

Name:	52R-2011 Berrillock Recreation Reserve
Project Description:	Surplus water collection for community sporting facilities and environmental usage
Date of Report:	2 nd February 2009

1. Background

Local sporting facilities play a key role in small country communities and towns such as Berrillock. The community is under increasing financial pressure to provide these facilities, most of which are provided on a volunteer basis. The town has a population of around 80 and a district population of about 250, the bowling club has a membership of 38, and the amalgamated football club has 120 family memberships.

Berrillock Recreation Reserve is currently being supplied with water from the town reservoir filled from the Grampians water system, but with the introduction of the Wimmera/Mallee pipeline the water supply will be via a pipeline from the Murray River system. This new pipeline will also serve the Berrillock Golf Course leaving their existing dam available for other uses.

With current water restrictions making the maintenance of the local football ground and bowling green's to maintain a safe playing surface difficult. The use of metered pipeline water will also greatly increase the cost of providing water to these facilities when it is permitted.

2. Description of Project

Berrillock Recreation Reserve proposed to use the runoff storm water from the Graincorp Berrillock silo site that drains to a collection dam. That surplus Class B water is currently directed into a waste drainage channel and is not currently being utilized. We were unaware of any similar setup in the region.

This project connected 1.8 km of 2" Rural poly pipe to the existing drainage pump and directed this surplus drainage water to a large deep holding dam situated at the Berrillock Golf club. It took 7 people 10 hours over 2 working bees to do this. We use a committee member's tractor and pipe layer to complete the task. A solar powered pump capable of pumping 10,000 Litres per day at this dam then pumps this water to an existing water tank so it can be utilized at the Berrillock Bowling Club and at the Berrillock Recreation Reserve (sporting ground).

This project enables:

- Recycling use of waste drainage water from the grain silo yard
- Water savings for community based sporting facilities, allowing unused water to be returned to the Murray River system and contribute towards environmental flow requirements
- Provision of environmental open water point for native Mallee birdlife

3. Key Activities Completed

A number of key milestones or activities were completed in the course of this project.

A detailed project Plan and Communications Plan.

- a. This milestone provided a detailed Project Plan for the project and also looked at the various communication activities that were undertaken throughout the life of the project.

Purchase of necessary equipment and materials in accordance with the approved detailed project plan.

A solar pump, solar panel and necessary electrical equipment was purchased at a cost of \$5944.25.

9 rolls of 300m x 2" rural poly pipe, 9 x 2" Philmac joiners and 2 end connectors were purchased for \$4130.75.

This milestone involved the purchase and delivery of the above equipment and materials required for the project.

Installation of all necessary equipment and materials in accordance with the approved detailed project plan.

This work was completed in 2 parts,

1. The completion of pipe work to remove collected runoff water to storage dam.
2. The completion of the solar pump installation and footings

The costs and work done for the installation was done by the committee members as our 'in kind' contribution to the project. We had the use of a John Deere tractor and a poly pipe layer capable of laying 2" pipe. An approx total of 70 man hours was donated over 2 working bees. Other equipment like shovels and other tools was supplied by the committee members. \$400 worth of concrete for pump footings and solar panel footings was purchased by the committee. This was estimated to represent around \$ 4,200 of 'in kind' contribution.

Cost Item	SWF Contribution	Berriwillock Rec. Reserve contribution
Purchase of Equipment and Materials	5944.25	\$200.00
Installation	4130.75	4000.00
Signage	\$32.73	
Total	\$10,107.73	\$4,200

b. Delivery of the Final evaluation report and implementation of Communications Plan.

A full evaluation report of the project was provided including a suggestion that this sort of project could be worthwhile at other rural based sporting groups. The committee discussions agreed that any group impacted by water restrictions or costs in providing water to sporting grounds would benefit from such projects. It was also agreed this type of project would best suit football/cricket clubs in the Wimmera & Mallee or regional areas with access to a grain receival site. There are over 90 Graincorp sites in Victoria alone, locations and contact numbers can be found on the web at: <http://www.graincorp.com.au/contactus/Pages/SouthernDivision.aspx>. Distance between collection point and sports ground may prove to be an issue, but in general, most would be within a 1 - 2 km distance.

Sport or Football Clubs located in proximity to a Graincorp Silo Site	Graincorp Silo Site
Hopetoun Football Club	Hopetoun
Jeparit-Rainbow Football Club	Jeparit & Rainbow
Ouyen United Football Club	Ouyen
Woomelang Lascelles Football Club	Woomelang
Wycheproof Narraport Football Club	Wycheproof
Bridgewater Football Netball Club	Bridgewater
Quambatook Football Club	Quambatook
Ultima Football Netball Club	Ultima
Swan Hill Football Club	Swan Hill
Birchip Watchem Football Club	Birchip
Horsham Football & Netball Clubs Inc.	Horsham
Horsham Saints Football Club	Horsham
Horsham United Football & Netball Club	Horsham
Robinvale Football Netball Club	Robinvale
Charlton Football Club	Charlton
Donald Football Club	Donald
St. Arnaud Football Club	St. Arnaud
Lake Boga Football Club	Lake Boga
Warrack Eagles Football & Netball Club Inc	Warracknabeal

A range of communication activities were conducted as outlined in the approved Communications Plan. This involved a community BBQ and tour of the facilities that were provided, where around 25 locals outside the committee were in attendance, including the attendance of the local mayor, around 42 people in total attended. It also involved communicating what we had done to the secretary of the Mallee Football League and the operations manager of the Victorian Country Football League, outlining the possible opportunity of undertaking a similar project that could be explored by other communities and local football clubs, to provide supplementary water for their sporting facilities, and a copy of a power point

presentation (Refer Appendix 1) we put together was also sent to these representatives. As yet we have not received any feedback but we are confident there will also be increased interest with the project from other clubs once the 2009 football season commences.

