.<sup>27</sup>

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26 Murray–Darling Basin Authority, 2013, *Explore the Basin: About the Basin*, available from <<http://www.mdba.gov.au/explore-the-basin/about-the-basin>> [accessed 1 August 2014].

27 Department of the Environment website, available from <<http://www.environment.gov.au/topics/water/commonwealth-environmental-water-office/about-commonwealth-environmental-water/what-it>> [accessed 1 August 2014].

## Water reform

1.3 Over a number of years there have been significant reforms aimed at improving the management of water resources and addressing the imbalance between consumptive and environmental water use in the Basin. Major reforms have included the:

- National Water Initiative (NWI)—Australia’s blueprint for water reform. As part of this initiative, governments across Australia have agreed on actions to achieve a more cohesive national approach to the manner in which water resources are managed in Australia, including, measuring, pricing and trading water. The NWI was signed at the Council of Australian Governments (COAG) meeting on 25 June 2004;
- commencement of the *Water Act 2007* on 3 March 2008, which established the Commonwealth Environmental Water Holder (CEWH) and the Murray–Darling Basin Authority (MDBA);
- production, implementation and enforcement of the first Basin-wide water sharing and management plan (the Basin Plan) by the then Government in November 2012<sup>28</sup>; and
- progressive acquisition of water entitlements by the Commonwealth for use by the CEWH to water environmental assets in the Basin. As at 30 June 2014, the CEWH held 2126 gigalitres (GL), equating to 1454 GL of long term average yield.<sup>29</sup> These entitlements were valued by the Department of the Environment at around \$2 billion.<sup>30</sup>

1.4 The Australian Government’s portfolio of water entitlements is intended to meet environmental needs<sup>31</sup>, with diversions and extractions from

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28 After a development period of some four years, the Basin Plan was adopted into law by the Australian Parliament on 22 November 2012. The Basin Plan provides a high-level framework that sets standards for the Commonwealth, Basin states and the MDBA to manage the Basin’s water resources in a coordinated and sustainable way in collaboration with the community, available from: [www.mdba.gov.au/what-we-do/basin-plan](http://www.mdba.gov.au/what-we-do/basin-plan) [accessed 11 November 2014].

29 The water recovery volume in GL is expressed as a long-term average annual yield (LTAAY) to reflect actual water allocations over time from regulated water systems. LTAAY is a method used to standardise the calculation of expected water recovery from different water access entitlement categories.

30 This included \$592.3 million in accumulated impairments. The department’s water entitlements are classified as intangible assets and subject to impairment testing under Australian Accounting Standards and Finance Minister’s Orders.

31 Basin state governments have also conducted purchases of water entitlements for the environment. Department of the Environment website, available from <http://www.environment.gov.au/water/rural-water/restoring-balance-murray-darling-basin> [accessed 1 August 2014].

the Murray–Darling Basin to be reduced to sustainable levels by 2019 under the Basin plan. To implement the required level of reductions in diversions and extractions, the Government has committed to ‘bridge the gap’ by securing water entitlements for environmental use. The target for surface water recovery under the Basin Plan, or the volume of the ‘gap’, is 2750 GL. However, there is flexibility built into the Basin Plan to account for actions that enable environmental outcomes to be achieved with less environmental water or without economic detriment. This is called the sustainable diversion limit (SDL)<sup>32</sup> adjustment mechanism, which will be triggered by 2016, with works to be completed by 2024.<sup>33</sup> The Basin Plan and the SDL are designed to operate in conjunction with the inter-governmental agreement (IGA) on water reform that preceded these initiatives.

## Inter-governmental agreement

**1.5** On 3 July 2008, the Australian Government and the Basin states—being the states of New South Wales (NSW), Queensland, South Australia, Victoria and the Australian Capital Territory—signed an Inter-governmental Agreement on Murray–Darling Basin Reform (the IGA). The IGA aimed to increase the productivity and efficiency of Australia's water use, to service rural and urban communities and to ensure the health of river and groundwater systems. The IGA (part 4) provides for the Basin states and the Australian Government to enter into Water Management Partnership Agreements (WMPAs) to:

give effect to the urgent need to undertake water reforms in the Basin, to deliver a sustainable cap on surface water and groundwater diversions across the Murray–Darling Basin and to ensure the future of communities, industry and enhanced environmental outcomes.<sup>34</sup>

**1.6** As part of the IGA, Australian, state and territory governments agreed to develop seventeen priority projects for final approval by the Australian Government. Thirteen of these projects were to be led by Basin states, with the remaining four to be led by the Commonwealth. These State Priority Projects

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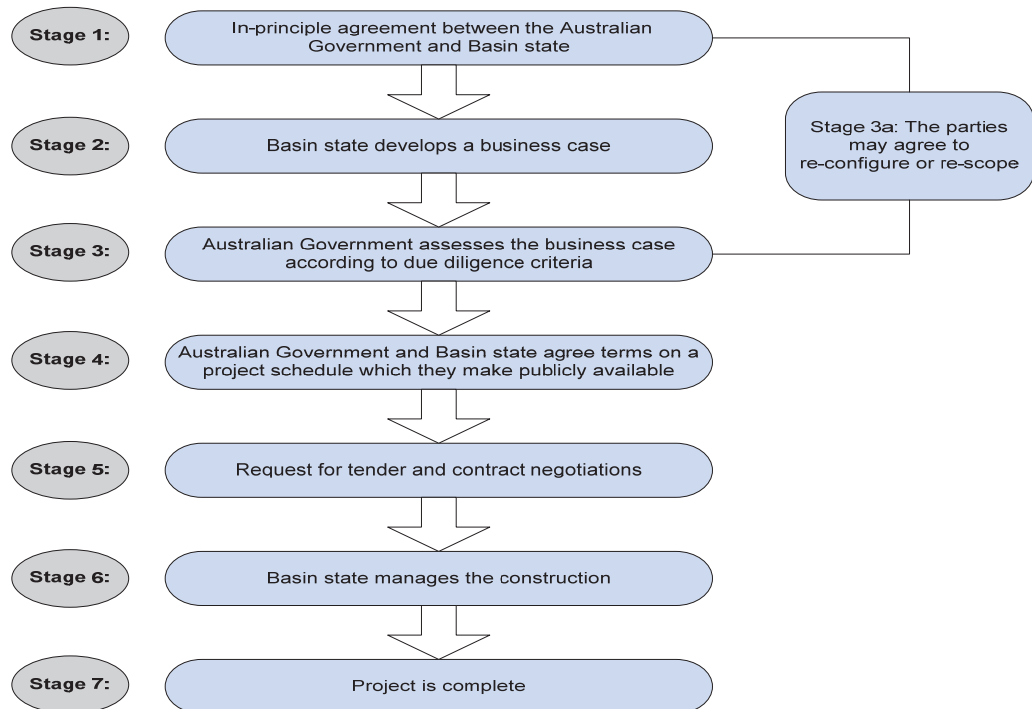
32 The SDL is the maximum amount of water that can be taken for consumptive use.

33 In June 2014, the Australian Government released the Water Recovery Strategy for the Murray–Darling Basin, which included the prioritisation of water recovery through infrastructure investment over water buybacks.

34 Department of the Environment website, available from <<http://www.environment.gov.au/resource/water-management-partnership-agreement-commonwealth-australia-and-state-new-south-wales>> [accessed 1 August 2014].

(SPPs) were to deliver substantial and lasting returns of water to the environment, secure the long term future for irrigation communities, and deliver value for money outcomes. Initially, the Australian Government was expected to provide total funding for the projects put forward by Basin states, however, a 10 per cent co-contribution was subsequently required from the states by the Australian Government. The agreed project development process for SPPs is outlined in Figure 1.1.

**Figure 1.1: Indicative SPP development process**



Source: COAG Reform Council, available from <<http://www.environment.gov.au/resource/water-management-partnership-agreement-commonwealth-australia-and-state-new-south-wales>> [accessed 1 August 2014] p. 36.

Note: The Australian Government provides funding for the business case, as well as for project implementation.

## Funding arrangements

1.7 The \$5.8 billion Sustainable Rural Water Use and Infrastructure Program (SRWUIP), which is the largest component of the Water for the Future initiative, includes funding for water purchasing, irrigation modernisation, desalination, recycling and storm water capture. The funding for SPPs (both Australian Government-led and state-led) is sourced from



SRWUIP.<sup>35</sup> To date, SPPs have been funded in each of the Basin states with project funding ranging from \$7 million to \$953 million.

1.8 The largest acquisition by the Australian Government of water entitlements under an SPP funded by SRWUIP was the Nimmie-Caira System Enhanced Environmental Water Delivery Project (Nimmie-Caira project).

## **Nimmie-Caira System Enhanced Environmental Water Delivery Project**

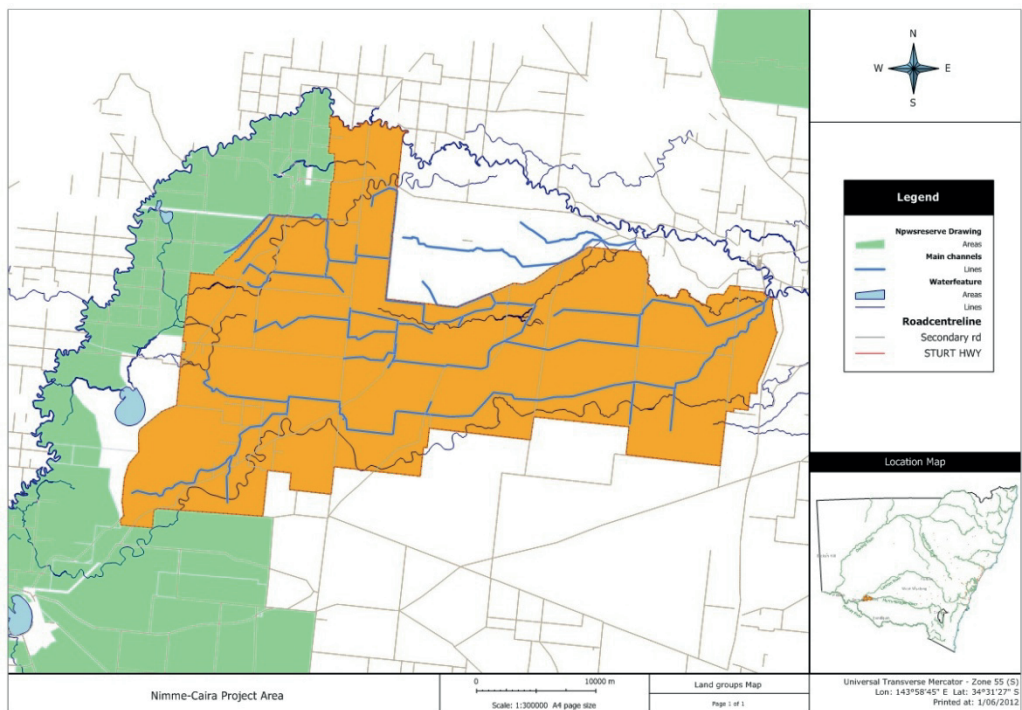
1.9 In July 2012, the NSW Government submitted a business case to the Australian Government (represented by the Department of the Environment) for the Nimmie-Caira project.<sup>36</sup> The business case identified around 32 000 hectares of water-dependent vegetation on the Nimmie-Caira site, including red gum and black box communities and sensitive wetlands. The business case also identified the potential to restore cleared land and flood ways to re-connect and re-integrate areas of water-dependent vegetation. The site had extensive irrigation infrastructure that could, with some modification, be utilised for watering high priority environmental sites within the local district, as well as downstream. It was proposed that 381 GL of supplementary water entitlement, which equated to 173 GL of LTAAAY, would be transferred to the Australian Government. The Heads of Agreement (HoA) enabled the NSW Government to own the land until long-term land management arrangements were settled and a non-government entity was selected to manage the site. A map of the Nimmie-Caira site is provided in Figure 1.2.

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35 As SPPs are being implemented under an inter-governmental agreement between the Australian Government and the states/territories, the funding is not considered to be grant funding for the purposes of the Commonwealth Grant Guidelines under Part 1, section 2.5 (h).

36 The Nimmie-Caira site, which comprised 19 properties (owned by 11 landholders) totalling 84 417 hectare, is located in the lower reaches of the Murrumbidgee River floodplain in NSW, east of the township of Balranald. The Nimmie-Caira project site is named after two local water courses, the Nimmie creek and the Caira Cutting. 'Caira' is also the name of the local county that includes the town of Balranald. The Geographic Names Board of NSW attributes the origin of 'Caira' to local Indigenous people.

**Figure 1.2: Nimmie-Caira project site**



Source: New South Wales Office of Water.

Note: The orange area defines the Nimmie-Caira project site. The green area defines the adjoining Yanga National Park.

## Project assessment and approval

**1.10** In March 2013, the Department of the Environment (Environment) completed its due diligence<sup>37</sup> assessment of the project, as required under Schedule E of the IGA. The requirements established under this schedule included the investigation of the economic and social, environmental, value for money and water reform aspects of any submitted project, prior to consideration by the Minister for the Environment.

**1.11** On the basis of the department's due diligence assessment, the then Australian Government announced its agreement in June 2013 to fund the Nimmie-Caira project. The HoA, established specifically for the Nimmie-Caira project, was signed in June 2013. Under the agreement, the Australian Government agreed to provide \$180 million to the NSW Government to

<sup>37</sup> Due diligence refers to a comprehensive appraisal of an acquisition by a prospective buyer, primarily to establish assets, risks and evaluate its fair value and/or benefits to be derived from its purchase.

purchase the land and water entitlements from 11 property owners in the Nimmie-Caira area, and for the NSW Government to undertake extensive infrastructure works and develop long term land management arrangements on the site. The HoA also enabled the water entitlements, previously used for flood irrigation, to be transferred to the Commonwealth for environmental use, making a contribution towards 'bridging the gap' to the SDL under the Basin Plan. The Australian Government's funding was subject to conditions set out in the final due diligence report and subsequently incorporated into a HoA.

## Administrative arrangements

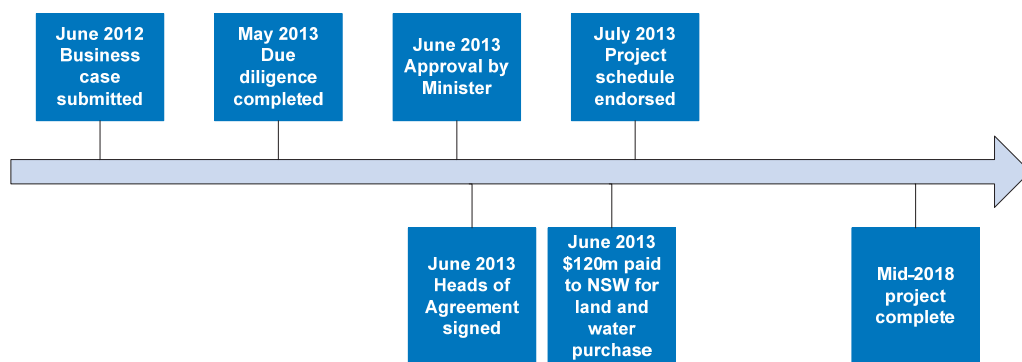
**1.12** The HoA defines the outcomes, timeframes, and responsibilities for implementing the project and oversight arrangements. Environment is responsible for the oversight and funding of the project, with Executive oversight provided through the Climate Change and Water Group Project Board, Chaired by a departmental Deputy Secretary. The New South Wales Office of Water (NOW) is responsible for day-to-day project delivery. The implementation of the project is informed by the Project Control Group (PCG) and a Project Advisory Committee (PAC). The PCG comprises Environment and NSW Government representatives<sup>38</sup>, and is the primary inter-governmental forum for managing the implementation in line with the agreed milestones and outcomes. The PAC involves local community and stakeholder representation and was established to advise the PCG on activities required to meet the project objectives.

**1.13** Progress on the Nimmie-Caira project is subject to the NSW Government achieving the milestones established in the HoA and the project schedule. As at December 2014, \$120 million has been paid to NSW for the purchase price of land and water entitlements. An additional \$4.5 million has been paid following the completion of three project milestones. A timeline of the key milestones and events for the Nimmie-Caira project is set out in Figure 1.3.

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38 The NSW representatives are from the NSW Office of Water, Office of Environment and Heritage and Water NSW.

**Figure 1.3: Timeline and key milestones (as at December 2014)**



Source: ANAO analysis of Environment information.

Note: The project schedule specified four purchase milestones and twelve operational milestones through to the completion of the project in mid-2018.

## Scrutiny of State Priority Projects

**1.14** The Nimmie-Caira project was approved after the majority of other SPPs, which had been agreed and were being implemented from 2008–09. In October 2010, the COAG Reform Council (the Council) reported that progress across the SPPs that had been funded at that time had not been in line with the expectations of governments. The Council expected that:

after two and a half years that the Commonwealth and relevant Basin States would have at least formally agreed the terms of the projects, and to have published project schedules as required by the partnership agreements. However, this was only the case for four of the thirteen projects.<sup>39</sup> While a handful of projects demonstrated progress through relatively small sub-projects, overall the projects were still in the planning stages.

**1.15** The Council noted that jurisdictions agreed to carry out their responsibilities in a ‘timely manner’, and considered—in most part—that this had not occurred.<sup>40</sup>

39 The Nimmie-Caira project was not included in the initial list of SPPs from NSW. The project was subsequently provided by NSW after an approach by the 11 landholders in the local irrigation district.

40 COAG (2010) Reform Council Report, available from <<http://www.coagreformcouncil.gov.au/reports/water-management/water-management-partnerships-performance-report-2010.html>> [accessed 1 August 2014].

