

Friends of the Ballarat Botanical Gardens
Guiding Friends
North Gardens Wetlands Information Notes

Project background

The North Gardens Wetland was identified as a necessary storm water protection measure in the Lake Wendouree Landscape Masterplan in 1994. The Ballarat Botanical Gardens Masterplan and Management Strategy 1995 as an important element of the Gardens experience as it would provide a site for a regional indigenous plant collection encompassing aquatic and terrestrial plants. Council held two trust funds established for the improvement of zoological gardens and enhancement of wildlife habitat within the Gardens Precinct.

Project Objectives

The North Gardens Wetland Project will achieve the following:

- Create a demonstration processing system for storm water within a very high profile site attracting over 1 million users annually.
- Provide protection of Lake Wendouree from increased nutrient and sediment loads
- Increase the habitat for avi-fauna
- Created a suitable landscape for interpreting storm water management, indigenous plants and their relationship with fauna and man.
- Provides a destination at the northern end of the Gardens and tramway.
- Creates social linkages between local residents, environment groups and educational institutions.
- Improves the aesthetic standards of the site.

Project Design

The Wetland processes storm water inflows through two major drains that account for a 99 Hectare urban catchment, one quarter of the total catchment supplying Lake Wendouree. In 1999 the Corangamite Catchment Management Authority announced two grants relating to the project, namely :

The Monastery Drain Gross Pollutant Trap was completed in June 2000, with a three way funding partnership between CCMA, Eco-Recycle Victoria and Council.

Upon notification of the grants a project team was established to ensure the Wetland Project would meet the relevant water quality management, habitat creation, educational and aesthetic objectives. The project team consisted of:

Prof. Tony Wong	Monash University Centre for Freshwater Ecology
Dr Peter Breen	Monash University Centre for Freshwater Ecology
Dr Tim Fletcher	Corangamite Catchment Management Authority
Peter Bate	BCC Civil Design Unit
Adam Parrott	BCC Landscape Architect
Ian Rossiter	BCC Manager Lake Wendouree and Botanical Gardens
David Grant	BCC Arboriculturist
Uldis Neidlands	BCC Waste Management Engineer

Following design and contract specification completion in November 1999, tenders were called, and the project budget was clearly insufficient to proceed. Further funding was sought from Council and the C.C.M.A. which being confirmed in July 2000 allowed re-tendering. The project commenced in November 2000 and was completed in March 2001.

The first step was to obtain samples of water following rainfall incidents to quantify the sediment and nutrients present. Rainfall records were investigated to determine the characteristic seasonal flows and potential peak flows. Following survey of the site and relevant features, Tony Wong and Peter Breen were able to produce required volumes, water depths and levels for each of the water bodies and structures required.

Ballarat Civil Design utilised these to produce an initial layout with sections, and the project committee tackled the issues of tree removal, desirable views in and out, access and circulation. The final design was able to meet the landscape and habitat objectives, without compromising the project's primary objective of improving storm water quality.