4. Results Achieved

This project has been completed and it is estimated to supply 3.0 – 3.5 ML of water annually. It was estimated that the bowling club required 936 KL (36,000 L per week for 26 weeks). The football ground required 1,170 KL (45,000 L per week for the 26 week long season that these clubs operate). This project will meet the 2.1 ML supply requirements of water to the sporting facilities in Berrillock and possibly allow for some expansion of water use at the football ground.

The economic benefits of this project are the use of collected runoff water offsetting the running cost of community resources. It is estimated that we will be able to utilise 3.0 - 3.5 mega litres of water that has a cost of \$2,800.

This calculation is based on a 50% efficiency in capturing, runoff from 2 HA Graincorp site, from an average annual rainfall of 350mm. (Not all rainfall makes it to the collection dam, it was estimated that around half is absorbed into the soil during normal rainfall events). Water currently costs \$800 per ML.

The environmental benefits are the maintenance of an open water source for native birdlife utilisation, which is becoming a serious environmental concern with the Wimmera Mallee pipeline resulting in farm dams no longer meeting this need. It will also allow the 3.5ML of water saved to be returned to the Murray River system, which could be allocated to environmental flows.

The social benefits are numerous, but mainly allowing the continuation of 2 key community resources, namely the Berrillock Bowling Club and the Berrillock Recreation Reserve which allows football to be played in our local community. Both of these sporting icons are key fixtures to the township and current water restrictions make the maintenance of a safe playing surface for football near impossible in the current climate. There may also be a possibility of increasing the number of football games played in Berrillock each season as other clubs are unable to maintain their grounds. It has been estimated by the treasurer of the football club that each home game can return around \$3,000 into the local community.

The long term costs should be limited to annual pump servicing (estimated at \$200 - 300 per year) and general repairs and maintenance on pipe works (estimated to be less than \$100 per year). Both costs are expected to be met by the recreation reserve committee.

There should be no negative impacts from this project. The positives will be measured in the ongoing success of these local sporting bodies. Advertising and promotion of the new equipment will help to maximise the positive benefits of this project.

5. Issues Arising

No major issues have occurred during the conduction of this project. It was coordinated and implemented by the Berrillock Recreation Reserve Committee, a group of local people that

has been responsible for the implementation of various community based activities and projects for many years. This group has plenty of experience in project implementation and the major issue is the coordination of volunteer people to conduct the works. This was reasonably straightforward and dates were planned in advanced to ensure adequate numbers were at hand.

Selecting the correct solar pump was something that no committee members were able to do, however a knowledgeable local supplier was able to supply the details and equipment that was required and this has proved to be a successful outcome as the equipment we purchased is quite adequate for the job at hand.

6. Conclusion

The project we have undertaken in conjunction with the Smart Water Fund has helped secure water for the Berriwillock community, to enable home football games to be played during periods of water restrictions by allowing the watering of our football ground adequately. The oval is the home ground for the Sea Lake Nandaly Tigers, in the Mallee Football League. It also allows us to provide adequate water to the Berriwillock Bowling Club to water their greens at no cost; this is a major cost saving for the club that provides sporting facilities for community use. This will help ensure the longevity of both clubs.

A \$15,000 project was undertaken to collect runoff storm water in town that was going to waste, we anticipate that we will be able to collect 3.5 Mega Litres of water that we will use to water the recreation reserve football oval, so that we can provide a ground in a state required for football, with adequate grass cover and softness underfoot.

The grant we received was under the Smart Water Fund, which provided \$11,118.50 (incl GST) towards the project's cost of capital items. We contributed \$4,200.00 in kind as labour and machinery hire to install the project.

The Berriwillock Recreation Reserve committee would like to recommend to all community groups the benefits of the project, and recommend other community groups and football clubs consider contacting Smart Water to assist them in instigating some water saving projects.

Details of project funding requirements and contacts can be obtained from;

www.smartwater.com.au Email to info@smartwater.com.au or

Free call to 1800 882432

I would recommend Smart Water projects as they are easy to deal with and can help with any information you may need.

We have a power point presentation (2MB) showing the works we undertook that is available by contacting me by email on michael.dmam@gmail.com

The Berriwillock Recreation Reserve would like to acknowledge the provision of the waste water and assistance provided by Graincorp in Berriwillock, this project would not have been possible without their contribution to the local community.

The committee would also like to thank all the local volunteers that contributed their time and equipment to make this project successful.