

# Ridge Park Managed Aquifer Recharge Scheme

The City of Unley is planning a Managed Aquifer Recharge (MAR) scheme utilising Glen Osmond Creek stormwater flows at Ridge Park, Myrtle Bank.

This is part of the Waterproofing the East project and jointly funded by the Australian Government's *Water for the Future* initiative and the City of Unley. It is an important project, which will protect the City's valuable urban forest, parks and reserves during times of drought and water restrictions.

The Brownhill Keswick Creek Draft Stormwater Management Plan specifies the need to detain the potential flow of 1:100 year Glen Osmond Creek flood waters at Ridge Park. The proposed infrastructure provides an opportunity to

improve the output of the City of Unley's MAR scheme from 20ML to 60 ML, by aligning the flood mitigation initiatives identified in this plan with the water harvesting requirements of the MAR scheme.

## The two projects

### Brownhill Keswick Creek Draft Stormwater Management Plan

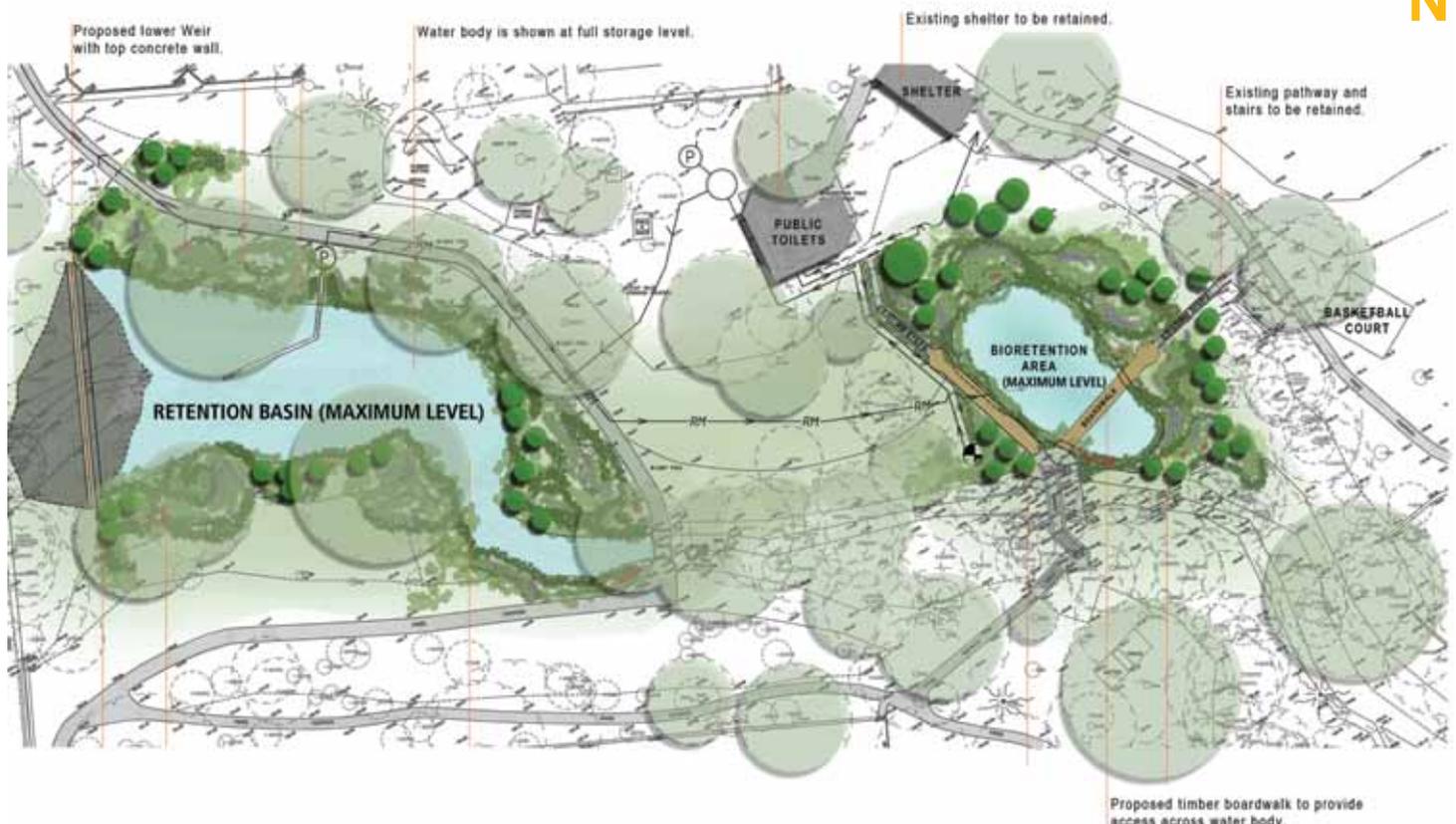
A Draft Stormwater Management Plan has been prepared for the Brownhill Keswick Creek (BHKC) catchment. The catchment is made up of the Brownhill, Keswick, Glen Osmond and Parklands Creeks that flow through the Cities of