## Previous audit coverage

**1.16** The Australian National Audit Office (ANAO) has undertaken a number of audits relating to water management reform since the National Plan for Water Security was announced in 2007, with audits including:

- **Restoring the Balance (Audit Report No.27 2010–11):** The report noted that the purchase and use of water entitlements by the Australian Government through the Restoring the Balance in the Murray–Darling Basin (Restoring the Balance) Program advanced the program's objectives of reducing consumptive water use, providing water for the environment and easing the transition to the then proposed Basin Plan. Of particular relevance to the current audit of the Nimmie-Caira project were the audit findings in relation to future purchases of water entitlements, with the report stating that:

in the future, more explicit consideration should be given to quantifying administrative savings and demonstrating claimed 'immediate' environmental benefits to justify paying a price premium above established price benchmarks.

- **Administration of the Private Irrigation Infrastructure Operators Program in New South Wales (Audit Report No.38 2011–12):** The report concluded that while Environment had implemented the program in NSW and allocated available funding, weaknesses in program governance and in the management of a number of implementation issues had an adverse impact on the overall effectiveness of the program's administration. In this regard, shortcomings were evident in the department's design of the program, the assessment of applications and the development of measures to inform an assessment of whether the program was achieving its objectives.
- **Commonwealth Environmental Watering Activities (Audit Report No.36 2012–13):** The report concluded that the strategies for managing environmental water were generally sound. However, a number of suggestions were made to enhance the approach to administering the environmental watering function. In particular, a strong focus on the establishment of the monitoring, evaluation, reporting and improvement process would position the department to report on the extent to which its use of environmental water had contributed to protecting and restoring the environmental assets of the Murray–Darling Basin.

- **Administration of the Strengthening Basin Communities Program (Audit Report No.17 2013–14):** The report concluded that there were significant shortcomings in some key aspects of the program’s implementation that detracted from the effectiveness of Environment’s administration. These included the design of the program guidelines, the subsequent assessment of grant applications, and the management of funding. Of relevance to the current audit of the Nimmie-Caira project, were the findings in relation to the management of funding agreements, with the audit concluding that the department had not established a sound and consistent process to manage the scope of funded projects.

## Parliamentary interest and media coverage

**1.17** The Nimmie-Caira project has been subject to Parliamentary interest since it was first proposed as an SPP by the NSW State Government. Concerns were initially raised by Senator Heffernan in July 2012. Senator Heffernan called for an urgent inquiry before the proposed water buyback was finalised and commented that the landholders selling their assets did not have a licensed water allocation. Prior to the sale he commented that ‘the buy-back of water was some two and a half times the real commercial value and with the infrastructure costs etc that are in the package, it will be four times the real value’. In his view, this was ‘a serious fraud of the public purse and a classic example of a government not knowing what it’s doing’.<sup>41</sup>

**1.18** In March 2013, the Senate Standing Committee on Rural and Regional Affairs and Transport completed a report into the *Management of the Murray–Darling Basin*. The Committee was particularly concerned about the value for money from the Australian Government acquiring supplementary entitlements because of the ‘low level of reliability of the water’. In relation to the Nimmie-Caira project the Committee commented:

the lack of reliability of flows undermines the value for money that the proposal provides for taxpayers and leads to uncertain environmental outcomes. The Committee is also concerned that there has been limited public transparency about the Nimmie-Caira buyback proposal.

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41 Interview by ABC, available from <<http://www.abc.net.au/news/2012-07-25/heffernan-buyback/4153144>> [accessed 1 August 2014].

The Committee also has concerns that the proposed purchase of water entitlements as part of the Nimmie-Caira project stems from the creation of a new license entitlement recently granted to the landholders. This combined with the concerns about different types of water entitlements and the \$168 million total cost of the proposal, raises further questions about the value for money the proposal represents for Australian taxpayers.<sup>42</sup>

**1.19** In its report, the Committee recommended that the ANAO review the Nimmie-Caira buyback proposal. On 26 March 2013, the Auditor-General advised Senator Heffernan, the Chair of the Senate Standing Committee on Rural and Regional Affairs and Transport, that an audit would not be undertaken at that time as a due diligence process was being completed by Environment and an audit had the potential to delay the Nimmie-Caira negotiations between the Australian and NSW governments. Once the agreement between the Australian and NSW governments was endorsed in 2013 and the transfer of water entitlements to the Australian Government was finalised in June 2014, an audit was scheduled to commence in the second half of 2014.

## Media coverage

**1.20** Media interest in the Nimmie-Caira project has reflected much of the debate over water buy-backs and the impact on local communities. Local media articles<sup>43</sup> have provided extensive coverage of the project and local tensions over the price of the water entitlements being purchased by the Australian Government. Alternative coverage has focused on the different sides of the debate including the environmental benefits of the project and the support from peak industry groups.

## Audit objective, criteria, scope and methodology

### Objective

**1.21** The objective of the audit was to assess the effectiveness of the arrangements established by the Department of the Environment for the funding and management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project.

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42 Senate Standing Committee on Rural and Regional Affairs and Transport, March 2013, *The Management of the Murray–Darling Basin*, available from <[http://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Rural\\_and\\_Regional\\_Affairs\\_and\\_Transport/Completed%20inquiries/2012-13/mdb/report/index](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Completed%20inquiries/2012-13/mdb/report/index)> [accessed 1 August 2014].

43 Such as in the *Global Mail*, May 2012, available from <[www.theglobalmail.org/feature/is-the-worlds-most-expensive-water/257/](http://www.theglobalmail.org/feature/is-the-worlds-most-expensive-water/257/)> [accessed 19 November 2014].

## Criteria

1.22 To form a conclusion against this objective, the ANAO adopted the following high level criteria:

- appropriate arrangements to assess the merits of funding the proposed project were implemented; and
- sound arrangements for the management and delivery of the project were established.

## Scope

1.23 The audit examined the due diligence processes undertaken by Environment to assess the merits of funding the Nimmie-Caira project, including the basis of value for money established by the department in its advice to the decision-maker (the Minister). The appropriateness of arrangements to manage the funded project, including the extent of progress to date was also examined.

## Audit methodology

1.24 The audit team reviewed planning and consultative arrangements, relevant documentation, probity and due diligence processes, as well as assessments, advice, guidelines and decisions taken to fund the project. In addition, departmental staff and key stakeholders were interviewed and the governance and performance measurement framework established to guide implementation, monitor progress and inform advice to the Government were examined. The audit team also undertook a visit to the Nimmie-Caira site in September 2014.

1.25 The audit was conducted in accordance with ANAO Auditing Standards at a cost to the ANAO of \$421 500.<sup>44</sup>

## Report structure

1.26 The structure of the report is set out in Table 1.1.

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44 The ANAO engaged Vista Advisory Pty Ltd to provide audit services for the conduct of this audit.



**Table 1.1: Report structure**

Chapter	Chapter Overview
Chapter 2–Project Assessment	Examines the application for funding through the business case prepared by the NSW State Government and submitted to Environment for the Nimmie-Caira project. It also examines the due diligence process that was conducted by Environment in assessing the project.
Chapter 3–Project Advice and Approval	Examines the briefings and advice provided to the Minister by Environment in relation to approving Australian Government funding for the Nimmie-Caira project.
Chapter 4–Project Establishment and Implementation	Examines the implementation of the Nimmie-Caira project from the establishment of the Heads of Agreement and the completion of the project schedule. The oversight and administrative arrangements supporting the project were also examined, along with the performance monitoring and reporting arrangements.

## 2. Project Assessment

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*This chapter examines the application for funding through the business case prepared by the NSW State Government and submitted to Environment for the Nimmie-Caira project. It also examines the due diligence process that was conducted by Environment in assessing the project.*

### Introduction

**2.1** The process for developing, assessing and approving SPPs, such as the Nimmie-Caira project, was agreed between the Australian and state/territory governments as part of the Water Management Partnership Agreements (WMPAs) that were established in 2008. The agreed process emphasised the following three stages:

- State/territory agencies develop and submit a business case for each project;
- Environment assesses the project against due diligence criteria established under Schedule E of the IGA; and
- each project is considered by the Minister for the Environment, with approval of funding subject to the agreed terms included in a project schedule.

**2.2** Under such arrangements, Environment is responsible for assessing the business case and conducting the due diligence process to comprehensively appraise the project in terms of establishing the potential benefits and costs involved, identifying the risks and developing appropriate mitigation strategies and determining fair value.

### Nimmie-Caira business case

**2.3** In July 2012, the NSW Government, through the NOW, submitted the initial business case to the Australian Government for financial support for the Nimmie-Caira project.<sup>45</sup> In response to matters raised by Environment during the due diligence assessment, the NOW submitted a revised business case in

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<sup>45</sup> The preparation of the business case was funded under the Australian Government's Environmental Works and Measures Feasibility Program for NSW at a cost of \$200 000.

April 2013.<sup>46</sup> In summary, the proposal outlined in the business case requested \$185.1 million, of which \$120 million related to the acquisition of the Nimmie-Caira land and water entitlements.<sup>47</sup> The proposal submitted by the NSW Government indicated that the Nimmie-Caira project would deliver the following:

- the provision of 381 GL of Lowbidgee<sup>48</sup> Supplementary Entitlement (the equivalent of 173 GL of LTAAY) to meet the water recovery targets within the Murrumbidgee River under the Basin Plan<sup>49</sup>;
- a flow of up to 3000 ML/day around the Murrumbidgee river choke at Chaston's Cutting<sup>50</sup> through the modification of existing water infrastructure;
- the potential for further SDL offsets through more efficient watering of environmental assets within the Nimmie-Caira site and other areas of the Lowbidgee using the Nimmie-Caira infrastructure, compared with the volumes identified in the then draft Basin Plan;
- the flexibility of using Nimmie-Caira water to provide flows to the Southern Redbank System and Yanga National Park, the Fiddler's-Uara Creek System or shepherding the flows downstream to other Basin assets, as well as directing flows to important environmental assets within the Nimmie-Caira site;
- enhanced environmental outcomes within the Nimmie-Caira site through the protection of existing areas of lignum vegetation<sup>51</sup>, wetlands, bird breeding sites and habitat for endangered frog species,

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46 The revised business case provided additional information on project costs, as well as a net reduction of \$20 744 in funding.

47 The initial proposal was for \$168.3 million, but this was subsequently revised to \$185.1 million to allow for a contingency amount because of uncertainty over the costs of elements such as the reconfiguration of water infrastructure. A more accurate cost estimate was expected following the completion of the water and land management plans for the site, which were to be completed as part of the project.

48 Lowbidgee is a description of the lower reaches of the Murrumbidgee river covering 300 000 hectares. It is listed in the *Directory of Important Wetlands of Australia*. Available from NSW Environment and Heritage <[www.environment.nsw.gov.au/environmentalwater/lowbidgeefloodplain.htm](http://www.environment.nsw.gov.au/environmentalwater/lowbidgeefloodplain.htm)> [accessed 16 October 2014].

49 At the time there was 183 000 ML of water to be recovered from the Murrumbidgee River to meet the Basin target for the river.

50 Chaston's Cutting is a narrow channel in the Murrumbidgee River upstream of Balranald.

51 Lignum refers to *Muehlenbeckia florulenta*. It is a plant native to inland Australia and is common in flood-prone areas of the Murray-Darling Basin, available from <[www.publish.csiro.au/paper/BT04130.HTM](http://www.publish.csiro.au/paper/BT04130.HTM)> [accessed 16 October 2014].

as well as the potential for rehabilitation of currently cleared areas of lignum<sup>52</sup>;

- the benefits accruing from a large, diverse and actively managed wetland from its position adjoining the existing Yanga National Park;
- a reduction in compensation to land owners for flood damage as a result of overbank environmental flows; and
- offset projects endorsed by affected local councils to reduce any negative impacts on local communities.

**2.4** While the business plan outlined a range of positive outcomes from the implementation of the Nimmie-Caira project, it also outlined some adverse outcomes. These outcomes included the loss of rate payments to local councils, loss of agricultural production and an associated loss of local expenditure and jobs. However, these outcomes were to be offset through specific local adjustment projects and, overall, the NSW Government considered that the regional and national benefits of the project would far outweigh any negative impacts.

## **Proposed project budget**

**2.5** The proposed budget encompassed the cost of acquisition of land and water entitlements, improvements to the site to facilitate environmental watering, structural adjustment projects to assist local councils with the loss of rateable land and a contribution to the NOW for project management and governance. A summary of the project budget outlined in the proposal is set out in Table 2.1.

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52 The business case noted that the Nimmie-Caira site provides internationally important habitat and breeding areas for colonial water birds, supports populations of rare and endangered species of frogs and birds and provides an important mid-Basin source of replenishment of river based populations of macro-invertebrates, fish and reptiles, far in excess of the levels of production possible in the surrounding semi-arid landscapes. The Nimmie-Caira site was described as being part of the largest area of wetland remaining in the Murrumbidgee Valley, and has been identified as a hydrological indicator site in the Murray–Darling Basin Plan by meeting four of the five MDBA criteria for key environmental assets. (Business case, Executive Summary p. 1).

**Table 2.1: Summary of Nimmie-Caira project elements**

Project Component	Description	Cost (\$m)
Purchase of land and water entitlements	Purchase of 381 000 shares of Lowbidgee supplementary water entitlements. Purchase of 84 000 hectares (ha) of land across 19 properties with water delivery infrastructure.	120.00
Conveyance/legal fees	Legal services associated with the purchase.	0.10
Water delivery infrastructure reconfiguration	Upgrade of system capacity to deliver up to 3000 ML/day through the modernisation and rationalisation of the delivery system's operation.	16.26
Land transition	Easements, decommissioning of fence lines, establishment of boundary fences. Water supply pipeline, provision of utilities, environmental water management services.	25.55
Water planning and modelling	Environmental watering plan. Verification and modelling of system losses, system operational plan.	0.50
Local community offset projects	Road upgrades for Waugorah and Loorica Roads to maintain access, Community Development Coordinator for Hay Shire, Community Interpretive Centre in Balranald, National/regional tourism marketing.	4.55
Project management and governance	Project manager, project steering committee, monitoring and reporting.	1.30
Contingency	n/a	16.83
<b>Total</b>		<b>185.09</b>

Source: NSW business case 2012, p. 22.

## Land and water acquisition

**2.6** One of the key concerns of the Senate Standing Committee on Rural and Regional Affairs and Transport related to the creation of new licence entitlements granted to the Nimmie-Caira landholders in advance of the proposed purchase under the project. The committee considered that the granting of the licences, combined with the total cost of the proposal, raised questions about the value for money from the Nimmie-Caira project.

**2.7** The Lowbidgee Flood Control District, the area in which the Nimmie-Caira project is located, was constituted on 24 January 1945 under

Part 7 of the then *Water Act 1912 (NSW)*.<sup>53</sup> A key consideration in approving funding for the Nimmie-Caira project was that the water access entitlements had not yet been separated from land titles. That is, the original proclamation establishing the Lowbidgee Flood Control District was still in place at the time the proposal was submitted to the Australian Government by the NSW Government. Consequently, the water access entitlements could not be traded or held separately from the land.<sup>54</sup>

**2.8** A key water reform initiative agreed by COAG in 1994 and subsequently reinforced by the National Water Initiative (NWI) in 2004 was that all water access entitlements be changed from area based licences to volumetric entitlements separated from the land.<sup>55</sup> Since the mid-1980's, NSW has been converting area-based licences into volumetric entitlements, with an initial focus on regulated river valleys. NSW has reported that, in recent years, unregulated river and groundwater systems have been progressively converted into volumetric entitlements including within the Lowbidgee Flood Control and Irrigation District. The volumes determined for the entitlement reflected the historical nature of the diversions.<sup>56</sup> The conversion of the irrigation rights to volumetric entitlements in the Lowbidgee were reflected in the amended water sharing plan and were issued to landowners in proportion to their area of land that historically benefited from the water diversion.<sup>57</sup> The basis of the charges levied over the licences was to cover the costs of water management and infrastructure owned by the NSW State Water Corporation.

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53 NSW Department of Primary Industries, NSW Office of Water, (2012). *NSW Water Infrastructure Project, Lowbidgee Water Licence—including Nimmie-Caira*, p. 1.

54 The separation of land and water titles was put forward by the NSW Government in 2012 as amendments to the Murrumbidgee Regulated River plan to include the Lowbidgee Flood Control and Irrigation District. The proposed amendments were placed on public exhibition from 26 April to 4 June 2012. The plan was formally amended in October 2012—after the submission of the business case by NSW (July 2012), but before the approval of the project in June 2013.

55 The separation of land and water entitlements formed part of the national water reform agenda. Jurisdictions have been progressively separating (unbundling) land and water entitlements, with priority given to water systems with high levels of diversions. The National Water Commission's National Reform Assessment in 2014, recommended that opportunities for further unbundling should be considered on a case-by-case basis where there is the potential for a market to develop. *Australia's Water blueprint: national reform assessment 2014*, National Water Commission, September 2014, Section Chapter 5 'Future of water reform', 5.2.2 Water entitlements and planning, available from <<http://nwc.gov.au/publications/topic/assessments/australias-water-blueprint-national-reform-assessment-2014>> [accessed February 2014].

56 *ibid*, p. 2.

57 *ibid*, pp. 2–3.

**2.9** The conversion of existing area-based licences to volumetric entitlements in the Nimmie-Caira area formed part of a broader process of reform within the Murray–Darling Basin, with conversions being undertaken across different catchments within the Basin. The conversion of licences in the Nimmie-Caira area in 2012 was based on the maximum historical level of diversion and in proportion to the area of land owned by each landholder. There was no indication that the conversion of the Nimmie-Caira entitlements, which was necessary to facilitate water trading by the Commonwealth Environmental Water Holder, was inconsistent with national water reforms in the Murray–Darling Basin.

