

NSW WATER INFRASTRUCTURE PROJECT

Nimmie-Caira enhanced environmental water delivery

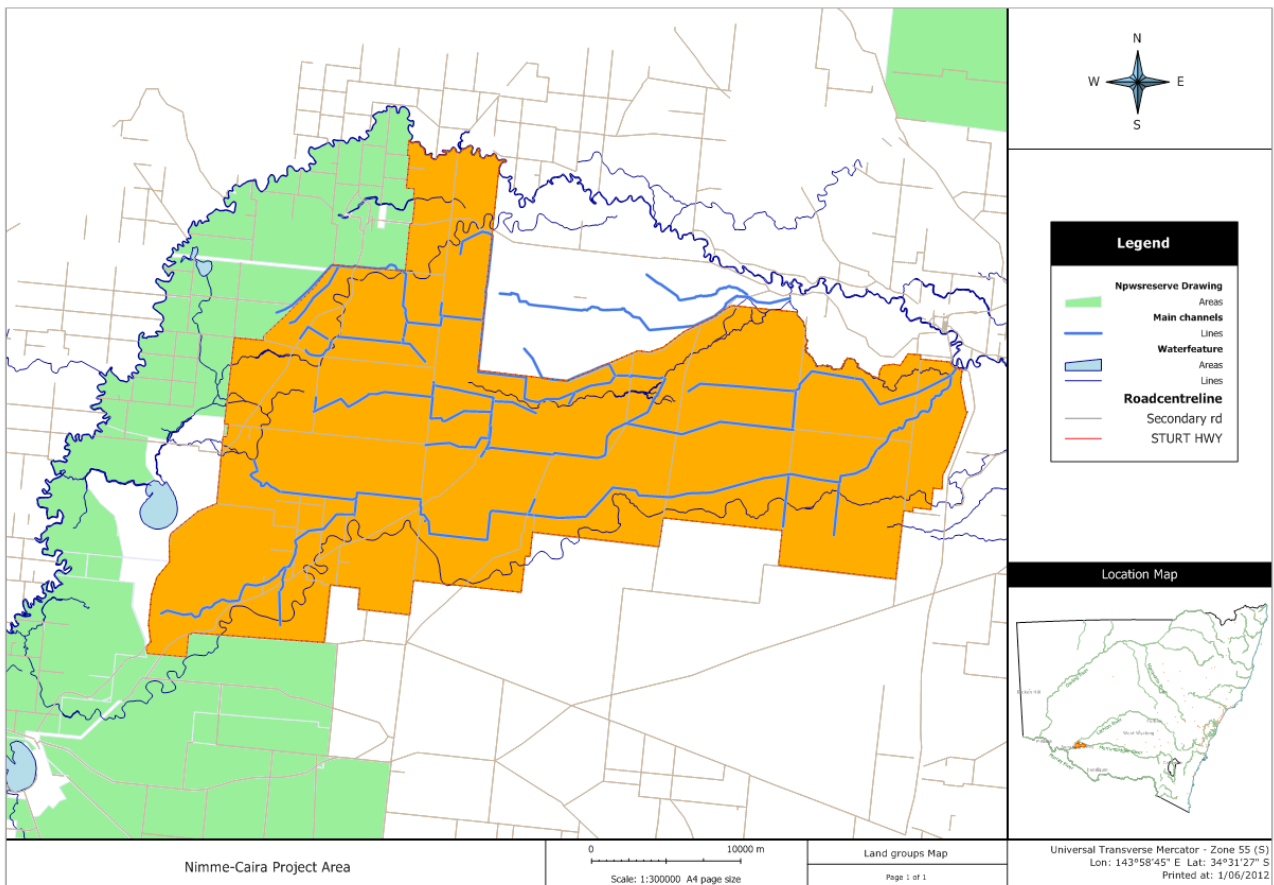
Introduction

The Nimmie-Caira is part of the Lowbidgee floodplain, the largest remaining area of wetlands in the Murrumbidgee Valley.

The Nimmie-Caira project area covers about 86,000 hectares of predominantly Lignum wetlands and is a vital component of the Murrumbidgee floodplain and its ecosystems.

The floodplain and wetlands systems within Nimmie-Caira are areas of national and international significance, providing habitat, breeding and nursery grounds for colonial water birds and migratory species listed under international agreements, populations of rare and endangered species of frogs and birds, and endangered and vulnerable plants.

Figure 1 Map showing location of the Nimmie-Caira project area



The wetlands within the Nimmie-Caira system provide an important mid-river refuge during drought, and breeding grounds for river based populations of macro-invertebrates, fish and reptiles.

As part of the Lowbidgee floodplain system, Nimmie-Caira is located adjacent to the River red gum forests of the Redbank system, now reserved as part of Yanga National Park, and the environmentally significant Great Cumbung Swamp located directly to its north at the end of the Lachlan River.

The development of a feasibility study and business case for the Nimmie-Caira System Enhanced Environmental Water Delivery Project has been funded by the Australian Government as an Environmental Works and Measures Feasibility Project under the *Water for the Future Program*.

If approved, this project could contribute to a large proportion of the remaining within-valley target to be recovered from the Murrumbidgee Valley under the draft Basin Plan. The proposed works would also improve the delivery of environmental flows around the Murrumbidgee Choke at Chaston's Cutting.

Figure 2 Unique wetlands of the Lowbidgee



The Nimmie-Caira is part of the largest area of wetland remaining in the Murrumbidgee Valley, which has been identified as a key ecological site in the draft Murray-Darling Basin Plan.

