

OUR PROJECTS



NORTH CENTRAL
Catchment Management Authority
Connecting Rivers, Landscapes, People

ABOUT THE PROJECT

The North Central Catchment Management Authority (CMA) plays a key strategic role in providing leadership and integration of sustainable natural resource management.

An integral element to the management of our natural resources within the irrigation regions is to enable appropriate management of surface water generated from rainfall, which if not managed can have significant environmental, social and economic impacts on the local communities of north central Victoria.

The Benwell Surface Water Management System (Benwell SWMS) project has been identified as the highest priority drainage works under the Loddon Campaspe Irrigation Region Land and Water Management Plan.

HIGH VALUE ASSETS

The Benwell Catchment, situated north of Kerang near the Murray River, supports a diverse range of assets including:

- ◆ Benwell and Guttrum State Forests
- ◆ Reedy Creek
- ◆ Growling Grass Frog and Grey Crown Babbler
- ◆ Valuable and productive farmland.

THREATS TO ASSETS

The Benwell Catchment suffers from poor surface water management which causes:

- ◆ Waterlogging of farmland and forests
- ◆ Raised and highly saline groundwater levels
- ◆ Reduced water quality that degrades waterways
- ◆ Salinised crops, pastures and native vegetation
- ◆ Long-term socio-economic and environmental issues for the area.

SOLUTION

Reinstating a more natural surface water system for the local area, that during times of rainfall, provides drainage and flood management, therefore protecting the important environmental and agricultural values of the region.

CONSULTATION

A thorough community consultation process including public meetings, information packages and surveys has been undertaken with the local community regarding the Benwell SWMS. There is strong landholder support and Agency commitment to implement the Project.

CONSTRUCTION

Onground works for the construction of the Benwell SWMS commenced in March 2009. By September 2010, 6.7km of primary drain had been constructed. By June 2011, a total of 11km of primary drain is expected to be completed.

THE BENWELL SURFACE WATER MANAGEMENT SYSTEM



THE SYSTEM

The Benwell Irrigation Catchment takes in an area of 4,840 ha. The project proposes to provide an integrated and planned approach to surface water management in the Benwell catchment.

The Benwell SWMS will consist of approximately 19km of primary drains. Up to 36km of smaller secondary drains can then be constructed, providing rain induced surface water management to surrounding farmland.

On-farm works and measures that complement the drainage lines, such as tailwater reuse systems, will be implemented to ensure best practice irrigation is undertaken by containing water on-farm.

This approach ensures the environmental, economic and social aspects of catchment management are addressed to ensure long-term sustainability and viability of the catchment and the region.

The system has been designed to:

- ◆ Be built to compliment the surrounding environment;
- ◆ Follow the meandering course of the Reedy Creek, except where there are environmental features that must be avoided;
- ◆ Be a shallow waterway improvement along the depression, offset to one side;
- ◆ Blend into the depression landscape and minimise removal or disturbance to trees; and
- ◆ Ensure that only rainfall runoff outfalls to the River Murray.

This will be achieved through an increased focus on-farm reuse and diversion of water from the system for use by other land owners within the system.

Outfall into the River Murray has been designed and built to minimize any issues also.

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THE BENWELL SURFACE WATER MANAGEMENT SYSTEM

THE BENEFITS

The Benwell SWMS will provide the environmental, economic and social benefits to the region.

ENVIRONMENTAL BENEFITS

Protection of the Benwell and Guttrum State Forests

Uncontrolled pumping to the state forest, which currently has no alternative outfall, is resulting in unnatural wetting regimes. This will cease once the Benwell SWMS is constructed.

Rehabilitation of the Reedy Creek

The introduction of the Benwell SWMS will largely re-instate natural flows along Reedy Creek.

Complimentary environmental protection works will deliver significant improvements to the health of the waterway, wetlands and riparian vegetation. The undertaking of revegetation works will also maximise the environmental benefit to the area.

Nationally Threatened Grey Crowned Babbler and Growling Grass Frog habitat protected & enhanced

Along the Reedy Creek there currently exists a number of significant areas of Red Gum Grassy woodland that provide important habitat for these threatened birds and frogs.

The Benwell SWMS will enable appropriate surface water management to minimise the risks and subsequently the threats to the habitat.

SOCIAL BENEFITS

Significant local and broader regional social benefits expected from the construction of the Benwell SWMS include:

- Restoring regional and community well-being that has been severely eroded by drought, including risk reduction and improved business confidence
- Community confidence enhanced through on-farm improvements that will derive additional project benefits
- Reduced stress felt by community during high rain fall events that contribute to water logging of the catchment; and
- Improved communication and expanded local networks.

ECONOMIC BENEFITS

The present value of benefits for the project, estimated at \$2.38 million, also takes into account the broader economic benefits to the region. It is expected that these additional outcomes will exceed the project costs.



Productive agricultural land, without access to surface drainage, after a high rainfall event in June 2010. Access to drainage will be provided to the property under Stage 2 of the project



A section of completed primary drain (June 2010)



LODDON CAMPASPE
Irrigation Region
Land & Water Management Plan



Australian Government



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