**2.10** In undertaking its due diligence assessment of the project, the LTAAY from the purchase was a critical consideration for the Australian Government in its calculation of value for money as it informed an assessment of the reliability of water access over time. This was also necessary as there has often been significant variation between the entitlement and actual allocation for water users in NSW.

### **Risk assessment in the proposal**

**2.11** The business case prepared by the NOW included a risk assessment for the Nimmie-Caira project, prepared in accordance with the Australian and New Zealand Standard for risk management 2009.<sup>58</sup> The risk categories identified by the NOW included: stakeholders; the environment; commercial; technical; safety; and operational risks. In total, fourteen risks were identified along with associated mitigation measures. After mitigation measures were applied, one risk remained at high<sup>59</sup>, eight of the risks remained at medium and five were classified as low. The highest residual risks (that is, risk after mitigation measures were applied) were:

- stakeholders (ensuring the participation of all landowners in the sale process and the acceptance of the project by the local community);
- operational matters (such as timely amendments to the water sharing plan and approval for required works on creeks to allow the efficient flow of environmental water); and

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58 Standards Australia/Standards New Zealand 2009. AS/NZS 31000:2009 Risk Management Principles and Guidelines.

59 The risk with a residual rating of high related to delays resulting in the landholder agreement expiring and consequently some landholders declining to participate beyond the expiry date.

- the environment (in particular the potential for increased carp breeding<sup>60</sup> through increased water flows in the Nimmie-Caira).

## Due diligence assessment

**2.12** Given the high value of the project and its potential contribution to achieving Australian Government water reform policy objectives, it was critical for the department to examine and test the fundamental elements of the business case to provide an assurance to the Minister and the Government that the project would achieve the stated expectations outlined in the business case. The completion of a due diligence assessment against established criteria was also a requirement of the IGA.

**2.13** In addition to the project level risk assessment by the NSW Government provided in the business case, Environment conducted its own strategic risk assessment in line with departmental risk management guidelines. This assessment was prepared to assist the department to identify and manage those risks that could impact on the ability of the Australian Government to achieve its investment objectives for the project. The assessment also assisted the department to better understand aspects of the business case and address a number of concerns. In particular, the department considered that more information was required on the value of water entitlements and operational considerations, such as the movement of water to important environmental assets in the local district and downstream of the Nimmie-Caira site.

**2.14** The risk assessment provided Environment with a reasonable basis for managing the range of risks that were intrinsic to major projects funded through inter-governmental arrangements. It also provided the department with a framework within which to consider the application of the due diligence criteria agreed by COAG, which focused on the following three primary criteria:

- economic and social;
- environmental (such as through water shepherding arrangements and re-crediting return flows)<sup>61</sup>; and

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60 Carp are a major pest in inland waterways of Eastern Australia, available from <[Australianmuseum.net.au/european-carp-cyprinus-carpio](http://Australianmuseum.net.au/european-carp-cyprinus-carpio)> [accessed 4 November 2014].

61 An MoU between the Australian and NSW governments (July 2010) noted that the objective is 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.



- value for money.<sup>62</sup>

## Economic and social criteria

2.15 Under schedule E of the IGA, SPPs were expected to:

- secure a long term sustainable future for irrigation communities in the context of climate change and reduced water availability in the future;
- contribute towards regional investment and development, secure regional economies and support the local community; and
- demonstrate 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 Australian Government's guidelines for irrigation, modernisation and planning assistance.

2.16 The business case contained high level information on the economic and social impacts of the Nimmie-Caira project, highlighting the loss to local councils of \$82 000 per annum in rates, the loss of agricultural production of \$8.4 million per annum<sup>63</sup>, a loss of expenditure in Balranald and Hay of some \$1.3 million per annum, as well as a loss of employment in the local area.

2.17 The key anticipated benefits identified in the assessment were:

- contributing significantly to 'bridging the gap' to SDL's under the Basin Plan;
- removing the need to obtain the anticipated volume of water from other users in the Murrumbidgee<sup>64</sup>; and

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62 All activities associated with the funding of projects were expected to accord with COAG and National Water Initiative Agreements and to be consistent with best practice and other national approaches and standards being adopted for planning and implementing the *Water for the Future*. Schedule E, COAG (2008) Agreement on Murray–Darling Basin Reform, available from: <[www.coag.gov.au/sites/default/files/murray\\_darling\\_IGA.pdf](http://www.coag.gov.au/sites/default/files/murray_darling_IGA.pdf)> [accessed 20 October 2014].

63 The \$8.4 million had a significant local impact as the total agricultural production in the Lower Murrumbidgee was estimated at \$22.1 million in 2012. The predicted loss of agricultural production, therefore, equated to 38 per cent of total local agricultural production. See GHD (2012) Assessment of the Benefits of the Basin Plan for Primary Producers on Floodplains in the Murray–Darling Basin. Final Report to the Murray–Darling Basin Authority; August 2012, available from: <[www.mdba.gov.au/kid/files/2132GHD\\_AssessmentBenefitsOfTheBasinPlanforPrimaryProducers.pdf](http://www.mdba.gov.au/kid/files/2132GHD_AssessmentBenefitsOfTheBasinPlanforPrimaryProducers.pdf)> [accessed 3 November 2014].

64 The due diligence report noted that, if an equivalent volume of water was acquired elsewhere in the Murrumbidgee, it would cost approximately \$172 million compared to the \$120 million cost for the Nimmie-Caira land and water assets. This assumes that the project management and on-costs for alternative projects would be roughly the same.

- contributing to the Basin Plan and the efficiency of water use for the environment.

**2.18** To address the identified economic and social costs associated with the project, the NSW Government proposed local council ‘offset’ projects valued at \$4.5 million. These projects included: the upgrading of local roads and infrastructure; an interpretative centre at Balranald and regional tourism marketing; and a regional economic development officer located at Hay. The department accepted the cost estimates and all listed project elements with the exception of one.<sup>65</sup> As a consequence, the accepted value of the offsets was reduced to \$4 million. The basis on which proposed projects were funded was appropriately documented by Environment.

**2.19** The business case included limited coverage of the longer term economic and social costs or benefits of the project in the region. The absence of this information made the assessment process more difficult for Environment. The department noted that ‘the level of economic and social activity from the project will be contingent on the implementation of the long term land management plan for the site’. This plan is not, however, expected to be in place until August 2015.

**2.20** While undertaking specific modelling to more comprehensively address the socio-economic criteria would have been costly and, to an extent, pre-empted the long term land management plan, there was the opportunity for the department to have considered other relevant research to inform its assessment. For example, research commissioned by the MDBA in 2011 highlighted that, in relation to the Basin Plan:

At the Basin level, the costs are expected to be relatively small. Models have estimated that the level of total production in the Basin (gross regional product) will be reduced by less than one per cent and that this is expected to be more than offset by broader economic growth over the transition period to 2019–20.<sup>66</sup>

**2.21** The MDBA commissioned a further study in 2012 of the benefits of the Basin Plan for primary producers on floodplains in the Murray–Darling Basin.

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65 The project not supported was for regional tourism marketing. The reasons were that this activity was not critical to the project and that Tourism NSW has responsibility for funding specific tourism activities.

66 Murray–Darling Basin Authority (2011) Socioeconomic Analysis and the Draft Basin Plan: Part A–Overview and analysis. p. v, available from <[http://www.mdba.gov.au/sites/default/files/archived/proposed/social\\_economic\\_analysis\\_part\\_a.pdf](http://www.mdba.gov.au/sites/default/files/archived/proposed/social_economic_analysis_part_a.pdf)> [accessed 3 November 2014].

The resulting report in August 2012 showed that the estimated value of production for floodplain producers in the Lower Balonne, Barwon Darling, Lower Lachlan and Lower Murrumbidgee would increase by 10 per cent. The report suggested that the 'long-run benefits of the Basin Plan are likely to outweigh the long-run costs'.<sup>67</sup> While studies completed to date indicate that the net social and economic impacts of the Nimmie-Caira project are most likely to be positive in the longer term, the extent of any impact will not be known until the options for site management are agreed and finalised in the land management plan scheduled for completion in 2015.

## Environmental criteria

**2.22** Schedule E of the IGA indicated that SPPs must deliver substantial and lasting returns of water to the environment to secure real improvements in river health. To receive approval, projects were required to:

- be based on technically valid calculations of net water savings, with projections to take into account the impacts of climate change; and
- be able to deliver water in the form of a secure and transferable water entitlement to the Australian Government. The Australian Government's share of water savings was expected to be capable of being used for purposes that reflected the Government's environmental watering priorities.

**2.23** The due diligence report prepared by Environment noted that, while the Nimmie-Caira project had significant and well documented environmental values, it did not contain any areas designated under the Ramsar Convention for wetlands of international importance.<sup>68</sup> Notwithstanding the absence of Ramsar Convention designated areas, the Nimmie-Caira site was identified by Environment as supporting significant rookery and breeding sites for birds protected under international migratory bird agreements.<sup>69</sup> The Lowbidgee was also registered in the *Directory of Important Wetlands of Australia* by meeting

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67 GHD (2012) Assessment of the Benefits of the Basin Plan for Primary Producers on Floodplains in the Murray–Darling Basin. Final Report to the Murray–Darling Basin Authority; August 2012, available from <[www.mdba.gov.au/kid/files/2132\\_GHD\\_AssessmentBenefitsOfTheBasinPlanforPrimaryProducers.pdf](http://www.mdba.gov.au/kid/files/2132_GHD_AssessmentBenefitsOfTheBasinPlanforPrimaryProducers.pdf)> [accessed 3 November 2014].

68 The Ramsar Convention is an inter-governmental treaty signed in 1971 that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources and is the only global environmental treaty that deals with a particular ecosystem, available from <[data.unep-wcmc.org/decisions/6/](http://data.unep-wcmc.org/decisions/6/)> [accessed 3 November 2014].

69 These agreements are in place with the People's Republic of China, Japan and the Republic of Korea.

five of the six criteria used to determine nationally important wetlands. In addition, the ecological significance of the Lowbidgee was discussed in the Basin Plan, with the MDBA commenting that:

The Lower Murrumbidgee Floodplain is a key environmental asset within the Basin and is an important site for the determination of the environmental water requirements of the Basin.<sup>70</sup>

**2.24** The report also noted the negative impacts from past land use changes in the Nimmie-Caira district, referencing a NSW National Parks and Wildlife Service Report in 2001. The report commented that the change in land use from grazing to irrigated cropping from the 1980s resulted in ‘one of the world’s largest wetland destructions in recent times with the area of wetland reduced by 60 per cent’.<sup>71</sup>

**2.25** In addition to preserving the environmental features of the Nimmie-Caira site, a further benefit from the project was the potential to deliver environmental water to local environmental sites of importance in the local area. The CEWO had historically experienced difficulty in delivering water to important environmental assets in South Yanga and Yanga Nature Reserve.<sup>72</sup> The value of providing watering capacity through the Nimmie-Caira project illustrates its potential to address a gap in pre-existing environmental watering capability.

**2.26** Further, the due diligence report recognised important cultural values within the Nimmie-Caira site, with numerous observations of Indigenous burial sites, campfire ovens and artefacts across the Lowbidgee floodplain. Local Aboriginal Land Council members that were interviewed by the ANAO highlighted the cultural significance of the site to local Indigenous communities.

**2.27** Environment did not, however, give explicit consideration to the impact of climate change despite it being an element of the required COAG

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70 Murray–Darling Basin Authority (2012), Assessment of Environmental Water Requirements for the Proposed Basin Plan Lower Murrumbidgee River Floodplain p. 18, available from: <[www.mdba.gov.au/sites/default/files/archived/proposed/EWR-Lower-Murrumbidgee-River.pdf](http://www.mdba.gov.au/sites/default/files/archived/proposed/EWR-Lower-Murrumbidgee-River.pdf)> [accessed 3 November 2014].

71 R.T. Kingsford, R.F Thomas, NSW National Parks and Wildlife Service Report, ‘Changing water regimes and wetland habitat on the Lower Murrumbidgee floodplain of the Murrumbidgee River in arid Australia’, p. 2, 2001.

72 South Yanga and Yanga Nature Reserve forms part of the Yanga National Park, which is considered to be of national environmental significance and was listed as a nationally important wetland within the *Directory of Important Wetlands of Australia* in 2000.

environmental criteria. Environment informed the ANAO that the impact of climate change is inherent in the project proposal and the business case information requirements that were used to write and assess the proposal for funding. Nevertheless, while climate change impacts were not separately addressed, the evidence was sufficient for Environment to conclude that the environmental values were significant and appropriately aligned with the Government's water policies at the time—particularly in relation to the contribution to 'bridging the gap' and the environmental objectives of the Basin Plan. Furthermore, these values were enhanced through the potentially significant cultural values of the site for local Indigenous communities.

### **Value for money criteria**

**2.28** The value of the land and water within the Nimmie-Caira project proposal—\$120 million—represented two thirds of the proposed project cost and was the most material component of the project. Consequently, assessing fair value was critical to any assessment of value for money. In addition, the project costs for site works, community offset projects, project management and contingencies were substantial at \$60.1 million.

#### *Value for money of land and water*

**2.29** The business case prepared by the NSW Government noted that \$120 million for the land and water assets was being sought by existing landholders. This asking price was recorded in a legally binding and time-limited joint agreement amongst the 11 landholders, which was to expire on 30 June 2013. The offer was presented on an 'all or nothing' basis as a single transaction, with the NSW Government supporting the price to the Australian Government through the business case.

**2.30** To determine the fair value of the land and water entitlements, Environment engaged two independent firms in 2012 to conduct a market-based comparison to assess the value of the proposed land and water entitlements. The two valuation reports produced a range of values that reflected variations in methodologies<sup>73</sup>, as well as the 'uncertainties given the complexity for cropping and livestock systems and the risks associated with these systems'. The challenges in valuing the land and water assets were noted by both firms in their respective reports, as well as in their comments to the

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73 Both valuers used the comparative market value to assess the value of the Lowbidgee supplementary water entitlements, with differences in its application providing different insights and perspectives.

ANAO during the audit. The due diligence report noted that, while both firms provided defensible water valuations, both recognised the uncertainty in the water valuations due to:

- the amended Murrumbidgee Water Sharing Plan (WSP)<sup>74</sup> not being finalised at the time of the valuations;
- a lack of information about actual farm production costs and profits;
- uncertainty around the reliability of the Lowbidgee supplementary water entitlement (the reliability was subsequently confirmed by the MDBA in February 2013 as 0.454<sup>75</sup>); and
- uncertainty about how water is used and when the entitlement is available throughout the year.<sup>76</sup>

**2.31** Environment recognised that it required assurance as to the reliability of Nimmie-Caira’s supplementary water over time. Supplementary water entitlements are of lower value than general or high security water entitlements, as the diversion of water is only allowed during periods of supplementary flow—that is, where flow is greater than that required to meet downstream consumptive needs.<sup>77</sup> The uncertainty of supplementary access means that any calculation of value must be considered on the basis of the LTAAY and an appropriate discount rate applied.

**2.32** The LTAAY for the Nimmie-Caira site was calculated by NSW and included in the business case at 173 GL per annum from the 381 GL of entitlements available through the proposed purchase.<sup>78</sup> Modelling by the MDBA that was undertaken as part of Environment’s due diligence process,

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74 The Water Sharing Plan (WSP) for the Murrumbidgee River originally commenced on 1 July 2004 and established a water sharing regime that provided water for the environment and water for extractive purposes, such as irrigation. In October 2012, the WSP was amended to expand the range of surface water sources covered by regulation and established the 381 000 shares of Nimmie-Caira water entitlement.

75 This figure indicates that the full water entitlement is available on average 45.4 per cent of the time each year.

76 The due diligence report noted that the independent valuations could have been refined if: the valuers had access to the financial records of each farming enterprise and a better understanding of water availability; the Murrumbidgee WSP had been finalised; and there had been a confirmation of the reliability of entitlements.

77 NSW Office of Water, July 2012, *The Lowbidgee Water Licence – including Nimmie-Caira*, pp. 1–3.

78 A water entitlement is the maximum amount of water that can be obtained. The actual allocation of water depends on seasonal factors such as rainfall in the catchment and the amount in storages. The LTAAY measures the average amount of water available per annum over time.

indicated that, while these figures were accepted<sup>79</sup>, only 132.6 GL of LTAAY could be counted as ‘bridging the gap’ because an amount of 40 GL of LTAAY was already being utilised on local environmental assets and benefiting the environment. This matter was strongly contested by the NOW and remains an issue of disagreement between Environment and the NOW. However, the due diligence report noted that ‘it was not a matter that should put Australian Government investment at risk’ as 132.6 GL was regarded as a substantial amount of water to ‘bridge the gap’.<sup>80</sup> A planned review of sustainable diversion limits in the Murray–Darling Basin is expected to resolve this issue. The department has informed the ANAO that agreement on this matter is expected by mid-2016.

**2.33** Once the LTAAY was calculated, Environment then sought to determine the fair value of the water entitlements to be acquired under the project (on a per ML basis<sup>81</sup>). The two valuations obtained through the due diligence process were used by the department to initially determine that a price of \$130 per ML represented a fair market value. However, the NOW strongly disputed the department’s initial determination, arguing that it was based on flawed assumptions—particularly as it preceded amendments to the Murrumbidgee WSP that could reasonably be expected to have a material impact on any water purchase.<sup>82</sup>

**2.34** Accurately determining assumptions and subsequently fair value for water can be difficult for a number of reasons. The price of water fluctuates with rainfall and available supply in storage dams and weirs, and the water market in some areas, including the Lowbidgee, has not been subject to extensive trading. Environment noted that, from August 2008 to May 2013, there were only 12 trades of Murrumbidgee supplementary water entitlements recorded on the NSW Water Register. These trades ranged in price from \$158 per ML to \$490 per ML and reflected the changing price because of flood and drought conditions over this period. The department recognised that

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79 MDBA modelling of LTAAY to the Nimmie-Caira site was 175 GL, which is slightly higher than the 173 GL in the business case. The variance relates to the different range of years included, but is not material to the overall result.

