OUR PROJECTS



THE BENWELL SURFACE WATER MANAGEMENT SYSTEM

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 out 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 action under the Loddon-Murray Surface 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 Guttrum State Forests
- Reedy Creek
- Growling Grass Frog
- Grev Crown Babbler
- Diverse range of farming enterprises.

THREATS TO ASSETS

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

- Waterlogging
- Raised groundwater levels
- Water quality impacts that lead to degraded waterways
- Salinised crops, pastures and native vegetation
- Long-term socio-economic and environmental issues for the area.

SOLUTION

The \$6.7M Benwell SWMS project has been established to focus on resolving these and other associated issues attributed to poor surface water management.

CONSULTATION

A thorough community consultation process including public meetings, information packages and surveys has been undertaken with the local community regarding the Benwell SWMS. The majority of landholders within the Benwell Catchment support the Benwell SWMS 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 SYSTEM

The Benwell Irrigation Catchment takes in an area of 4,840 ha.

The Benwell SWMS will consist of approximately 19km of primary SWMS. Up to 36km of Community SWMS can then be constructed providing surface water management services to the surrounding farmland.

The project proposes to provide an integrated and planned approach to surface water management in the Benwell catchment. On-farm works and measures that complement the project will be implemented.

This approach ensures the environmental, economic and social aspects of catchment management are appropriately considered and 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 onfarm reuse and diversion of water from the system for use by other land owners within the system.

It also takes into consideration the nature of the design of the outfall works where the system enters the River Murray.

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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 reinstate 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 habitat protection and enhancement

Along the Reedy Creek there currently exists a number of significant areas of Red Gum Grassy woodland that provide important habitats for the Grey Crowned Babbler.

The Benwell SWMS will enable appropriate surface water management minimising the risks to the Red Gums and subsequently the risks of reduced habitat for the Grey Crowned Babbler.

SOCIAL BENEFITS

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

- Restoring regional and community confidence that has been severely eroded by drought, including reduce risk and improved business confidence
- leading to further development in the region;
- Community confidence enhanced through on-farm improvements required of individuals to derive benefit from the project;
- Reduce 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)









ACKNOWLEDGEMENTS

This project has been developed in partnership with the North Central CMA, Goulburn- Murray Water, Department of Primary Industries and Department of Sustainability and Environment. The Benwell SWMS is a joint funding initiative by the National Action Plan for Salinity and the Victorian Government.

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