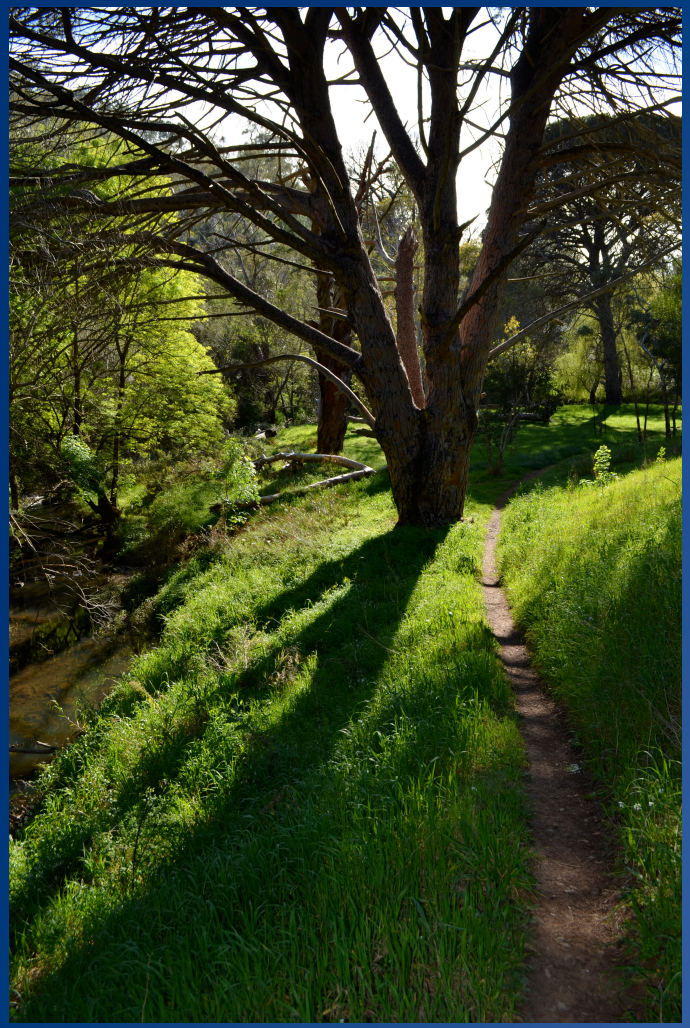


Flood Mitigation Without a Dam

Ron Bellchambers, spokesperson for

No Dam in Brownhill Creek Action Group

The Proposed Dam is a Community Issue

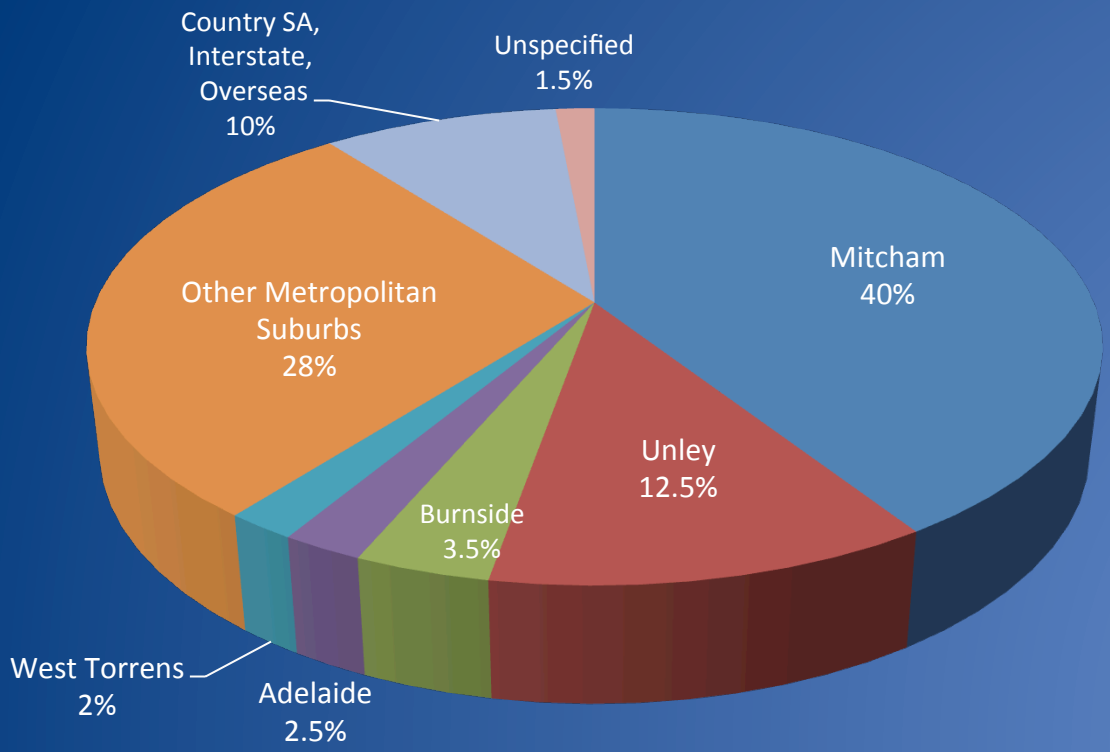
- Conservation Council SA
- The Kaurna Nation Cultural Heritage Association
- Community Alliance SA
- The Friends of Brownhill Creek
- Mitcham Historical Society
- Nature Foundation SA
- Local Government
- Numerous small community groups
- No Dam Petition with over 10,000 signatures

No Dam in Brownhill Creek Petition 2011/2014 Data Analysis

Total values of signatories to the *No Dam in Brownhill Creek* Petition divided by residential grouping:

City of Mitcham	City of Unley	City of Burnside	Adelaide City Council	City of West Torrens	Other suburbs	Country SA; interstate; overseas	Unspecified address	TOTAL Signatures to the petition
4035	1261	353	252	202	2824	1009	151	10,087