80 Environment applied a discount rate of 22 per cent to the values to reflect the reliability of Lowbidgee water compared with the Murrumbidgee River in general.

81 1 GL equates to 1000 ML.

82 The amendments to the WSP had important implications for diversions within the Murrumbidgee River system as they were designed to move towards more sustainable diversion limits, which would result in a reduction in the supply of water for irrigation or other industry purposes.

average trading prices had declined at the time by 20–30 per cent in the southern basin since 2009. However, as outlined earlier, the initial valuations were prepared prior to the completion of the WSP for the Murrumbidgee River.

**2.35** To obtain additional assurance, and to respond to concerns from the NOW, Environment engaged the then Australian Valuation Office (AVO) in April 2013 to review the two independent valuation reports and the draft due diligence assessment report in the context of the amended WSP (endorsed in October 2012). The AVO concluded that a price of \$140 per ML to \$170 per ML represented fair value for the water entitlements. The mid-point of this price range produced a total cost of \$59.1 million for the water entitlements.<sup>83</sup>

**2.36** A material component of the project was the acquisition of the land. Acquiring the land was an important element of the project because the reconfiguration of the water infrastructure could not occur without appropriate control of the site. The site involved 2500 kilometres of channels and levees for irrigation. In the absence of the required reconfiguration of the infrastructure, the Australian Government would have been limited in its capacity for water shepherding and in re-crediting return flows.<sup>84</sup> The department found it difficult to value the land because of ‘a lack of information and insufficient data on past sales in the area’. The initial range of assessed values determined during the due diligence assessment was between \$26.5 and \$48 million.<sup>85</sup> The AVO in its review of the valuations commented that the wide value range in the business case and due diligence reports stemmed from ‘mixed information including a lack of comparable sales and a desk-top assessment with a compressed timeline’. The AVO assessed the land value at \$43–\$45 million—with a mid-point valuation of \$44 million.

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83 However, neither the valuations nor the department’s due diligence processes were able to consider the impact of expected increases in water delivery charges from the implementation of Murray–Darling Basin reforms. Environment recognised that the extent of cost recovery and any consequential increases in charges will be determined by future pricing decisions by the Australian Competition and Consumer Commission regulatory processes, the NSW Independent Pricing and Regulatory Tribunal decision process and the final composition of the infrastructure and related asset base following the implementation of the project. These details are yet to be finalised. As a consequence, the full cost implications of increased charges are unknown.

84 Department of the Environment, ‘Nimmie-Caira Due Diligence Report’, 2013 p. 37. In initial advice from the Commonwealth Environmental Water Holder, water shepherding was seen as critical to the delivery of value from the Nimmie-Caira project.

85 This figure compared to the imputed value in the business case of \$26.3 million.



**2.37** Environment determined from its due diligence assessment that land and water assets were fairly valued for commercial purposes at \$103.1 million—comprising \$44 million for the land and \$59.1 million for the water entitlements—representing some 86 per cent of the fixed asking price of \$120 million.<sup>86</sup> The department noted that, under the Restoring the Balance program, policy approval had been obtained to expend up to 10 per cent above market price on acquisitions of water entitlements in excess of 40 GL. In the case of the Nimmie-Caira project, this represented a premium of \$5.9 million on the valuation of the water entitlements. The assessed value was therefore \$109 million, some \$11 million less than the amount sought by NSW in the business case.

**2.38** In its due diligence assessment report, Environment considered whether a further premium, on top of the accepted 10 per cent for large acquisitions was justified. The department concluded that an additional price premium was acceptable on the basis of avoiding higher costs on water purchases elsewhere in the Basin, as well as the benefits of securing a large volume of water within a single transaction.<sup>87</sup> A further consideration was the long term public benefit from the improved environmental condition of the wetland ecosystems of the Nimmie-Caira that Environment considers will add considerable ecological resilience to the southern Basin.<sup>88</sup> The department did not, however, seek an independent external assessment of the premium to be paid over and above fair market value for the land and water assets. Such an approach would have provided greater assurance to the department and the Minister in relation to the additional benefits to be derived from the premium paid.

**2.39** The values presented by Environment in the due diligence report are outlined in Table 2.2.

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86 This figure was more conservative as it was based on a discount rate of 22 per cent that took into account the reliability of the water against the entitlement within the Lowbidgee. The discount rate used by the department effectively reduced the calculated value of the water purchase by \$16.7 million.

87 In addition, the ability to undertake less-restricted large scale environmental watering activities, including inundation of land for environmental watering activities with fewer adverse third party impacts was a consideration by Environment, albeit unquantified, in its due diligence assessment.

88 The Nimmie-Caira site was noted by the department as supporting at least nine significant bird rookeries with dams and wetlands providing important habitat for 10 threatened species, including the endangered Southern Bell Frog. The project area also forms part of the Endangered Ecological Community of the Lower Murray under the *Fisheries Management Act 1991* and is a hydrological indicator site meeting four of the five criteria in the Basin Plan.

**Table 2.2: Calculation of land and water values in the proposal**

Land and Water Values	\$ (m)
Fair market price land <sup>1</sup>	44.0
Fair market price water <sup>2</sup>	59.1
10 per cent premium for large water acquisition <sup>3</sup>	5.9
Additional premium	11.0
<b>Total</b>	<b>120.0</b>

Source: Environment information.

Note 1: Mid-range of AVO determination.

Note 2: Mid-range of AVO determination.

Note 3: Based on the Restoring the Balance in the Murray–Darling Basin Program, policy approval.

**2.40** A further consideration regarding value for money was the re-crediting of return flows, so that the water purchased could be used for watering additional environmental priorities in the Basin. While not included in the fair value appraisal of water assets, Environment estimated that the LTAAY of return flows would provide a potential benefit to the Australian Government of \$11 million.<sup>89</sup> However, to realise the benefits from re-crediting return flows of this value, a further \$6 million was required to provide a channel for the delivery of the return flow across the Nimmie-Caira site.

#### *Value for money of project management and implementation costs*

**2.41** The proposed project and management costs of \$60.1 million were considered by Environment during the due diligence assessment. These elements included compensation to local councils, as well as planning and project management<sup>90</sup> and site works (including infrastructure reconfiguration). The cost of reconfiguring the infrastructure works on the Nimmie-Caira site included: potential changes to channels; regulators to control water flow; culverts; banks and levees. While major water infrastructure within the Nimmie-Caira site was predominantly managed and operated by the NSW State Water Corporation, some infrastructure was privately or jointly owned and operated. At the time the business case was submitted, there was no definitive listing of major water infrastructure assets or their ownership. The accurate

89 This figure was based on particular assumptions that were subject to inherent uncertainties and were, therefore, not considered sufficiently robust to include in the fair value appraisal by Environment. The inherent uncertainties were also noted by the AVO in its review.

90 Project management costs amounted to \$5 million, which represents 2.8 per cent of the total project costs. Environment, in its due diligence assessment, considered that these costs were reasonable and consistent with other SPP project costs.

determination of these assets is largely dependent on the land and water management plans that are to be developed by 2015. Because of the difficulty in preparing accurate estimates, NSW initially proposed a contingency of \$16.83 million that was subsequently revised to \$18.74 million within the total project cost. The contingency amount was subsequently revised by Environment to \$9.9 million during the due diligence process.

**2.42** As outlined earlier, an amount of \$0.5 million was also reduced from the project offsets for local councils because of the scope for funding from another source. A summary of the changes from the revised business case to the proposed offer from Environment is outlined in Table 2.3.

**Table 2.3: Project variations for elements of the Nimmie-Caira project**

Project Component	NSW Proposal <sup>1</sup> (\$m)	Environment's Proposed Offer (\$m)	Cost Variation (+ or -\$m)	Key Reason for Variation
Purchase of water entitlement and land	120.00	120.00	-	-
Planning and infrastructure works (including decommissioning structures)	10.84	9.89	-0.95	Project planning, tendering and supervision excluded from Environment's offer
Land management and construction of channels, easements and water supply	25.80	30.55	+4.75 <sup>2</sup>	Channel construction for return water flow included and management of environmental water excluded from Environment's offer
Operational plans and modelling systems	0.50	0.50	-	-
Local council offset projects	4.55	4.05	-0.50	Regional tourism marketing excluded from Environment's offer
Project committees (Project Control Group and Project Advisory Committee) and legal services	4.45 <sup>3</sup>	5.21	+0.76	NOW management service fees increased and legal services excluded from Environment's offer

Project Component	NSW Proposal1 (\$m)	Environment's Proposed Offer (\$m)	Cost Variation (+ or -\$m)	Key Reason for Variation
Contingency	18.74	9.95	-8.79	Decrease in contingency in Environment's offer
<b>Total</b>	<b>\$184.88</b>	<b>\$180.15</b>	<b>-4.75</b>	<b>-</b>

Source: ANAO analysis of Environment information.

Note 1: NSW requested revised funding in April 2013. This revised funding contained more detailed costing information not previously included and resulted in a reduction of \$20 744 overall.

Note 2: Environment included \$6 million to allow the construction of a bypass channel to facilitate the re-crediting of environmental flows. This had not been included in the NSW business case.

Note 3: The initial estimate of \$1.30 million was subsequently revised to \$4.45 million within the revised business case in April 2013.

**2.43** The site works and infrastructure for the Nimmie-Caira site were important in the water shepherding arrangements and re-crediting environmental flows envisaged for the project. However, at the time that the business case was submitted to Environment, a complete listing of infrastructure assets or their ownership was not available. In these circumstances it was difficult for Environment to assess value for money from the estimates of works to be undertaken.

#### *Further considerations in value for money*

**2.44** In assessing value for money, comparisons with other major water infrastructure initiatives provide insights into the relative value for money for the project. The ANAO compared the Nimmie-Caira project with similar initiatives funded under the Restoring the Balance Program in the Murray-Darling Basin, (Restoring the Balance Program) as well as projects designed to 'bridge the gap' for water diversions within the context of the Basin Plan.

**2.45** A review by the ANAO of purchases secured by the department under the Restoring the Balance Program indicated a price paid per trade for supplementary water entitlements ranging from \$161 per ML (in the Macquarie-Bogan catchment) to \$1045 per ML (in the Gwydir catchment).<sup>91</sup> This data indicates that the assessed fair value of supplementary water entitlements for the Nimmie-Caira project at \$155 per ML compares favourably to alternative

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91 The due diligence report also indicated that the acquisition of 132.6 GL of general security water from irrigators upstream in the Murrumbidgee catchment would cost \$173.6 million at the market prices applying at the time (2012-13).

water buybacks that have been undertaken by the Australian Government. When the final amount paid<sup>92</sup> for 381 GL of supplementary water entitlements (173 GL of LTAAY) is considered, the derived \$199 per ML compares favourably when the range of prices paid for other supplementary entitlements.

**2.46** The ANAO examined this matter further in comparing the relative value of the Nimmie-Caira project against the cost and the LTAAY from other water recovery projects contributing to ‘bridging the gap’ targets. All projects other than the Nimmie-Caira project involved Australian Government funding of \$2.7 billion to achieve 427 GL of LTAAY, with an average cost of \$6.4 million per GL (LTAAY). If it is assumed that the LTAAY for the Nimmie-Caira project is 133 GL, rather than the 173 GL outlined in the business case, the project cost of \$180 million produces a value of \$1.35 million per GL (LTAAY). This figure compares favourably with the \$6.4 million per GL (LTAAY) for other national projects and programs and \$5.8 million per GL (LTAAY) for other NSW funded projects. Further information on ‘bridging the gap’ projects is provided in Table 2.4 (on the following page).

**2.47** A further consideration is that the Nimmie-Caira project involved the largest volume of water entitlements obtained by the Australian Government in a single transaction, with the next largest entitlement being 113 GL of LTAAY from the Private Irrigation Infrastructure Operators Program (PIIOP). The median volume of water (LTAAY) obtained by all major infrastructure projects contributing to ‘bridging the gap’ targets for environmental flows was 16.8 GL. The large volume of water in this transaction means that there are implicit opportunity cost savings for the Australian Government in both time and resources from avoiding multiple alternative sources of water in the Murrumbidgee to meet the targets in the Basin Plan.<sup>93</sup>

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92 The total amount paid for water of \$76 million includes the price premium of \$16.9 million (comprising the 10 per cent premium applying to large water acquisitions and the additional premium required to meet the asking price for the Nimmie-Caira project—some 28.6 per cent of the fair market price) in addition to the assessed fair value of \$59.1 million (as outlined in Table 2.2). This figure does not include the cost of the land.

93 Value for money was also supported by the requirement for NSW to contribute 10 per cent of total project costs for SPPs. NSW elected to make this contribution for the Nimmie-Caira project through transferring an additional 13 per cent (valued at \$13.5 million) from the NSW share of water savings from another NSW SPP—the Basin Pipes project.

**Table 2.4: Water Recovery from ‘Bridging the Gap’ projects (June 2014)**

State	Program/Project	Cost (\$m)	LTAAY (GL)	Cost (\$m/GL)
NSW	PIIOP <sup>1</sup>	642	113.0	5.68
NSW	Water metering pilot project	22	4.0	5.50
NSW	Water metering (excluding pilot)	199	28.0	7.11
NSW	Basin Pipes	137	30.0	4.57
NSW	Irrigated farm modernisation (Border rivers Gwydir pilot)	7	0.5	14.00
NSW	Irrigated farm modernisation	85	12.0	7.08
NSW	Nimmie-Caira project	180	133.0	1.35
<b>NSW</b>	<b>Sub-total</b>	<b>1272</b>	<b>320.5</b>	<b>3.97<sup>3</sup></b>
Queensland	On farm water use efficiency	51	7.0	7.29
Victoria	Four projects	1203	149.0	8.07
South Australia	Two projects	94	19.8	4.75
Southern Basin <sup>2</sup>		296	83.0	3.57
<b>Total ‘Bridging the Gap’ water recovery</b>	<b>TOTAL</b>	<b>2916</b>	<b>560.0<sup>4</sup></b>	<b>5.21</b>
Less Nimmie-Caira project		-180	-133.0	1.35
<b>‘Bridging the Gap’ less Nimmie-Caira project</b>		<b>2736</b>	<b>427.0</b>	<b>6.41</b>

Source: ANAO analysis of Environment information.

Note 1: Private Irrigation Infrastructure Operators Program.

Note 2: Southern Basin Projects are joint initiatives in addition to individual state projects.

Note 3: The average for all projects in NSW, excluding the Nimmie-Caira project, is \$5.8 million per GL.

Note 4: While the total for this column adds to 579.3 GL, the department has advised that 17 GL of the environmental water savings recovered through infrastructure initiatives is not ‘gap bridging’. Taking this into account and rounding differences of 2.3 GL, the preferred total figure used by the department is 560 GL.

## Conclusion

**2.48** The proposal for financial assistance for the purchase of land and water entitlements under the Nimmie-Caira project formed part of an agreed COAG process designed to 'bridge the gap' in terms of water diversions in the Murray–Darling Basin. The Nimmie-Caira site was by far the largest parcel of water entitlements proposed by any state and considered by the Australian Government within the context of the framework established for SPPs. The project involved the purchase of 381 GL of Lowbidgee Supplementary Water Entitlement (the equivalent of 173 GL of LTAAAY) and 84 000 hectares of land to meet the environmental water recovery targets within the Murrumbidgee River under the Basin Plan. However, only 133 GL of LTAAAY was assessed by Environment as counting towards 'bridging the gap' because of 40 GL of pre-existing environmental watering commitments.

**2.49** The business case prepared by the NSW Government outlined the scope of the project, the significant project elements and the overall benefits from the proposal. The benefits included the enhanced environmental outcomes from environmental watering to support important habitat for rare and endangered species, such as migratory birds, amphibians and fish. The NSW Government proposed funding of \$185 million for the project, of which \$120 million was for the purchase of land and water entitlements from the 11 landholders who agreed with NSW to sell their properties for this fixed amount on an 'all or nothing' basis.

**2.50** The conversion of existing area-based licences to volumetric entitlements in the Nimmie-Caira area formed part of a broader process of reform within the Murray–Darling Basin supported by COAG since 1994 and recommitted to under the National Water Initiative in 2004. The conversion was also important to enable the Australian Government to separately own the water entitlements. The separation of land and water entitlements would also facilitate water trading by the Commonwealth Environmental Water Holder, which was not previously available. There was no indication that the conversion of the Nimmie-Caira entitlements was inconsistent with the agreed national water reform agenda.

**2.51** Environment assessed the merits of the project through a due diligence process. The department tested the assumptions and values in the business case to establish a fair market price for the land and water and determined that the asking price was \$16.9 million over and above fair market value for irrigated agricultural land and water in current use. This premium was,

however, justified by Environment on the basis of the scale of the purchase against targets in the Basin Plan, the re-crediting of water once it returned to the river and the potential to provide better environmental watering capabilities for assets in the Murrumbidgee and Murray Rivers. An independent assessment of the value of those aspects of the project on which the department based its decision to recommend a price premium over and above the assessed fair value of land and water assets would have provided greater assurance to the department and the Minister.

