

# 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 page V1 of DSM Plan).
- 93% of the costed works or \$122million out of \$133million do not involve the dam.
- **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 DSM Plan).
- **Viable alternatives** to the proposals in the Draft Stormwater Management Plan have been identified which **do not require a dam.** 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 the 100 year ARI (average recurrence interval). **This is a better approach than the proposed dam. The dam does not provide protection for short term rain events and provides very little protection for long term rain events up to the level of a 2005 flood.**

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](http://www.mitchamcouncil.sa.gov.au) or in the Get The Facts section on our website at [www.brownhillcreek.org](http://www.brownhillcreek.org)

## 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.** This 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 of 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. In the Get The Facts section on our website at [www.brownhillcreek.org](http://www.brownhillcreek.org)*

### **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. See the data analysis of our interim petition on our website. **This interim petition has over 5500 signatures**. These petitioners are valid stakeholders in any decision relating to the proposed dam and reside across council areas.
- ***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 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. In the Get The Facts section on our website at [www.brownhillcreek.org](http://www.brownhillcreek.org)*

### **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!
- We do know that the spillway height is 12 metres. This means that the sidewalls of the dam will be at least 2 to 3 metres above this height (freeboard) in order to direct water over the spillway, resulting in an overall height of at least 14 to 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 make the crest height of the dam 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.
- Under ANCOLD guidelines (Australian National Committee on Large Dams) the dam would be rated ***Extreme Hazard***, because of the population at risk (PAR) below the dam if it failed. The dam is sited above a caravan park and residential suburbs. These regulations apply even if the dam is not designed to permanently hold water.
- The dam will have to be designed to cope with a Probable Maximum Flood (PMF) which is, according to Worley Parsons, “several times larger than a 100 year ARI flood” (page 93, 2011 Draft Stormwater Management Plan). This has design implications which will add to the scale, impact and cost of the dam. The public needed to be clearly informed of this during the Public Consultation.
- ***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 pipe at the base of the dam will let water through at a flow rate close to that of the 2005 floods.
- 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. In our Get The Facts section on our website at [www.brownhillcreek.org](http://www.brownhillcreek.org)

No Dam in Brownhill Creek Action Group