

A Summary Of Our Case

1. The Dam is Unnecessary:

- The dam is only a **small part** of a much larger Draft Stormwater Management Plan (see figure 25: 2011 Draft Stormwater Management Plan).
- 92% of the costed works or \$122million out of \$133million do not involve the dam (see page vi: Draft Plan).
- **Only 20% of the physical catchment for stormwater is above the dam site.** 80% of the catchment comprises Parklands Creek, Glen Osmond Creek, Keswick Creek and the Urban Brownhill Creek catchment. (See page 8:Draft Plan).
- **Viable alternatives** to the proposed dam have been identified. Therefore the dam is **not essential to the plan.** These alternatives would provide similar protection against flooding in both long term and short term rain events, up to and including the 100 year ARI (average recurrence interval). **This is a better approach than the proposed dam.**

Read more: 2011 Draft Stormwater Management Plan (full plan) and Preliminary Assessment- Enhancement of Flood Mitigation Options. Both are available at www.mitchamcouncil.sa.gov.au

2. It is Unacceptable to Damage the Environment and Heritage of Brownhill Creek by Constructing this Dam.

- The dam site is right in **the heart of Brownhill Creek Recreation Park**, which is designated as a **Heritage Site** in the 2003 Department for Environment and Heritage Brownhill Creek Recreation Park Management Plan. In the foreword to the plan, John Hill (then Minister for Environment and Conservation), states: **“Brownhill Creek Recreation Park has long been cherished by South Australians and as one our states oldest parks, it is rich with cultural heritage”.**
- The dam site is classified as a **Natural Monument** under the International Union for the Conservation of Nature, recognizing its environmental and historical significance. On page six of the DEH plan it is stated that “management of BHC Recreation Park will be consistent with the... IUCN Category 3 Management Objectives”. These objectives are strict and aim to protect the site.
- Given that there are alternative flood mitigation options to the dam, then the key hydrology objectives on page 17 of the BHC Park Management Plan, should be followed: **“Restore and maintain natural hydrology as far as possible”.**

- It makes no sense to permanently ruin one of the last original creek lines in the Adelaide Hills for an *unnecessary dam*.

Read more: Friends of Brownhill Creek submission paper on the Environmental and Heritage Aspects of the Proposed Dam in Brownhill Creek.

3. Preserve the Integrity of Brownhill Creek Recreation Park:

- *The open space and aesthetics of this special park*, set aside for the people of South Australia in 1841 by Governor Grey and only 10kms from the city centre, are valued by our local community, the wider community, along with interstate and overseas visitors.
- *Politicians should heed their call to protect this park.*
- For 170 years Brownhill Creek has been a reminder of *Governor Grey's successful long-term vision*. Given that there are viable options to the proposed dam, will our current politicians be remembered forever for their short-term political thinking, which led to the destruction of Brownhill Creek Recreation Park, or for their long term vision which created *a win for the environment and a win for those currently at risk from flooding*.

Read More: No Dam Flyer.

4. Dam Design and Costing

- The exact design of the proposed dam in Brownhill Creek, including the type of construction and the environmental and visual impacts, will not be considered until after the dam is approved! Even a geo-technical survey (earthquake risk?) will not be carried out until after approval is given!
- We do know that the spillway height is 12 metres. This means that the sidewalls of the dam will be at least 3 metres above this height (freeboard) in order to direct water over the spillway, resulting in an overall height of at least 15 metres.
- The engineering and design company GHD involved with previous dam proposals in Brownhill Creek, have stated: *"A spillway with three metres of freeboard has been assumed to provide the required spillway capacity". (Preliminary Assessment of Detention Basins on Brownhill Creek 2008 GHD). That would confirm the overall height of the dam at 15 metres.*

- ***The footprint of the dam will span 100 metres or more across the valley*** (Draft Stormwater Management Plan figure 27) and most likely extend 60 metres upstream and downstream (120 metres toe to toe).
- Under ANCOLD guidelines (Australian National Committee on Large Dams) the dam would be rated ***Extreme Hazard***, because of the potential threat to lives below the dam if it failed (it is sited above a caravan park and residential suburb). The scale and complexity of the dam have been understated.
- ***This will not be a small earth dam blending into the environment.***
- Worley Parsons suggest that it could be a concrete core structure with large rock or mattresses of wire mesh filled with rock on its downstream side. The upstream side would most likely be covered in riprap (small rock boulders).
- ***The dam is not designed to hold water for long periods*** and a 1.5 metre diameter outlet pipe at the base of the dam will let water through at a flow rate close to that of the 2005 floods. Significant works will be required below the outlet.
- A Cofferdam will be built upstream of the main dam to aid construction and works yards will be built. It has been assumed in the Draft Plan that material for the dam wall will be quarried from the valley.
- Security fencing and signage will add to the visual impact, with this dam ***permanently scarring Brownhill Creek Recreation Park.***
- A report has been released demonstrating that ***the dam has been under costed by perhaps 40% or more.*** This reduces the economic viability of the dam and ***improves the economic viability of the alternatives.***

Read More: Submission Papers on Dam Costing and Design.

5. Public Consultation.

- The Brownhill Keswick Creek Stormwater Management Plan Community Consultation Report states,
“Analysis of the feedback forms received showed that the flood control dam at Brownhill Creek Recreation Park was the least supported component of the Draft Plan overall” (Executive Summary page vi).
- In the Mitcham Council area, where the proposed dam is to be built, 74% were opposed to the dam.
- If the ***submitted*** No Dam in Brownhill Creek petition of 4,010 signatories (valid stake holders: users of the Park) had been included in the total

return figures, then the overall result would have been **76% against the dam** and 21% pro dam.

- The Summary Page of the Consultation Report is misleading because it does not explain the details of the mail out, which led to a skewed pro dam bias. 26,539 summary and feedback forms were delivered, mainly to West Torrens (16,861) and Unley (6,157). Mitcham residents only received 1,055. Despite this a weak response of only 1,241 pro dam was received, out of 26,539 delivered, or 4.7%.
- According to Mitcham Mayor, Michael Picton: “ The community is keen to move on with the majority of the proposed project but has major concerns about the construction of a dam, in particular the environmental impact that a dam will have on Brownhill Creek Recreation Park”.
- Given that the supposed aim of a public consultation is to gauge community opinion, then clearly the Draft Plan should be amended to exclude the proposed dam. Viable alternatives could then be implemented instead.

Read more: Mitcham Council Media Release: “ Consultation on Brownhill Keswick Creek Stormwater Management Plan Confirms Community Opposition To Dam”.

No Dam in Brownhill Creek Action Group