While acknowledging the premium paid above fair market value, the project proposal offered a significantly lower cost than buying from upstream irrigators, which was estimated by Environment to cost an extra \$53.6 million. Furthermore, the Nimmie-Caira project was relatively less expensive per GL than other water recovery projects in the Murray–Darling Basin. At \$1.35 million per GL (LTAAY), the Nimmie-Caira project compared favourably with other ‘bridging the gap’ projects that had an average cost of \$6.4 million per GL (LTAAY). That is, the Nimmie-Caira water recovery could be achieved at less than a quarter of the average cost of other funded ‘bridging the gap’ projects.



## 3. Project Advice and Approval

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*This chapter examines the briefings and advice provided to the Minister by Environment in relation to approving Australian Government funding for the Nimmie-Caira project.*

### Introduction

**3.1** Australian Government entities have an important role to play in advising their Minister(s) in relation to significant expenditure or investment in complex, high profile inter-governmental projects relevant to government objectives. Departmental advice should be carefully considered, evidence-based and appropriately documented, as well as compliant with relevant legal obligations and IGA requirements.<sup>94</sup> To address relevant requirements, Environment was required to provide the Minister with sufficient and appropriate information to assess the extent to which the proposal aligned with government policy outcomes, to meet ‘value for money’ requirements and to manage any major risks.<sup>95</sup>

### Water recovery policy context

**3.2** At the time that Environment was briefing the Minister on the approval of the Nimmie-Caira project, the then Government was seeking to achieve agreement amongst the Basin states for the Basin Plan. While a specific pre-condition for the NSW Government to commit to the plan was the funding of the Nimmie-Caira project, this pre-condition was not explicitly outlined until after the Federal election in 2013 and after the Nimmie-Caira Heads of

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94 Under the *Financial Management and Accountability Act 1997* (FMA Act), which applied at the time the Nimmie-Caira project was approved, FMA Act agencies were required to be satisfied that the proposal to financially commit the Commonwealth represented a ‘proper use’ of resources. Proper use was defined as: ‘efficient, effective, economical and ethical use that is not inconsistent with the policies of the Commonwealth’ (section 44 (3)). The relevant regulation (FMA Regulation 9) provided that an approver (in this case the Minister for the Environment) must not approve a spending proposal unless the approver is satisfied, after making reasonable inquiries, that giving effect to the spending proposal would be a proper use of Commonwealth resources.

95 *Financial Management and Accountability Act 1997* Regulation 9, which applied at the time, required that an approver of a spending proposal was to make reasonable enquiries before making a decision. To satisfy this requirement an approver needed to exercise judgement taking into consideration the nature, significance and value of the spending proposal and any associated risks. Department of Finance, 2011, Finance Circular 2011/01, available from <[www.finance.gov.au/publications/finance-circulars/2011/docs/Finance-Circular-2011-01-FMA-Regulations-7-12.pdf](http://www.finance.gov.au/publications/finance-circulars/2011/docs/Finance-Circular-2011-01-FMA-Regulations-7-12.pdf)> [accessed 24 November 2014].

Agreement was signed. In September 2013, a letter drafted by the NSW Government outlining its water policy position was forwarded to the then Parliamentary Secretary for the Environment. In this draft letter, the NSW Government stated that:

NSW has not been prepared to implement the Basin Plan until a number of issues have been resolved... From our perspective, it would have been premature for NSW to sign the IGA prior to confirmation of Commonwealth funds for infrastructure projects including the Nimmie-Caira [project]...and we trust that you appreciate this position.

**3.3** While the letter was unsigned, it formed the basis of a departmental briefing to the Parliamentary Secretary and a subsequent meeting between the Parliamentary Secretary and the NSW Minister, which resulted in a formal acknowledgement from the Australian Government. These circumstances illustrate the wider policy context for the Nimmie-Caira project and its consideration by the Australian Government at the time.

## **Project briefings**

**3.4** The scale and complexity of the Nimmie-Caira proposal necessitated a series of briefings and the provision of advice to assist the Minister to determine whether funding would be provided for the project. The Minister was progressively briefed at various stages of the process from the receipt of the business case through to the final recommendation to approve the project, along with the establishment of the Heads of Agreement and the project schedule.

**3.5** On receipt of the business case, the department briefed the then Minister on the proposal (24 July 2012). The brief provided the Minister with an overview of the proposal, timing and progress of the due diligence process. In November 2012, the department provided a more detailed brief to the Minister that highlighted the ongoing negotiations with the NOW. At that time, the mix of funding between infrastructure and water purchase had not been settled. Nevertheless, the briefing highlighted some of the emerging issues and risks that would need to be managed through conditions, should the project be approved. In particular, the brief highlighted the importance of water shepherding arrangements, the re-crediting of return flows to the Lowbidgee system for utilisation downstream and the importance to the project's outcomes of a long term management plan that covered land use and management in perpetuity to protect key environmental assets.

**3.6** A further briefing in June 2013 provided the Minister with the basis for making a decision on the project. The brief included 31 proposed conditions of funding based on the due diligence report, with a recommendation of funding up to \$180.1 million (with \$120 million for the purchase by the NSW Government of the Nimmie-Caira water and land assets from the existing 11 landowners as a single transaction). The conditions of funding included the:

- timely transfer of the Nimmie-Caira water entitlements to the Australian Government;
- establishment of project governance arrangements;
- planning for a potential listing of the Lowbidgee flood plain under the Ramsar Convention for wetlands of international importance;
- transition arrangements for the current owners of the land and water entitlements;
- project planning and implementation arrangements, such as ecological and cultural heritage surveys of the site, an environmental watering plan, a land management plan, flood easements and a long term Water Infrastructure Management and Operation Plan;
- requirement for NSW to make a 10 per cent contribution to the project (it was proposed that this would include additional water savings being transferred from the NSW share of the Basin Pipes SPP<sup>96</sup>); and
- requirement that the CEWH would determine how environmental water holdings would be distributed on the Nimmie-Caira site.

**3.7** These conditions were designed to address the risks identified in the due diligence assessment. The extent and nature of the conditions highlighted the residual project risks, which will remain until the site planning and land and water management arrangements are implemented.

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96 The NSW Basin Pipes project was an SPP, with funding of \$137 million provided by the Australian Government. This project aims to upgrade selected stock and domestic schemes in the NSW Murray–Darling Basin. A project variation increased the contribution that the project was required to make to the Australian Government by 13 per cent.

## Cost benefit framework

3.8 As part of its briefing to the Minister, Environment enclosed both a cost benefit analysis for the Nimmie-Caira project and a risk assessment. The cost benefit analysis presented to the Minister included:

- a broad outline of the methodology used;
- the amount of \$103.1 million identified as fair market value for irrigated agricultural land and associated water entitlement in the Nimmie-Caira;
- the agreement amongst landowners establishing \$120 million as the value of land and water assets (negotiated by NSW and presented as an ‘all or nothing’ offer);
- an outline of the implicit benefits in excess of the proposed purchase cost, as well as the potential to avoid higher costs from alternative purchases<sup>97</sup>, including:
  - the value of a single large parcel of water in one transaction as opposed to smaller, multiple transactions with associated costs;
  - the existing policy under the Restoring the Balance Program to pay a premium of up to 10 per cent on parcels greater than 40 GL that offer substantial environmental benefits; and
  - in the context of climate change projections for much dryer conditions in the Basin, the provision of water to important wetland breeding sites and refuges that would not otherwise be possible;
- specification of the premium of \$16.9 million above market estimates for the purchase of land and water assets; and
- the identification of NSW commitments to develop arrangements for shepherding of the Nimmie-Caira water and to re-credit return flows to the Australian Government.<sup>98</sup>

3.9 The analysis presented to the Minister appropriately addressed the costs and benefits of the proposal for the purchase price of land and water

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97 A purchase of general security water entitlements in the Murrumbidgee catchment was estimated to cost an extra \$53.6 million at the market values at that time.

98 This was conservatively estimated by the department at \$11 million.

assets. However, as noted in the previous chapter, the analysis did not provide coverage of the costs and benefits of the remaining \$60.1 million relating to the offsets, project planning and management and infrastructure reconfiguration. Consequently, these elements were not assessed either independently or by Environment in terms of their value for money.

**3.10** The land and water infrastructure reconfiguration costs (including water channels/regulators, earthworks, fencing and decommissioning existing structures valued at \$41.8 million) were based on a preliminary assessment by the NSW Government and subject to consideration in the land and water management plans and market testing through proposed tendering arrangements. The contingency arrangements (\$9.9 million) provided some capacity to absorb cost escalations, along with the 10 per cent contribution provided to the project by the NSW Government. While this contribution supplemented the total funds available for the project, it could only be used to offset the total costs of the project if the entitlements were traded on the open market. Nevertheless, the cost benefit framework generally incorporated an appropriate level of information to inform the Minister's decision as to whether or not to fund the project.

## **Risk assessment**

**3.11** The risk assessment provided to the Minister as part of the briefing identified nine high level risks and associated mitigation measures that were aligned with the findings from the due diligence report. The assessment had a strong emphasis on managing project delays, with two of the nine risks specifically focussed on possible delays with critical implementation steps, such as the land management plan and the Environmental Watering Plan—essential elements to determine compatible land use for the site and the extent of infrastructure reconfiguration required. The mitigation measures were:

- initiating dispute resolution mechanisms between the Australian and NSW governments; and
- payments being linked to the achievement of milestones.

**3.12** These measures to reduce the risks were specifically highlighted for the Minister's consideration. Nevertheless, seven of the nine residual risks (following treatment) remained high (one) or medium (six). Given the residual risks, the project required careful ongoing management by both Environment and the NOW if the outcomes were to be achieved.

## Compliance with financial framework requirements

**3.13** In seeking Ministerial approval for the Nimmie-Caira project, the department identified that funding approval would be required under Regulation 9 of the then *Financial Management and Accountability Act 1997*. The department, in briefing the Minister on funding approval, recommended that approval be subject to 31 funding conditions that reflected the outcomes of the due diligence process. On 24 June 2013, the Minister approved up to \$180.1 million in funding, acknowledging the uncertainties associated with the project and the 31 funding conditions to be met. Funding across subsequent years and subsequent budget appropriations to 2018 also necessitated Regulation 10 approval. A briefing to the departmental Deputy Secretary in July 2013 noted that the then Finance Minister provided an overarching Regulation 10 authorisation to the responsible Minister on 16 June 2009 for all agreements that related to National Partnership Agreements or National Implementation Plans, executed prior to 30 June 2014.

## Conclusion

**3.14** To address the requirements of the *Financial Management and Accountability Act 1997*, Environment had the obligation to provide the Minister with sufficient and appropriate information to assess the extent to which the proposal aligned with government policy outcomes, to meet 'value for money' requirements and to manage any major risks.

**3.15** In the broader water recovery policy context, the Nimmie-Caira project proposal coincided with the then Government's focus on achieving an agreement among the Basin states to the Murray–Darling Basin Plan. A precondition for the NSW Government to commit to the Basin Plan was an agreement from the Australian Government to fund the Nimmie-Caira project. While the Minister was made aware of the precondition, it was not explicitly referenced in the advice from the department regarding approval.

**3.16** Overall, the department managed the provision of advice to the Minister appropriately. During the assessment process, the Minister was progressively briefed on the merits of the project. This process entailed an analysis of the business case, the due diligence and final approval of the project, the establishment of the Heads of Agreement and the project schedule. Emerging risks were identified in these briefs along with the need to establish appropriate conditions to manage the risks should the project be approved.

**3.17** A briefing to the Minister in June 2013 included the proposed 31 funding conditions based on the due diligence report. Environment recommended funding of up to \$180.1 million—\$5 million less than the amount sought by NSW. The briefing explicitly outlined the price premium to be paid for the land and water assets and the rationale for the additional expenditure. This was subsequently endorsed by the Minister for Environment. The price premium was offset, to some extent, by a 10 per cent contribution requirement from the NSW Government.

**3.18** A cost benefit framework and thorough risk assessment were included in the brief to the Minister. The briefing identified nine high level risks and associated mitigation measures that aligned with the findings of the due diligence report. Of these risks, there was a focus on contingency in anticipation of potential delays in key implementation stages. Mitigation measures focused on dispute resolution mechanisms and the linking of project payments to the achievement of milestones.

While the briefing appropriately addressed the costs and benefits of the purchase of land and water assets, it did not extend to the remaining \$60.1 million relating to offsets and infrastructure configuration.

## 4. Project Establishment and Implementation

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*This chapter examines the implementation of the Nimmie-Caira project from the establishment of the Heads of Agreement and the completion of the project schedule. The oversight and administrative arrangements supporting the project were also examined, along with performance monitoring and reporting arrangements.*

### Introduction

**4.1** Once the purchase of the Nimmie-Caira land and water assets had been finalised, substantial work remained if the benefits of the project were to be realised. The key elements of this work include site surveys, long-term site planning and water delivery infrastructure reconfiguration. The successful delivery of these elements requires significant stakeholder engagement, sound project management and effective administrative oversight.

**4.2** The implementation and delivery of Australian Government policy initiatives is one of the key responsibilities of government entities. In recent years, there has been an increasing focus on sound policy implementation and the seamless delivery of government policies—on time, within budget and to an acceptable level of quality.<sup>99</sup> To determine the appropriateness of arrangements put in place by Environment to establish and implement the Nimmie-Caira project, the ANAO examined the:

- project establishment arrangements through the Heads of Agreement (HoA) and project schedule;
- oversight and administrative arrangements to support the project, including those arrangements within Environment, and on an inter-governmental basis; and
- performance monitoring and reporting arrangements.

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99 ANAO, *Better Practice Guide, Successful Implementation of Policy Initiatives*, Canberra, October 2014, p. 3.



## Project establishment

**4.3** To guide the implementation of the Nimmie-Caira project, Environment established a HoA between the Australian and NSW governments that outlined objectives, roles, responsibilities and reporting requirements. As outlined in Chapter 3, the Minister approved the project on 24 June 2013 with 31 conditions. These conditions were designed to address the risks identified in the due diligence report, such as the timely transfer of the water entitlements to the Australian Government, the establishment of project governance arrangements, and project planning and implementation. Conditions also included the requirement for NSW to make a 10 per cent contribution to the project through water savings transferred to the Australian Government from the Basin Pipes SPP.

### Heads of Agreement

**4.4** Through the HoA the parties agreed to collaborate and work to achieve the following objectives<sup>100</sup>:

- realising the full potential of the project to achieve environmental benefits of Basin-scale significance both within and beyond the Lowbidgee irrigation district;
- implementing management arrangements that would enhance environmental and cultural heritage outcomes within and potentially beyond the Nimmie-Caira area;
- providing for improved environmental watering outcomes through:
  - relaxing physical constraints in the Nimmie-Caira area; and
  - facilitating shepherding and accounting of returns flows for the Nimmie-Caira entitlements.
- achieving water recovery that provides a substantial contribution towards 'bridging the gap' targets under the Basin Plan; and
- determining any further SDL adjustment<sup>101</sup> for the Murrumbidgee catchment under the processes specified in the Basin Plan and the IGA.

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100 Adapted from the Heads of Agreement supporting the Nimmie-Caira System Enhanced Environmental Water Delivery Project, clause 9.

101 On advice from the MDBA, the Minister can adjust the SDL in the Basin Plan within defined limits to achieve enhanced environmental and socioeconomic outcomes. *Fact Sheet: Sustainable Diversion Limit (SDL) Adjustment Mechanism*, Department of the Environment, October 2012, p. 1, available from <<http://www.environment.gov.au/resource/fact-sheet-sustainable-diversion-limit-sdl-adjustment-mechanism>> [accessed 30 October 2014].

**4.5** The objectives outlined in the HoA were clear, specific and measurable to enable the parties to progress the project towards achieving the expected outcomes. However, while the objectives were appropriately high level, key implementation matters remained to be settled, in particular in relation to:

- water shepherding—how this would occur to balance the environmental priorities of the Nimmie-Caira site with the environmental watering priorities downstream, how re-crediting would occur and the timeframe that would apply;
- water infrastructure reconfiguration—the changes required, the reconfiguration costs, and the implications for local environmental watering priorities; and
- land management plan—land management options that would be commercially viable and compatible with the environmental objectives of the project.

**4.6** These priority matters were to be dealt with through the operational project management arrangements, that is, the Project Control Group (PCG), established for the project.

#### *Managing high level risks*

**4.7** The HoA had an important role in establishing a framework to manage the risks identified in the due diligence report and the project approval process. It provided the basis for the development of the project schedule, which was to include timeframes and milestones.

**4.8** Unlike other infrastructure modernisation projects funded through SRWUIP, Environment considered that securing the anticipated benefits from the project over the long-term required a close and ongoing co-operation between the Australian and NSW governments. The Nimmie-Caira project was inherently complex and the suite of terms and conditions attached to the project approval (including the risk assessment) indicated substantial risks if key elements of the project package were not successfully implemented. For example, the long-term management plan for the site and the reconfiguration of the infrastructure to allow water shepherding to high priority environmental assets.

**4.9** Mitigation measures to address identified risks were outlined in the HoA, such as dispute resolution mechanisms between the Australian and NSW governments and payments being linked to the achievement of milestones.

However, as previously outlined, the Australian Government was required to provide the NSW Government with an upfront payment of \$120 million, for the purchase of the land and water entitlements, which amounted to two thirds of the total project budget. The remaining funding, up to \$60 million, is expected to be provided through 12 milestones with associated payments ranging from \$600 000 to \$12 million (see Appendix 2 for a table outlining agreed milestones and payments made to date). The residual level of funding covered by the payment regime for the remaining aspects of project implementation means that Environment has relatively limited leverage to encourage the timely achievement of project outcomes.