What does this project aim to do?

The *Nimmie-Caira System Enhanced Environmental Water Delivery Project* would provide a unique opportunity to acquire water entitlements that are currently used for irrigated agriculture, together with the land and water supply infrastructure, which includes regulators, levees and channels that deliver water throughout the Nimmie-Caira and downstream.

The project includes reconfiguration of the water supply infrastructure to enhance the environmental values of the Nimmie-Caira and to potentially increase the volume of water that can be diverted into the River Murray from the Murrumbidgee River, which is currently restricted by natural constraints.

The project looks for the future management of the land to be managed in consideration of the high environmental value of the floodplain and wetlands, but would allow for future dryland farming. The project would include alternative stock and domestic supply infrastructure and considers the potential for indigenous land management into the future.

The NSW Government is determined to minimise adverse social and regional impacts and provision has been made to offset the potential for reduced economic activity in the affected shires. Given the significant environmental values of the Nimmie-Caira, the project will explore options for economic activity to the regional economy in the longer term.

Potential Water Savings

If the project proceeds, 381,000 unit shares of supplementary water (Lowbidgee) access entitlement would be transferred to the Commonwealth Environmental Water Holder. This entitlement has been estimated as providing a long term average annual yield of 173,000 megalitres per annum (ML/yr) or 173 gigalitres (GL/yr).

This could account for a large proportion of the remaining within-valley target of 183 GL/yr to be recovered (at June 2012) from the Murrumbidgee Valley under the draft Basin Plan.

In addition, further sustainable diversion limit (SDL) offsets may be realised by using the Nimmie-Caira infrastructure to deliver environmental flows to the Nimmie-Caira floodplain and other areas of the Lowbidgee, as well as provide environmental flows around the Murrumbidgee Choke at Chaston's Cutting.

Through the reconfiguration of the Nimmie-Caira water supply infrastructure and removal of blockages to flows in the creeks draining the lower reaches of the Lowbidgee floodplain, up to 3,000 ML/day can be delivered back to the Murrumbidgee River downstream of the choke.

This would have the additional benefit of reinstating natural flows and floodplain connectivity to the Lowbidgee floodplain.

How would the project work?

The Nimmie-Caira Project proposes the purchase of 19 properties from willing sellers on the Nimmie-Caira floodplain, owned by 11 farming businesses, together with their supplementary water (Lowbidgee) access licence (381,000 unit shares), and associated water supply infrastructure and improvements.

The project would allow unconstrained use of the Nimmie-Caira infrastructure for the efficient delivery and distribution of environmental flows, unencumbered by the requirement to deliver water for agriculture, although future stock and domestic needs would be provided by a newly constructed pipeline.

Figure 3 Regulator in the Nimmie-Caira area



The *NSW State Water Corporation* would continue to own, operate and manage the major water supply infrastructure on the Murrumbidgee River, including Maude Weir, and potentially infrastructure within the project area to meet the needs of other water users including those downstream and environmental customers including the Commonwealth Environmental Water Holder.

The rules for operation and access would be determined through the development of an Environmental Watering Plan for the Nimmie-Caira and the costs of the development of this Plan are proposed to be funded as part of the project.

The Nimmie-Caira contains significant indigenous cultural heritage values, and an objective of the project would be to protect these values into the future and where possible, with the involvement of local indigenous groups.

The project proposal includes a comprehensive cultural heritage survey to ensure that these values and assets are better understood and

recorded as a basis for ongoing management and conservation.

Future land management options for the system would include the potential for indigenous land management opportunities.

Are there any shortcomings?

While the Nimmie-Caira Project has widespread support from Murrumbidgee Valley communities and water user groups in particular, there is expected to be some short-term impacts on local communities within the Balranald, Hay and Wakool shires including reduced economic activity associated with current irrigated farming activities.

The Nimmie-Caira Project Business Case has been developed in consultation with these Shire Councils and a suite of potential off-set projects have been identified and included in the project to assist Shires to adapt to an environment with less water for irrigation, and identify alternative development opportunities.

Figure 4 Scar tree in the Riverina – courtesy NSW Office of Environment and Heritage



It is proposed that the land assets would be owned and managed by the NSW Government with the objective of actively managing and protecting the important environmental and cultural heritage values contained in the Nimmie-Caira, while continuing dryland farming activities.

Future land management options have been identified as part of the feasibility study and several have been short listed for the NSW

Government to further investigate and implement during the course of the project.

Where could the funding come from?

The NSW Government is seeking funding from the Australian Government for the project as a State Priority Project - using unspent State Priority Project funds committed to NSW by the Australian Government as part of the Inter-Governmental Agreement on Murray-Darling Basin Reform.

Next steps

The NSW Office of Water has submitted the feasibility study and business case for the Nimmie-Caira System Enhanced Environmental Water Delivery Project to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) for consideration.

NSW proposes that the project would best be undertaken in two stages:

1. purchase of land, water entitlements and associated water supply and management infrastructure
2. reconfiguration of water delivery infrastructure, and transition to new land management arrangements including alternative water supply arrangements, and community off-set projects.

If the project is approved, NSW would seek to have Stage 1 completed as soon as possible, while the longer term infrastructure works and future land management arrangements could be implemented over a longer time period.

More information

For more information contact Bunty Driver on 0407 403 234 or visit the NSW Office of Water website www.water.nsw.gov.au

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