Adelaide, Burnside, Mitcham, Unley and West Torrens. In Ridge Park, the catchment involves Glen Osmond Creek.

The principal objective of the Draft Stormwater Management Plan is to reduce the impact of major flooding across the catchment.

Members of the public are invited to provide feedback on the Draft Plan from 31 October to 12 December 2011.

Currently, a one in a hundred year storm in the Brownhill Keswick Creek catchment would affect up to 7 000 properties and cause potential damages of about \$178 million.



For further  
information  
contact:

**City of Unley**  
181 Unley Road  
Unley SA 5061

Phone: 08 8372 5111  
[unley.sa.gov.au](http://unley.sa.gov.au)

This figure does not account for the personal trauma suffered by flood victims, insurance issues and damage to the environment and historic fabric of the City.

One of the initiatives of the Draft Stormwater Management Plan is the development of a **detention system in Glen Osmond Creek at Ridge Park**. This will slow down the flow of stormwater and reduce the potential for flooding.

### Ridge Park Managed Aquifer Recharge (MAR)

The City of Unley has confirmed the hydrogeology of Ridge Park is suitable for storing water in the underground aquifer for reuse through a MAR process. The City of Unley has entered into a funding agreement with the Australian Government under the *Water for the Future* initiative to plan and build a MAR scheme at Ridge Park as part of the first round of federal funding. Negotiations are currently underway with the Government to provide an extensive pipe distribution system of the MAR water to many of the City of Unley's parks and reserves.

### What is Managed Aquifer Recharge (MAR)?

Managed Aquifer Recharge is the process of adding a water source such as recycled stormwater to aquifers under controlled conditions, for withdrawal at a later date.

### Water quality of a MAR

Wherever recycled water is used, strict Environmental Protection Agency (EPA) water quality standards must be met prior to pumping treated water into the aquifer.



Artist's impression of the upper bioretention area showing the maximum level of water.

Department for Water also sets robust licensing requirements and guidelines for water quality, quantity and management for when water is drawn out of the aquifer for irrigation and other purposes.

### Project opportunities

With the proposed development of the BHKC detention system in Ridge Park, the City of Unley has the opportunity to utilise the retention system as a stormwater harvesting point. This will increase the MAR scheme from the planned 20ML scheme to a 60ML scheme.

Benefits include:

- Ridge Park is located at the highest location in the city. This allows the water to be transported to other parks included in the scheme via a gravity system, thus greatly reducing energy and pumping infrastructure requirements for water distribution.
- There will be more water availability via this scheme during high need times such as the summer months, droughts and when water restriction periods are in place for parks, reserves and street trees.

- By aligning the flood mitigation initiative identified in the Brownhill Keswick Creek Draft Stormwater Management Plan with the water harvesting requirements of the MAR scheme there is the ability to reduce the amount of infrastructure at Ridge Park.
- Reduction in mains water costs for irrigation.

### When will the City of Unley undertake community consultation?

The City of Unley will undertake consultation with the community on the Ridge Park MAR project from **6 February - 2 March 2012**. This consultation will ask whether the community would prefer a wet or dry retention system at Ridge Park, the type of treatment options for the harvested stormwater (natural, mechanical or a mix of both) as well as what opportunities this project can provide for the future use and amenity of the park.



CITY OF



MITCHAM



For further  
information  
contact:

**City of Unley**  
181 Unley Road  
Unley SA 5061

Phone: 08 8372 5111  
[unley.sa.gov.au](http://unley.sa.gov.au)