### *Roles and responsibilities*

**4.10** The roles and responsibilities of the Australian and NSW governments were clearly defined in the HoA and subsequently reflected in the project schedule. The intention of the HoA was to deliver the project benefits through a formal commitment by both governments to particular obligations. The NSW Government commitments through the HoA, included:

- the acquisition of the land and water assets;
- developing a conservation-focussed LMP and Environmental Watering Plan (EWP) for the entire site;
- actively exploring in partnership with the Australian Government the potential for the Nimmie-Caira land to be managed in the long-term by an environmental non-government organisation; and
- developing arrangements for shepherding of Nimmie-Caira environmental water (and other environmental water) downstream, and re-crediting of return flows from the Nimmie-Caira system.

**4.11** The Australian Government, through the HoA, committed to:

- providing funding for the project of up to \$180.1 million;
- timely payment of funds on the basis of NSW's achievement of milestones outlined in the project schedule;
- working with NSW to identify opportunities to contribute to the NSW proportion of downstream shared requirements under the SDL adjustment mechanism in the Basin Plan; and
- working with NSW to finalise land and water management arrangements within the timeframes detailed in the HoA.

**4.12** While all matters were not resolved at the execution of the HoA (such as final agreement on the LTAAY of water from the project), there was a process in place to review unresolved matters. The issues were not, however, considered by the parties to be material to progressing the project. The dispute resolution mechanism incorporated into the HoA also provided the basis for handling any emerging disputes between Environment and the NOW in relation to critical implementation matters, such as the development of a long-term land management plan.

**4.13** Overall, the HoA provided a reasonable basis for project implementation and managing the risks of a complex, large scale inter-governmental project with further detail provided in the project schedule. While the NSW Government has the primary delivery role for the project, there is, nevertheless, an ongoing responsibility for Environment to ensure that the Australian government financial and accountability requirements are met.

### **Project schedule**

**4.14** Under the HoA, a commitment was made to develop and agree to a project schedule. The development of a schedule was also a requirement under the WMPA for SPPs.<sup>102</sup> The project schedule was signed on 26 July 2013, approximately four weeks after the HoA was signed.

#### *Project schedule design*

**4.15** The schedule specified the project components and milestones and proposed payments, along with the progress reports required until its completion in mid-2018. The schedule contained four major delivery components:

- the land and water purchase involving the transfer of 19 properties with a total area of 84 417 hectares to the NSW Government and the transfer of 381 GL of Lowbidgee Supplementary Water Entitlement in one single licence to the Australian Government. Land and water transfer and registration was to be completed by 1 October 2014;

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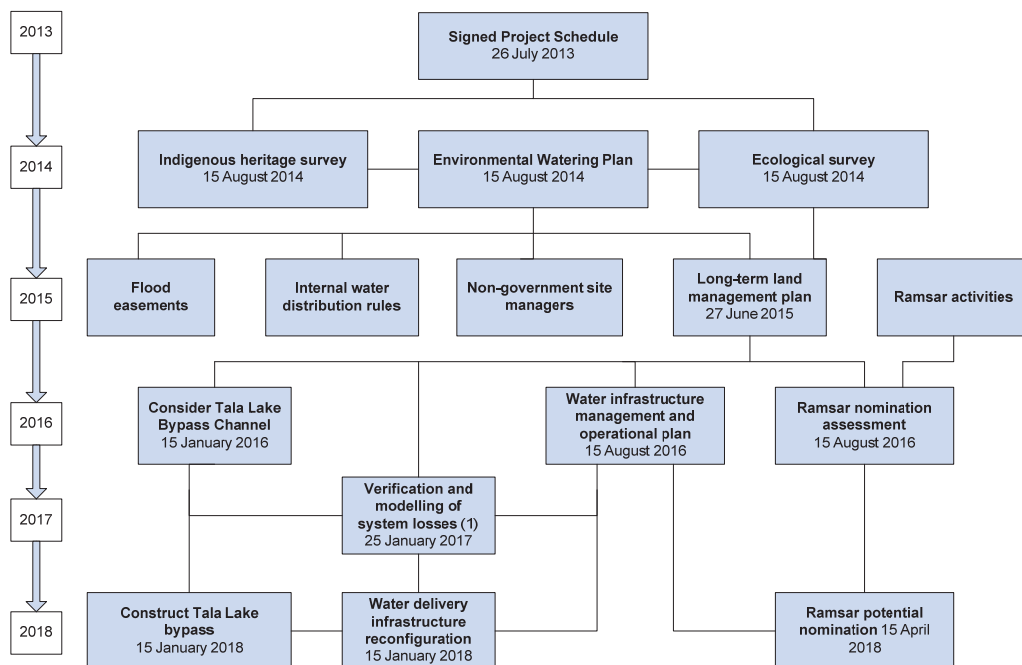
102 Clause 16.2.1 of the *Water Management Partnership Agreement* between the Commonwealth and the NSW Government, signed 11 January 2010, available from <<http://www.environment.gov.au/topics/water/australian-government-water-leadership/council-australian-governments-water-reform-0>> [accessed 30 October 2014].

- an EWP required by 14 August 2014 that was to determine the environmental water requirements of important water dependant ecosystems at the site;
- an LMP that is to determine and guide future land use of the area. The LMP is due by 27 June 2015, with the management arrangements expected to be implemented by 15 January 2018; and
- a reconfiguration of the current water infrastructure to enable the efficient delivery of environmental water (including the Nimmie-Caira entitlement) to assets on the site and to other assets in the Lowbidgee area. A Water Infrastructure Management and Operation Plan (WIMOP) is expected to be finalised by August 2016 and the construction is due for completion by 15 January 2018.

**4.16** These four major delivery components have been separated into project schedule milestones, with associated payments attached to their achievement. The milestones included four land and water purchase milestones and 12 additional milestones covering operational aspects of the project. These range from establishing the project governance arrangements and developing and implementing water shepherding and return flow arrangements for the entitlements, to undertaking cultural heritage and ecological surveys of the site and delivering appropriate pest plant and animal control programs. Of these milestones, 11 required the NOW to provide reports to Environment demonstrating completion before any milestone payments are to be made.

**4.17** As a number of the key milestones had prerequisite actions that had to be completed, the sequencing of milestones in the project schedule was particularly important. For example, the EWP relies on the information from the Nimmie-Caira ecological survey to inform environmental watering priorities and land management arrangements. The LMP and WIMOP also rely on the EWP to determine dependant ecosystem values and their water requirements, including areas for restoration and environmental watering. The inter-dependencies of key milestones are illustrated in Figure 4.1.

**Figure 4.1: Milestone inter-dependencies and planned completion dates**



Source: ANAO analysis of Environment information.

Note: This includes potential SDL adjustments to align with the current Project Schedule.

**4.18** The project schedule aligned with the HoA and reflected the conditions of funding for the project. In addition, the project schedule met the minimum requirements as set out in Schedule 2 of the WMPA.<sup>103</sup> It contained appropriate milestones and sequencing and set out clearly the requirements for the delivery of the project. The schedule was drafted in a relatively short timeframe following negotiations between government agencies during the due diligence process. The project schedule identified that NSW was responsible for managing project delivery (including risks) consistent with project and budget milestones. However, the project schedule was silent on the resources the NOW required to meet the milestone timeframes<sup>104</sup> and the inter-dependency of achieving early

103 Schedule 2 of the WMPA between the Commonwealth and NSW governments sets minimum requirements for inclusion in a SPP schedule including: project milestones; cost; details covering the transfer of water entitlements; sharing of actual water savings; indemnity; project reporting and payment schedule for the funding of priority projects. The WMPA was signed on 11 January 2010 and is available from <http://www.environment.gov.au/topics/water/australian-government-water-leadership/council-australian-governments-water-reform-0> [accessed 30 October 2014].

104 Environment informed the ANAO that the resources required to meet the milestones were agreed with the NOW as part of the due diligence process.

milestones on the achievement of future milestones. Further, the schedule provided little scope for any slippage in meeting milestones even though there were many variables with the potential to impact on their delivery. In addition, while the project schedule contained appropriate milestone and sequencing information, it did not constitute a comprehensive project plan that could be used to guide the day-to-day implementation of project activities and to monitor project progress. The establishment of such a plan by the NOW, endorsed by the Project Control Group (discussed later in this chapter), would have better positioned both Environment and the NOW to identify and respond to changes in the delivery environment for the project. Environment has indicated that, through the PCG, it has previously requested the development of a comprehensive plan for the project.

**4.19** The NOW advised the ANAO that the project schedule has proved difficult to meet and that significant slippage has occurred on Milestone 4, particularly in relation to the completion of the ecological and cultural heritage surveys. These delays have also impacted on the completion of the EWP. Addressing these project delivery challenges is a key role for the governance structures established under the HoA. In March 2015, Environment advised the ANAO that a project variation was being drafted by the NOW for approval following the completion of a comprehensive project planning and resourcing exercise.

## Project oversight and administrative arrangements

**4.20** Sound governance arrangements assist in managing the risks to effective project implementation and the achievement of the project objectives.<sup>105</sup> The ANAO examined the governance arrangements established to oversee and support the Nimmie-Caira project within Environment and in partnership with the NOW and other parties with an interest in the project.

### Arrangements within Environment

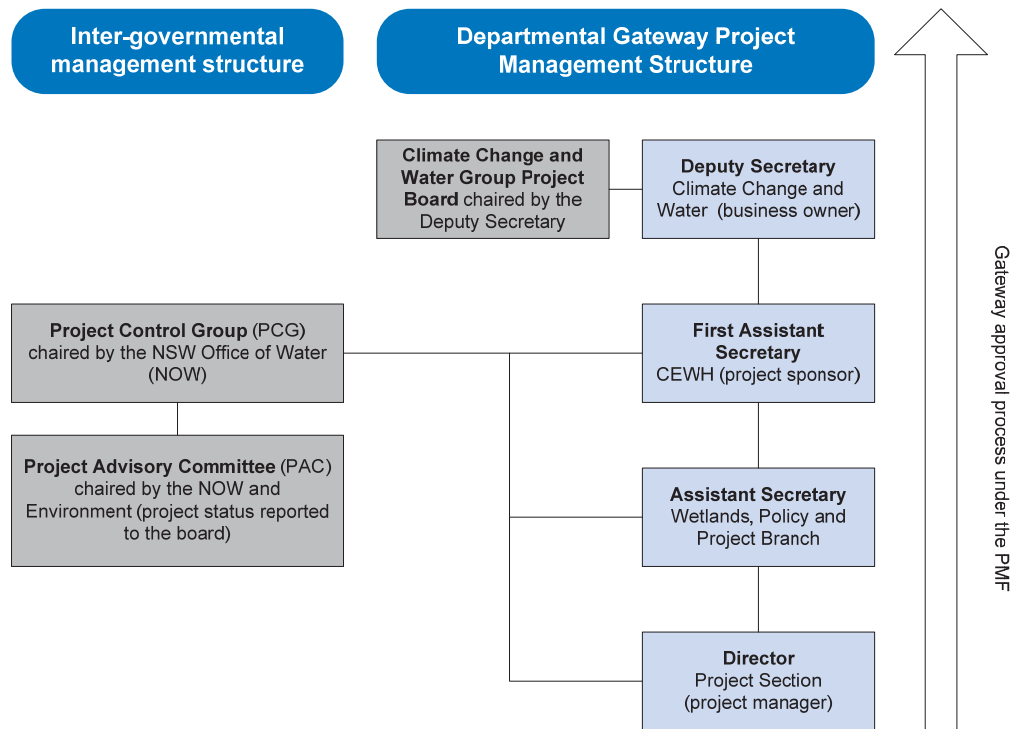
**4.21** Within Environment, executive oversight of the project has been provided through the Climate Change and Water Group Project Board (the Board) which has a high level management role for all programs funded under

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<sup>105</sup> Governance refers to the arrangements and practices that enable an entity to set its direction and manage its operations in order to discharge its accountability obligations and assist in the achievement of expected outcomes. ANAO, *Better Practice Guide—Successful Implementation of Policy Initiatives*, October 2014, Canberra, p. 21.

SRWUIP. The Board comprises the departmental Deputy Secretary Climate Change and Water (the Chair) and the relevant division managers with responsibility within the Water Group. The functions of the Board have included endorsing project plans, such as for SPPs, resolving major project issues, as required, and reviewing monthly status reports. An illustration of the governance framework for the Nimmie-Caira project is provided in Figure 4.2.

**Figure 4.2: Project governance arrangements**



Source: ANAO analysis of Environment information.

Note: PCG members are: NOW, NSW Office of Environment and Heritage, State Water Corporation, Department of the Environment, CEWO. PAC members are: those on the PCG and Balranald, Hay and Wakool Shire Councils, up to three local landholders and Indigenous representation.

**4.22** The accountability arrangements for the Board are reinforced through Environment’s broader Project Management Framework (PMF), which became operational in mid-2012.<sup>106</sup> The PMF was designed to strengthen processes,

106 Department of the Environment, *Project Management Framework–Overview Guide*, December 2012, Canberra, p. 3.



governance and accountability.<sup>107</sup> A key element of the PMF has been the requirement to develop a project plan to enable project implementation to be designed and managed effectively and efficiently. A Nimmie-Caira project plan was endorsed by the Climate Change and Water Board as part of the PMF project approval and implementation gateway process.<sup>108</sup>

**4.23** Environment commenced drafting the required project plan in July 2013, immediately following Ministerial approval of the project on 24 June 2013. However, in anticipation of the departmental restructure following the Federal election in September 2013, a decision on the final approval of the Nimmie-Caira project plan was deferred. The restructuring also delayed the input required from other areas of the department with an interest in the project, such as the wetlands policy area, Indigenous policy and the SRWUIP program area. Input from these areas was important in ensuring that the EWP, the LMP and the WIMOP met the requirements as established in the HoA and the project schedule.

**4.24** The departmental restructure was finalised on 1 July 2014. Further amendments to the project plan were made soon after and the project plan was endorsed by the Board on 29 August 2014. The delay in finalising the project plan, some 12 months after the project's approval, contributed to the Board receiving minimal information regarding the progress of the project.<sup>109</sup> In the absence of a project plan, the department advised that it established some project controls such as regular reporting to the Board, meetings with senior officers and weekly meetings with the NOW. While the Board received a monthly high-level report on the progress of all NSW SPPs, the information on the Nimmie-Caira project was limited and the Board was not well positioned to provide direction during the early implementation phase of the project.

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107 The PMF was intended to address previous ANAO audit and other recommendations for improvement to the delivery of projects within Environment, reflecting industry standards for project management and provide more consistent guidance on project management and project review.

108 Gateway approvals are a project assurance process within the PMF. In addition to providing the Project Sponsor with oversight of the project, the gateway approvals allow the Project Sponsor and relevant governance structure(s) to formally approve or endorse the progress of the project to the next stage of work. The gateway approvals are aligned to, but completely separate from, the Department of Finance external gateway review process.

109 The department's project plan was not shared with the NOW and has not been used by the Project Control Group (discussed later in this chapter) to monitor project progress. Environment has indicated that it requested NOW to develop a project plan through the PCG.

**4.25** In approving the project plan in August 2014, the Board elevated the project to a Tier 1 risk category (the highest risk category) from a Tier 2<sup>110</sup> signalling its uncertainty as to whether the project would meet its objectives based on progress to date. The project area within the department highlighted to the Board, through the August 2014 status report, that the project had been ‘significantly delayed with little or no progress made against agreed milestones’ and that, if it was not rectified, the consequence would be that ‘the project will not achieve agreed long term outcomes ...’.

**4.26** The risk treatment plan contained in the endorsed project plan nominated strategies to manage the highest rated risk—the failure to deliver the anticipated project outcomes. These identified strategies included close monitoring of the project delivery and negotiations with NSW officials to discuss performance and acceptable project schedule variations. Consistent with this approach, Environment has advised that, since the project plan was endorsed in August 2014, it has established monthly meetings between senior officials of Environment and the NOW. However, even with these controls in place, significant residual risks remain.

**4.27** The design of Environment’s governance framework for the Nimmie-Caira project is consistent with the intent of the department’s PMF. In practice, however, Environment has been slow to finalise internal governance arrangements—noting in particular the 12 month delay in the Board’s endorsement of the project plan. Given that two of the nine risks identified in Environment’s risk assessment and advice to the Minister were related to project delays, high level oversight and project management will need to be strengthened.

### **Inter-governmental working groups**

**4.28** The HoA sets out project governance arrangements between key groups associated with the project through the establishment of the Nimmie-Caira PCG and the PAC. Consistent with the HoA, Environment and the NOW established the PCG and PAC terms of reference and membership within 90 days of signing the project schedule. The first meeting of the PCG and PAC was held on 30 October 2013, in the town of Hay, NSW. Subsequent

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110 A project is given a Tier 1 rating due to having one or more of the following characteristics: project complexity; political sensitivity; impact on the public; high to severe risk rating; compressed project timeframes or a large project budget.

PCG meetings have been held every 12 weeks and the PAC has met twice in 2014, as required by the HoA.

### *Project Control Group*

**4.29** The PCG is the principal inter-governmental management group to oversee Nimmie-Caira project implementation. The functions of the PCG are to:

- provide guidance on, and approve or endorse, key decisions, submissions or actions;
- review and report on the delivery of project milestones;
- ensure the prudent and efficient use of funds;
- establish and review communication strategies for engaging key stakeholders; and
- ensure good corporate governance practices are followed.

**4.30** The PCG is chaired by the NOW with membership including senior representatives of the following key groups associated with the project:

- NSW Office of Environment and Heritage;
- NSW State Water Corporation;
- Australian Government Department of the Environment; and
- Commonwealth Environmental Water Office.

