

BROWN HILL KESWICK CREEK STORMWATER PROJECT

Funding crucial for \$140 million flood plan to protect Adelaide homes

Background

Brown Hill, Keswick, Glen Osmond and Parklands Creeks are major stormwater drainage watercourses flowing across metropolitan Adelaide.

Together they drain a catchment area of 69 square kilometres extending from the Adelaide Hills in the east to Adelaide Airport in the west. The combined catchment area is contained within the local government areas of Adelaide, Burnside, Mitcham, Unley and West Torrens which are home to more than 200,000 residents.

The creeks have a history of flooding events and a low standard of flood protection, and therefore local homes and properties continue to be put at serious flood risk.

The five catchment councils have collaborated to develop a stormwater management plan (SMP) to improve the standard of flood protection for homes, businesses and public facilities across the catchment.

“Implementing an effective stormwater management strategy is crucial to improve the standard of flood protection for homes, businesses and public facilities across the region.”

The Plan

The SMP details construction of a number of flood mitigation works across the catchment, as well as non-infrastructure measures to help reduce the impact of major flooding for more than 2,000 properties in a one in 100 year storm event. For details on these planned works, visit www.bhkcstormwater.com.au.

The SMP also identifies important environmental and community benefits, including:

- Improved quality of stormwater discharge into marine receiving waters;
- Beneficial re-use of stormwater, particularly for greening of urban open space areas;
- Creek rehabilitation and protection of biodiversity; and
- Improved recreational amenity in open space areas traversed by watercourses.

The works present urban renewal opportunities such that communities will be able to better use the land corridors through which stormwater is designed to be conveyed (i.e. linear parks, bike and walking trails, and wetlands etc).

Current situation

Currently, a large flood in the catchment of up to one in 100 years frequency (i.e. equivalent to a 1% chance of occurring in any year) would affect over 2,000 properties and cause an estimated \$130 million in damages.

And, that damage cost does not account for the trauma, disruption to normal living, and loss of or damage to personal effects suffered by people affected by flooding, as well as other intangible costs. The addition of intangible costs could result in total community damages of over \$250 million.

The SMP for the catchment was approved by the Stormwater Management Authority in February 2017 and, in February 2018, the catchment councils, under provisions of the Local Government Act, established a regional subsidiary (special purpose corporate entity) to be responsible for implementing the Plan.

To date, about \$9 million of design and construction works have been completed.

Shovel ready works

Three elements of the project totalling an estimated \$20 million are on track to be constructed over the next three years (2019-2021).

Designs for stormwater detention basins in the South Park Lands (City of Adelaide) are well advanced. The Victoria Park basin will incorporate an environmentally significant wetland, while another basin will form an open space element of the major inner city Glenside residential development currently underway.

Design is also underway for upgrading a section of Brown Hill Creek adjacent to a recently approved major residential development in Everard Park (City of Unley). Creek flow will be transferred through an underground culvert, enabling creation of an open space walkway / bikeway corridor to enhance the amenity and connectivity of the area, incorporating the new development.

Both the South Park Lands and Everard Park projects are on track for commencement of construction in mid-2019.

In December 2018, construction works commenced to increase the stormwater flow capacity of Brown Hill Creek through the City of Mitcham's Hawthorn Reserve. The Hawthorn Reserve project, which has won the support of the Mitcham community, will be integrated with nearby new community facilities and environmentally sensitive park improvements. And, like the South Park Lands project, it has been designed for interactive enjoyment by people, as well as serving a critical flood mitigation role.

Following a promising start, it is now critical to maintain momentum so that project works don't stall and to avoid communities becoming frustrated at lack of progress. An injection of early federal funding support would ensure these shovel ready works set the pace for the timely rollout of other SMP works.

What could happen if nothing more is done?

The potential adverse impacts of ignoring the region's high flood risk and doing nothing are significant.

In addition to damage to thousands of homes and commercial properties, a major flood event could seriously impact Adelaide Airport and interstate rail freight lines which are located in

the catchment floodplain. Disruption to these facilities would lead to significant adverse economic impacts for South Australia.

Ashford Hospital, one of the state's major health facilities, is also in a vulnerable location on the floodplain within the Brown Hill Keswick Creek catchment area.

To that end, key stakeholders including Adelaide Airport Limited, Australian Rail Track Corporation Limited and the South Australian Fire and Emergency Services Commission have indicated their in-principle support for the SMP.

Requirements

The overriding objective of the SMP is to significantly reduce the flooding risk to thousands of homes and businesses across metropolitan Adelaide.

To achieve this, funding assistance is urgently required to implement the proposed flood mitigation works, including shovel ready works as outlined above.

The total project cost is approximately \$140 million and the SMP proposes this will be evenly shared between the three spheres of government – local, state and federal. The South Australian Government has committed 50% of the net of total cost less any federal contribution, but spread over an unsatisfactorily long span of 20 years.

The five catchment councils have already agreed on their apportionments for the local government share of the cost, but 50% of the total cost, with potentially additional borrowing costs if the works are to be constructed within a reasonable timeframe, is too much for local government to shoulder.

In the past, large-scale flood mitigation projects around Australia have been given funding support by the Australian Government. The Brown Hill Keswick Creek Stormwater Project is now at a stage where the required compelling and rigorous justification has been developed to enable the Federal Government to consider special funding for construction.

Ultimately, funding support from the Federal Government is critical for the SMP to be fully implemented in order to mitigate flood risks and protect homes and properties across the catchment.

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For more information about the Brown Hill Keswick Creek Stormwater Project, visit www.bhkcstormwater.com.au or contact Project Director Michael Salkeld on (08) 8372 5473 or msalkeld@unley.sa.gov.au.