**4.31** The PCG meeting minutes for the period October 2013 to August 2014 indicated that the group has focused on key implementation actions, including progress against milestones, updates to the risk register, financial reports, and detailed project elements such as the ecological survey, cultural heritage survey and the protection and reuse of Commonwealth water. However, it was not until August 2014 that the PCG questioned the reasons for delays on the project to date and the need for high level support for coordinated actions to get the project 'back on track'. As discussed earlier, the absence of an agreed project plan has made it more difficult for the PCG to actively monitor progress against established milestones and respond in a timely manner to changes in the delivery environment.

### *Project Advisory Committee*

**4.32** The role of the PAC is to advise the PCG on the delivery of the project in a way that best achieves the project objectives. A key feature of the PAC is

the involvement of local community stakeholders, such as local government, local landholders and Indigenous land councils, as well Australian Government and state officials. The PAC is required to meet at least twice a year before the LMP is completed and at least yearly thereafter. It is chaired on an alternating basis by Environment and the NOW and reports jointly to the NOW and Environment through the PCG.

**4.33** The meeting minutes for the period October 2013 to August 2014 indicated that key agenda items are similar to the PCG, but with a stronger emphasis on land management, Indigenous and local government issues (including the local government offsets funded as part of the project to address the loss of rate revenue). The ANAO's discussions with members of the PAC indicated that the initial consultation process was considered appropriate. However, councils expressed concern that they were not fully informed of the final details of the project until it was approved by the Minister for the Environment. Nevertheless, the offset projects, involving road and bridge upgrades in Wakool Shire, the construction of an interpretation centre in Balranald and an Economic Development Coordinator in Hay (and adjoining local council areas) were considered to be progressing satisfactorily, although all are at an early stage and no project is yet completed.

**4.34** Concerns were, however, raised with the ANAO by stakeholders in relation to the land management arrangements for the site. In particular, there were concerns about weed and pest control, infrastructure maintenance and the long term arrangements for a return to commercial activity. Indigenous community members interviewed by the ANAO indicated strong support for the project and the potential for the identification of cultural sites through the cultural survey (in progress as at December 2014), as well as for job employment opportunities in the future for Indigenous community members. Discussions suggested considerable interest from all parties regarding the LMP and the range of activities that could be developed to create jobs and economic activity.

**4.35** This level of interest reinforces the importance of having regular, open and effective engagement between governments and local community stakeholders. To date, there has been limited information provided to the local community in relation to the project and the anticipated outcomes from a substantial investment from the Australian Government. Further, the key project milestones and actions anticipated in 2015, such as the ecological and cultural heritage surveys and the LMP, require effective stakeholder

engagement. While a communication and engagement strategy is being developed by the NOW, it is currently in draft form.

## Recommendation No.1

**4.36** To improve communication and engagement with stakeholders, the ANAO recommends that the Department of the Environment:

- (a) strengthens its efforts to work with the NSW Office of Water to finalise and implement a communication and engagement strategy for the Nimmie-Caira Enhanced Environmental Water Delivery Project as a priority; and
- (b) establishes the requirement that a communication and engagement strategy be developed, where appropriate, as part of any future State Priority Project Heads of Agreements.

**Environment's response:** *Agreed*

## Performance monitoring and reporting and project progress

**4.37** Active monitoring of progress is an essential element of the effective and efficient delivery of government funded projects and the achievement of project objectives. The Tier 1 Project Plan, introduced a requirement for a compliance strategy and evaluation plan to be developed for new projects. As at December 2014, the required strategy and plan were yet to be developed. Environment does, however, possess a well-developed understanding of project progress and the challenges facing implementation (including delays), primarily through regular engagement with the NOW and participation on governance committees. However, the absence of a compliance strategy and evaluation plan will make managing compliance and measuring project performance more challenging.

**4.38** As at December 2014, the department had established a range of mechanisms for project monitoring and reporting, including: status reports to the Climate Change and Water Group Project Board; milestone progress reports from the NOW to Environment; PCG meetings; monthly meetings with the NOW; and weekly teleconferences with NOW project management staff.

## Status reports

**4.39** As discussed previously, the Climate Change and Water Board is responsible for the high-level executive monitoring of the Nimmie-Caira project, including progress against the project's objectives and milestones. In the period from May 2012 and 1 July 2014, the Board received monthly status updates on the project as part of an update on all NSW SPPs. These reports provided an outline of the project's progress, but little project-specific detail on mitigation treatments to address ongoing delays. Over this period, most NSW SPPs were experiencing delays and problems. In July 2014, the Board was advised that:

NSW has not met a single milestone on time since signing the project schedules, audit reports do not meet the requirements of the WMPA Schedule 4 and NSW holds in excess of \$50 million in the NSW Treasury plus an estimated \$2 million of interest.

**4.40** For much of early to mid-2014, delays in the progress of most NSW SPPs continued.<sup>111</sup> Project status reports to the Board noted problems with a lack of staff resources in NSW delivery agencies to ensure project deliverables were completed on time, despite funding being provided for this under relevant agreements. In relation to the Nimmie-Caira project, it took some eight months after the Heads of Agreement was endorsed by Commonwealth and State Ministers, for the NOW to consider that it was in a position to properly plan and deliver on its commitments under the HoA. In addition, a lack of communication across state agencies involved in projects and a lack of project governance and regular meetings to resolve challenges in achieving long term project outcomes were noted in project reports.

**4.41** The Board received its first detailed project status report focussed on the Nimmie-Caira project on 29 August 2014—over a year after the HoA was endorsed. It has since received detailed reports in September and October 2014. These project status reports focussed on the delays in milestone delivery, the risks to the project, including the consequences of these risks and the mitigation measures to minimise them. The status reports reflected the project risks raised by both the PCG and the CEWO. In particular, the PCG and the CEWO considered that there were important risks relating to 'project milestones not delivered on time'. Both also identified a significant risk in

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111 In March 2015, Environment informed the ANAO that seven NSW SPPs (valued at \$608 million) were experiencing delays at that stage.

progressing the project schedule requirements in the absence of greater clarity about the preferred future condition and management of the Nimmie-Caira site in the short, medium and long-term. The mitigation measures put forward to the Board included closer monitoring of project progress through face-to-face meetings between senior officials<sup>112</sup> and a variation of the project schedule. While the project status reports to the Board outlined identified risks, they did not report on the residual risk once mitigation measures had been applied.<sup>113</sup> As a consequence, the Board has not been well positioned to determine the effectiveness of the proposed mitigation measures.

**4.42** In addition to upgrading the risk of the Nimmie-Caira Project to Tier 1 as discussed previously, the Board also sought to escalate the delays in project implementation to more senior officers in the NOW and build a stronger focus and vision for the project and its outcomes. Discussions between Environment and NSW officials during the site visit in September 2014 indicated an increased commitment to the project's outcomes, with both parties endeavouring to bring the project in line with the agreed timeframes to the extent possible given the delays that have occurred to date.

**4.43** A subsequent meeting was held in October 2014 and it was agreed to: progress a variation to the project schedule; develop a communication framework for addressing community expectations for project information; and develop guiding principles for the land management arrangements on the Nimmie-Caira site. It was also agreed that such meetings should be held more regularly to provide greater inter-governmental oversight of the project.

**4.44** The full benefits of the project, including from environmental water use, will only be realised by a strong commitment from the Australian and NSW governments. To date, the Board in conjunction with senior representation from NSW officials has been required to resolve emerging problems. Continuity from Australian Government representation has been a particular challenge commented on by NSW officials. The organisational restructure within Environment resulted in a number of changes in Australian

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112 In September 2014, the NOW's Acting Director-General of Water and senior officers from Environment visited the Nimmie-Caira site. The ANAO also participated in the site visit and relevant meetings with stakeholders.

113 Similar mitigation measures were put forward previously by the PCG members in their risk assessment register and the residual risk that the project is not delivered on time remained high.

Government membership of the PCG.<sup>114</sup> Over the same period, there have also been a number of staffing changes within the NOW at both operational and senior management levels. This level of staffing turnover creates a more difficult business environment to progress complex projects such as the Nimmie-Caira project. The NOW project risk register has recognised that a lack of NOW executive support and engagement is one of the more significant risks.

**4.45** There is merit in the Board and the PCG maintaining effective oversight of the risks relating to the implementation of the water delivery infrastructure changes and long-term land and water management actions and arrangements expected in 2015. These risks must be given high priority consistent with the Tier 1 status of the Nimmie-Caira project.

## **Project monitoring and reporting**

**4.46** Project monitoring and reporting arrangements are outlined in the HoA and the project schedule, which require the NOW to prepare milestone reports to demonstrate evidence of project, contract and financial management. The NOW was also required to include a description of actual performance of the project to date against the aim of the project and information and evidence to demonstrate completion of project milestones. Reports and documented evidence were anticipated for 11 of the 12 milestones over the life of the project—that is from 2013 to 2018.

### *Progress against project milestones*

**4.47** The ANAO reviewed the progress made by the parties against the project schedule milestones and whether milestones and reports were completed within the timeframes stipulated in the project schedule. The key elements that comprise the milestones are set out in Figure 4.3 (on the following page).<sup>115</sup> As outlined, the project is at an early stage, with major tasks to be completed, with delays in the achievement of early milestones already having an impact on the timely delivery of the project.<sup>116</sup>

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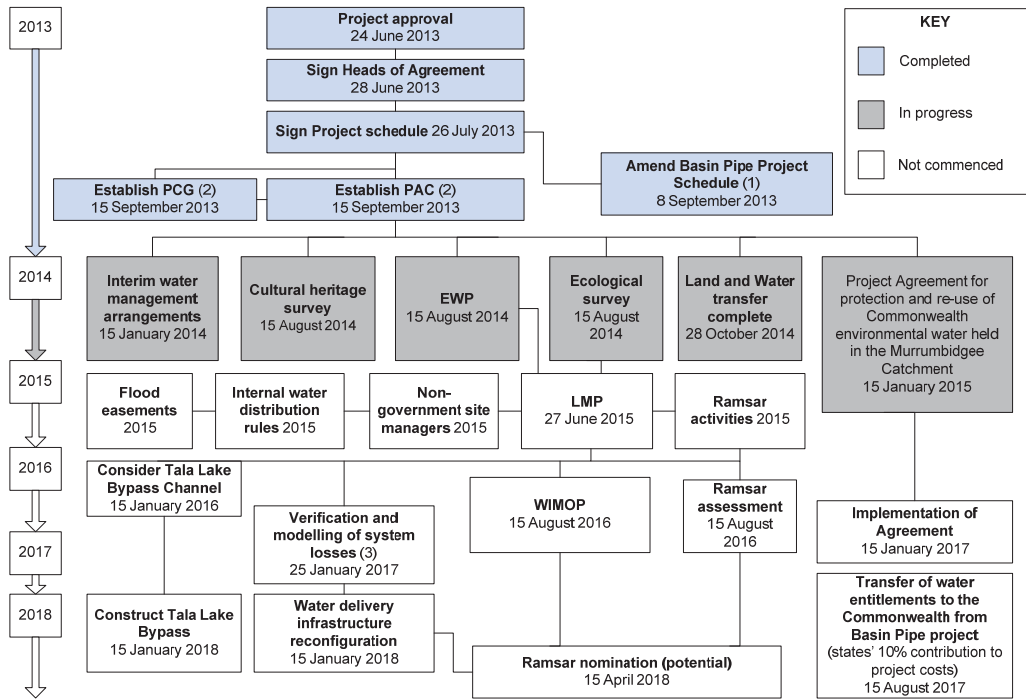
114 Over this short period, Environment had three different senior officers responsible for the Nimmie-Caira project.

115 A full list of all project schedule milestones and expenditure is outlined at Appendix 2.

116 As at December 2014, project expenditure was \$124.5 million compared to estimates of \$128 million.



**Figure 4.3: Key elements that comprise the milestones for the Nimmie-Caira project (at December 2014)**



Source: ANAO analysis of Environment information.

Note 1: Milestone 1, which included the amendment of the Basin Pipes Project Schedule, was completed on 30 August 2013.

Note 2: Milestone 2, which included the establishment of the PCG and PAC, was completed on 19 December 2013.

Note 3: This includes potential SDL adjustments to align with the current project schedule.

**4.48** There were four land and water purchase milestones relating to the transfer of land and water entitlements. The water entitlements were transferred to the Australian Government on 27 June 2014. The register of the land transfer to NSW was completed on 28 October 2014, which was after the agreed date of 1 October 2014.

**4.49** The first operational milestone (that is, not related to the purchase of the land and water entitlements) related to the signing of the Nimmie-Caira project schedule and the variation to the Basin Pipes Project Schedule. This milestone, which was due on 8 September 2013, was completed on 30 August 2013. The second operational milestone, which was due on 15 September 2013, related to the establishment of the inter-agency governance arrangements (the PCG and the PAC) and the delivery of the first milestone report on project progress. This

milestone was completed on 19 December 2013, some three months after the agreed completion date.

**4.50** Milestone 3, which was due on 15 January 2014, involved:

- the finalisation of interim land management arrangements;
- the agreement for the protection and re-use of the Commonwealth's environmental water held in the Murrumbidgee Catchment;
- the commencement of the EWP;
- evidence to tender for the engagement of consultants to undertake the ecological and cultural heritage surveys; and
- report to Environment on progress against the project schedule.

**4.51** Milestone 3 was not completed by the NOW until 23 June 2014, some six months later than the agreed completion date in the project schedule. Each of the components of Milestone 3 were delayed. For example, advertising of the request for tenders for the cultural heritage and ecological surveys (the direct responsibility of the NOW) was delayed by some four months. As at December 2014, the surveys were yet to be finalised. This delay has had a consequential impact on the completion of the EWP<sup>117</sup> and has caused ongoing delays to the completion of Milestone 4 (discussed below). Similarly, the project agreement between the Australian Government and the NOW for the protection and re-use of Commonwealth environmental water held in the Murrumbidgee Catchment was not signed until 20 June 2014. This delay also resulted in consequential impacts for environmental watering in the wider Murrumbidgee and Southern Basin.

**4.52** Milestone 4, which was due on 15 August 2014, relates to the finalisation of the EWP, ecological and cultural heritage surveys, the approval by the PCG of the work plan for the LMP and the commencement of the creation of flood easements<sup>118</sup> on all land titles that are acquired and subject to flooding. As at December 2014, Milestone 4 had yet to be achieved, with the NOW advising Environment in August 2014 that the finalisation of the surveys

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117 A draft EWP was completed in May 2014, but had not been finalised as at 1 December 2014.

118 The HoA identifies that NSW must agree to establish easements on the title of Nimmie-Caira land to facilitate the future delivery of Commonwealth environmental water. Environment identified that, without the ability to inundate land as required, the environmental benefits of the project will be greatly reduced. The establishment of easements is particularly important given the NSW Government's stated intention to consider the sale or lease back of land in the future to fund water management costs.

would be delayed by seven months, with a likely completion date of February 2015. Subsequently, this delay was further extended until the end of March 2015.

**4.53** In advice to Environment in February 2014, the NOW indicated that the required staffing resources to plan and deliver its project commitments were yet to be fully established. As a further consequence, the delivery of the EWP has been delayed, and therefore will need to be revisited following the completion of the survey work. Critically, the LMP work plan, a first step that outlines the approach to be taken in developing the LMP, has not yet been endorsed by the PCG, causing further delays to the project. The LMP is fundamental to deciding on the type and distribution of land use and commercial activity on the Nimmie-Caira site.

**4.54** In particular, slippage on the delivery of the two surveys by the NOW (the ecological survey and cultural heritage survey) will have a direct impact on the delivery of the LMP and the ability to commence the WIMOP resulting in delays to the completion of the water delivery infrastructure reconfiguration. Delays or non-completion of infrastructure reconfiguration would impact on the delivery of improved environmental watering outcomes in the Nimmie-Caira area and any further water recovery towards the Basin Plan. The slippage of the surveys may also delay, or put at risk, the achievement of the objectives for long-term ownership and management of the land, particularly the ecological and cultural heritage assets of the Nimmie-Caira site. These delays have the potential to impact on employment and/or commercial opportunities arising from the project for local communities.

**4.55** Further, to secure the potential benefits of the Nimmie-Caira project, a long-term agreement was required that provided the Australian Government with a priority to utilise, without restriction, all delivery infrastructure within the Nimmie-Caira system and to facilitate environmental water delivery. As at December 2014, ownership, management and access arrangements of the water distribution assets currently in-situ have not yet been agreed between the State Water Corporation, the NOW or the Australian Government. There is the potential for the water delivery infrastructure to degrade further if

arrangements are not agreed in a timely manner.<sup>119</sup> Should this occur, it will impact on the ability of the Australian government to deliver environmental water throughout the Nimmie-Caira project and manage the system for environmental outcomes in the long-term.

### *Project schedule variations*

**4.56** As a consequence of delays to the project as outlined earlier, there have been a number of requests from the NOW for variations to the Nimmie-Caira project schedule. In February 2014, the NOW wrote to Environment to request a variation to delivery dates in the project schedule for Milestone 3 and 4, with this variation sought to better reflect 'their improved understanding of the complexities of the project and revised timeframes for milestone completion'. Environment did not agree to the variation of milestones, primarily due to concerns that the changes proposed were inconsistent with the HoA.

**4.57** A relatively minor variation, however, to the project schedule details was signed on 3 July 2014 between the NOW and Environment to link the work tasks in the *Agreement for the Protection and Re-use of Commonwealth Environmental Water held in the Murrumbidgee Catchment* to the project schedule. These work tasks were new and additional and had no impact on the delivery of the milestones agreed in the project schedule. No other milestones were amended.

**4.58** As the due date for Milestone 4 (due 15 August 2014) was not met, the NOW has also requested a project schedule variation, as it did not meet the deadline for Milestone 5 (due 15 January 2015). On the basis of the progress to date and the linkages between project milestones, the NOW is unlikely to meet future milestones due to the cumulative impacts of delays to earlier milestone dates.

**4.59** In October 2014, Environment agreed to consider the project schedule variation put forward by the NOW as part of negotiations to 're-phase budgets and water savings'. There is likely to be ongoing pressure for variations to all

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119 The NOW has indicated that future ownership, operation and maintenance of the water distribution assets are the projects greatest 'unknowns.' The asset register is incomplete, many assets are unlikely to meet workplace health and safety requirements, and maintenance needs to be minimised until the WIMOP has been completed (otherwise expenditure could be incurred on assets that may become redundant).

future project milestones.<sup>120</sup> This reiterates the importance of the project being subject to careful ongoing management by both Environment and the NOW to help ensure that outcomes are achieved. It may also require an ongoing involvement from more senior officials from both governments to reinforce the work of the PCG, particularly in relation to complex project elements such as in relation to infrastructure reconfiguration, including the proposed channel to bypass Tala Lake. The Tala Lake Bypass case study (Case study 1) illustrates that, while a focus on timelines agreed by Ministers is important, in large, complex projects, circumstances can change as not all elements can be accurately forecast at commencement.

### **Case Study 1: Tala Lake Bypass—Example of a potential variation to the project schedule**

The construction of the Tala Lake bypass channel<sup>121</sup> is an area of sensitivity because of the potential conflict between the objective to deliver water to the Murrumbidgee more efficiently and the environmental damage that could be caused by the infrastructure construction.<sup>122</sup> The original purpose of the bypass channel was to enable re-crediting of return flows and to achieve higher peak flows during water delivery for the lower Murray system. This is expected to have significant benefits in terms of connectivity for fish and the movement of other species, and the transport of nutrients. These arrangements would also increase the flexibility for the Australian Government to provide environmental water to the South Redbank and the Fiddlers-Uara Creek System, which has previously not been possible due to the lack of channel access. The importance of the project being delivered as an integrated package was highlighted during Environment's 2013 due diligence process. In particular, advice by the CEWH noted that:

the environmental benefits provided by the entitlement acquisition are highly dependent on the establishment of appropriate and secure long-term management arrangements for the Nimmie-Caira system (including the land and delivery network acquired as part of the project). In the absence of such arrangements, the acquisition of Lowbidgee supplementary water entitlements is unlikely to provide sufficient environmental benefits to justify the Commonwealth's considerable investment.

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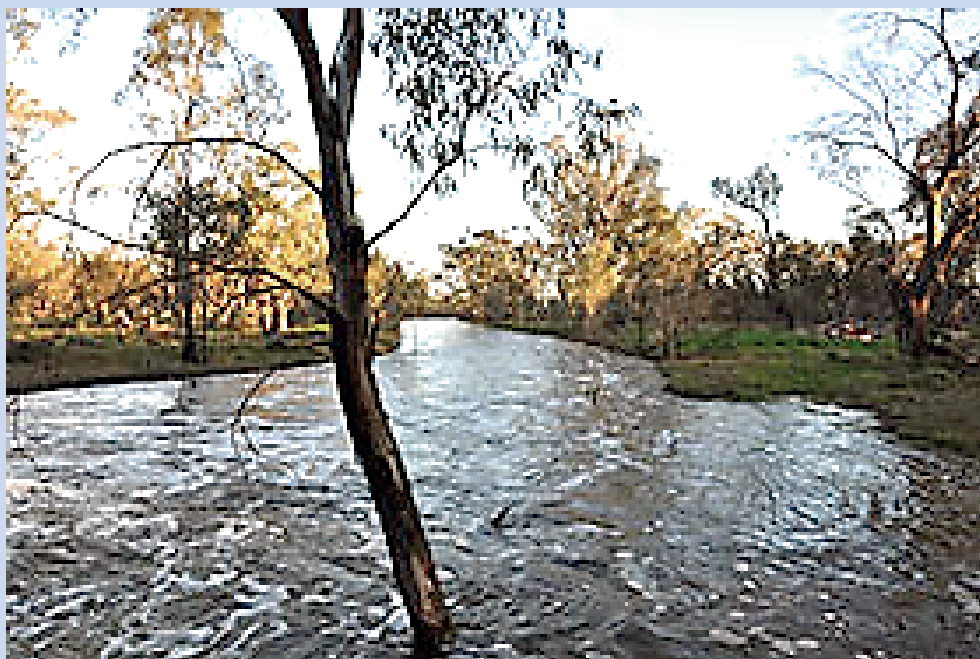
120 For example, the NSW Basin Pipes State Priority Project, designed to provide additional water savings to meet state co-contribution requirement for the Nimmie-Caira project is substantially behind its originally agreed timetable. NOW has indicated that it cannot meet the final remaining milestones this financial year. Environment has indicated that the Basin Pipes water contribution must be delivered and be audited.

121 The Tala Lake bypass channel was included by Environment as an important project element during the Nimmie-Caira project due diligence process, with funding of \$6 million for this element.

122 In early 2016, the PCG is scheduled to consider proposed earthworks, tenders and arrangements (project schedule Milestone 7) and by early 2018 the bypass is expected to be completed (project schedule Milestone 11).

The sensitivity centres on the construction of the channel and the negative environmental impacts on the Yanga National Park. However, since the signing of the project schedule, the need for the Tala Lake bypass has been questioned by the NOW. The private water licences that restricted water flow and delivery past Tala Lake have since been purchased by the NSW Government possibly negating the need to construct the bypass with the impact on a NSW National Park. For these reasons, NOW has requested that this project element be removed from the project schedule.

This matter is under consideration with the potential to save \$6 million on project costs if the channel is no longer required. The following image shows water flowing through Tala Lake.



Water flowing through Tala Lake

Source: James Maguire/NSW Office of Environment and Heritage

**4.60** This case study illustrates that there may be sound reasons why variations may be required and that these can produce more cost effective outcomes than originally envisaged. Options for return flows to the Murrumbidgee river have been discussed at the PCG meeting in December 2014. The meeting agreed that further testing of return flow options would need to be considered. Where timelines agreed between governments are changed, it remains important to adequately advise Ministers of the proposed change and the reasons and circumstances applying, as well as any implications for resources already committed for the project and the stated priorities of governments.

## Conclusion

**4.61** Following approval from the Minister, there were a number of important actions taken to establish the framework to implement the Nimmie-Caira project. These included a HoA and project schedule agreed between the Australian and the NSW governments. Since the HoA was endorsed, the NSW government has purchased both the land and water entitlements from the private owners and is responsible for the development and maintenance of the infrastructure<sup>123</sup> and ongoing management to ensure that environmental flows are delivered as agreed. Environment has established project governance arrangements that have defined roles and responsibilities, timeframes, stakeholder engagement and the management of risks. In addition, the transfer of water entitlements to the Australian Government was completed in June 2014.

**4.62** While initial elements of the Nimmie-Caira project were established soon after the approval by the Minister, the progress of the project overall has been affected by ongoing delays. Early project milestones were not delivered as stipulated in the project schedule and key milestones are overdue. The delays are having a cumulative impact that is affecting the sequencing of the project elements and is putting the delivery of the project within the agreed timeframe at risk.

**4.63** The full benefits of the project, including from environmental water use can only be realised by implementing the water delivery infrastructure changes and the long-term land and water management arrangements. If these are not completed, there is a significant risk that the project will not achieve established objectives. The project would benefit from strong, ongoing senior management collaboration and oversight by the Australian and NSW governments focused on meeting project milestones and resolving challenges in achieving long-term project outcomes. The development of an agreed project plan would better position the PCG to more actively monitor progress against established milestones and guide project implementation activities over the remaining stages of the project.

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123 The NOW will only own and maintain some of the infrastructure located in the Nimmie-Caira site, with the State Water Corporation owning and maintaining the remaining infrastructure. The water entitlements from the Nimmie-Caira site have been transferred to the CEWH.

**4.64** Communication with the local community stakeholders also needs to be improved to inform the community of the project progress, enable greater community input and manage expectations. This is particularly important as key milestones and actions anticipated in 2015, such as the ecological and heritage surveys and LMP, will have a high level of community interest and impact. An appropriate communication and engagement strategy should be established as a priority.

**4.65** Given the timing concerns raised by Australian and state/territory government Ministers at COAG in 2010 in relation to the progress of SPPs and the scale of the Australian Government investment through NSW SPPs, effectively managing these projects, such as Nimmie-Caira, to avoid further delays will be important for overall water reform in the Murray–Darling Basin. In this context, and in recognition of the Australian Government’s specific inclusion of administrative funding under the Nimmie-Caira HoA (\$5 million)<sup>124</sup> for the establishment of governance arrangements and to support NSW project management capability, there was scope for Environment to have more clearly specified its expectations. In particular, there would have been merit in the department more clearly linking the provision of administrative funding to the achievement of project management milestones (such as the early assignment of sufficient staff resources) in the project schedule to encourage timely performance and to help mitigate risks to the achievement of project objectives from the delayed achievement of operational milestones. Environment should also consider adopting such an approach for future projects where there is a significant risk to the achievement of objective arising from delays in implementation.

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124 In addition to the \$5 million provided to NSW for project management, an additional \$200 000 was also provided for the administration of the Project Control Group and the Project Advisory Committee.



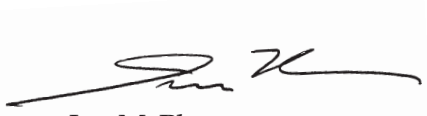
## Recommendation No.2

4.66 To support the effective delivery of any State Priority Projects delivered in support of Water Management Partnership Agreements, the ANAO recommends that the Department of the Environment, on a risk basis:

- (a) specifies expectations in future funding agreements in relation to the use of administrative funding provided to underpin project implementation; and
- (b) links the provision of administrative funding to project performance.

**Environment's response:** *Agreed*

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Ian McPhee

Canberra ACT

21 April 2015



# Appendices



# Appendix 1: Entity Responses



**Australian Government**  
**Department of the Environment**

**Dr Gordon de Brouwer**  
**Secretary**

Ref: EC 15-000335

Mr Mark Simpson *MS*  
Executive Director *2/4/15*  
Performance Audit Services Group  
Australian National Audit Office  
GPO BOX 707  
CANBERRA ACT 2601

Dear Mr Simpson

Thank you for your letter of 20 February 2015 seeking the Department of the Environment's response to the proposed audit report on the 'Nimmie-Caira System Enhanced Environmental Water Delivery Project'.

The Department welcomes the report's overall findings regarding the effectiveness of the arrangements established by the Department for the funding and management of the Nimmie-Caira project. It is pleasing to note the report considers the project the most cost effective water recovery project administered by the Department. The Department agrees with both audit recommendations and considers that overall the report provides a balanced assessment of the implementation of the Nimmie-Caira project.

The Department notes the Audit Office's assessment that there would have been merit in obtaining additional independent advice on the value of the premium paid over and above estimates of fair market value of the land and water entitlements for agricultural use. While the Department acknowledges the importance of independent assessment of public expenditure, in this instance the Department judged that further independent advice was not required given the large environmental and administrative benefits associated with the purchase and the avoided higher cost of acquiring the water from alternative sources.

I would like to acknowledge the professional approach taken by the members of your audit team. Thank you for providing the opportunity to comment on the proposed performance audit report.

Yours sincerely

*Gordon de Brouwer*

Gordon de Brouwer  
2 April 2015



Department of  
Primary Industries  
Office of Water

INW15/6817

Mr Mark Simpson  
Executive Director  
Performance Audit Services Group  
Australian National Audit Office  
GPO Box 707  
CANBERRA ACT 2601  
mark.simpson@anao.gov.au

Dear Mr Simpson

**ANAO Performance Audit: Funding and Management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project**

Thank you for providing the NSW Office of Water (NOW) with an extract of the proposed audit report on the *Funding and Management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project*, together with an invitation to provide a formal response to be included in an appendix to the final report.

As a general statement, the report contains few factual errors and is a reasonable summary of events up to late 2014. Our formal response, provided in the attached, is intentionally forward-looking and focuses on improvements to the project Schedule and greater commitment by all parties to adaptive governance and management.

Please contact David Leslie on M: 0428 250 385 or E: [david.leslie@dpi.nsw.gov.au](mailto:david.leslie@dpi.nsw.gov.au) should you require further information.

Yours sincerely

1/4/15

**GAVIN HANLON**  
DEPUTY DIRECTOR GENERAL WATER

**TAB A. Formal Response to the ANAO Performance Audit: Funding and Management of the Nimmie-Caira System Enhanced Environmental Water Delivery Project**

**Introduction**

1. Other than to assert that the arrangement relating to the funding for the Project were transparent and appropriate, this response is very largely confined to the *future management* of the Project.
2. It is acknowledged by NOW that the Project is presently running behind time and under budget. In part this is due to delays in forming a project team and turnover of senior staff. However, fundamental deficiencies with the Project Schedule have also introduced barriers to effective project implementation and delivery of previously agreed project milestones.

**Project Schedule Amendment**

3. NOW proposes an amendment to the Project Schedule to better define the requirements of the project such that:
  - a. an approved Project Plan provides the basis to plan and execute the project from 1 July 2015 onwards;
  - b. a review of the Project Plan endorsed by the project governing body provides the basis to further amend the Project Schedule if or when required;
  - c. sufficient resources are allocated to the interim land management requirements;
  - d. the potential for long term ownership and management by a non-government entity (NGE), as set out in the Heads of Agreement (HoA), is explored as soon as practicable;
  - e. the project is re-sequenced to permit the long term Land Management Plan (LMP) to be developed by NOW in collaboration with the NGE;
  - f. the governance arrangements are simplified to improve accountability;
  - g. the date of practical completion is extended by approximately 18 months.

**Recommendations**

4. The following recommendations may apply across all State Priority Projects:
  - a. Greater commitment by all parties to adaptive governance and management;
  - b. Compatible Project Management Frameworks be developed and implemented at the Commonwealth and State level; and
  - c. Greater use of benchmarking (ie. comparing like-for-like projects)
5. The following recommendations apply specifically to the Project:
  - a. Expedite NGE selection; and
  - b. Expedite an amendment to the Project Schedule, supported by a detailed Project Plan as described above.

## Appendix 2: List of Nimmie-Caira milestones, funding and status (as at December 2014)

No.	Project Milestone	Due Date	Funding (excl GST) \$(M)	Status
<b>Land and Water Transfers</b>				
1	First stage of legal process for purchase of land and water	Within 6 months of the signing of the schedule	12	<b>Complete</b>
2	Meeting contractual obligations for land and water purchase	Within 12 months of the exchange of contracts	108	<b>Complete</b>
3	Details of separate financial management accounts	Within 1 month of the signing of this	0	<b>Complete</b>
4	Registration of ownership of land and water entitlement	Within 12 months of the exchange of contracts	0	<b>Complete</b>
		<b>Sub Total</b>	<b>\$120M</b>	
<b>Other Project Milestones</b>				
1	Signing of Project Schedule and amendment of Basin Pipe Project schedule.	8 Sept 2013	2	<b>Complete</b>
2	PAC and PCG formed.	15 Sept 2013	0	<b>Complete</b>
3	Interim land management arrangements implemented, evidence to engage consultants to commence surveys and EWP, Project Agreement for the Protection and Reuse of Commonwealth Environmental Water held in the Murrumbidgee Catchment (reuse Agreement), evidence of agreement on Hay and Balranald offset projects.	15 Jan 2014	2.5	<b>Complete</b>
4	Final EWP, work plan for LMP, report on Balranald Interpretive Centre, evidence of commencement by NSW of the process for the creation of flood easements, final surveys and completion of stage one, phase one of reuse Agreement.	15 Aug 2014	3.5	Not yet complete



No.	Project Milestone	Due Date	Funding (excl GST) \$(M)	Status
5	Creation of flood easements on all land titles subject to flooding, first draft of WIMOP, and completion of stage one, phase two of reuse Agreement.	15 Jan 2015	4	Not yet complete
6	Evidence of contract for Wakool road upgrade, incorporation of landholder advice, final LMP, completion of stage one, phase three of reuse Agreement.	15 Aug 2015	7.5	Not yet complete
7	Draft report on system losses and potential offsets, evidence of tenders for infrastructure reconfiguration, evidence of tenders for fencing, consideration of Tala Lake Bypass, 50 per cent of road upgrades completed, second draft of WIMOP, evidence of stock and domestic supply contract, and completion of stage one, phase four of reuse Agreement.	15 Jan 2016	11	Not yet complete
8	Completion of road upgrades, 30 per cent completion of stock and domestic supply, assessment of feasibility of RAMSAR listing, final WIMOP.	15 Aug 2016	11	Not yet complete
9	Final report on system losses and SDL adjustment, 70 per cent of stock and domestic water supply, completion of stage two of reuse Agreement.	15 Jan 2017	6	Not yet complete
10	70 per cent completion of water delivery infrastructure reconfiguration, fencing, completion of stock and domestic supply, evidence that the total water entitlement to be held by the compliant projects will amount to 75 per cent of total water savings.	15 Aug 2017	1	Not yet complete

No.	Project Milestone	Due Date	Funding (excl GST) \$(M)	Status
11	Completion of water delivery infrastructure reconfiguration, Tala Lake Bypass Channel and fencing, review implementation of LMP.	15 Jan 2018	1	Not yet complete
12	Submit final progress report and audited financial report.	15 April 2018	0.69	Not yet complete
	<b>Sub Total</b>		<b>\$50.19M</b>	
	<b>Total (excl contingency)</b>		<b>\$170M</b>	
	Contingency		\$9.9M	
	<b>Grand Total</b>		<b>\$180.1M</b>	

Source: Nimmie-Caira System Enhanced Environmental Water Delivery Project Schedule.

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