Petition Signatories by Council Region

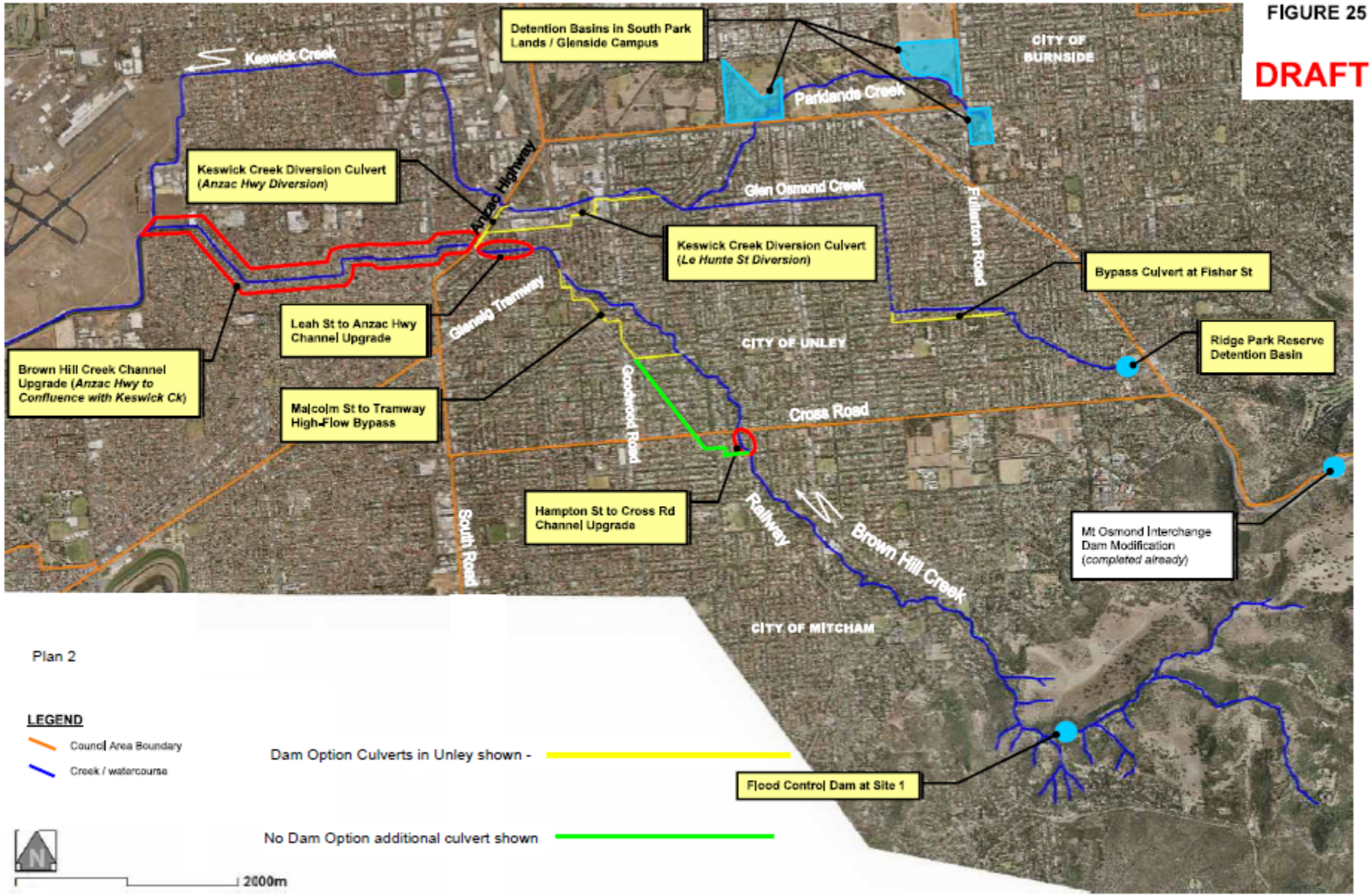


Catchment Council Agreement

- Due to community opposition to the dam the five councils (Adelaide, Burnside, Mitcham, Unley and West Torrens) have agreed to a new plan.
- The $150 million, 2012 Brownhill Keswick Creek Stormwater Management Plan, is in two parts.
- Part A contains the bulk of the works (80% of the value of works) and can proceed now.
- Part B contains the Brownhill Creek catchment works above the Glenelg Tramway, including a possible dam in the valley.
- Part B works will be re-assessed over 12 months and the councils have *"committed to a preference to pursue a feasible and whole of catchment, community supported, No Dam solution"*.

FIGURE 25

DRAFT



Plan 2

LEGEND

Council Area Boundary

Creek / watercourse

Dam Option Culverts in Unley shown -

No Dam Option additional culvert shown

2000m

WorleyParsons
resources & energy

Rp301015-02356 – Brown Hill Keswick Creek SMP
fg301015-02356-110803-fig_SMPworks.doc

STORMWATER MANAGEMENT PLAN
STRUCTURAL WORKS COMPONENTS

Recommended Stormwater Management Strategies

Flood Mitigation Works

COMPONENT	CAPITAL COST *(2012 $ M)*		
	2011 DRAFT SMP	OPTION 3 BYPASS CULVERT	OPTION 3A BYPASS CULVERT
Part A Works			
Detention basins in the South Park Lands / Glenside Campus	$17.6		
Modify Mt Osmond Interchange Dam outlet.	Completed in 2008		
Inline flood detention system in Ridge Park Reserve and stream rehabilitation	$1.1		
Bypass Culvert at Fisher Street	$4.5		
Keswick Creek to Brown Hill Creek Diversions at Le Hunte Street and Anzac Highway	$31.9		
Brown Hill Creek Channel Upgrades between Forestville Reserve and Anzac Highway	$14.9		
Brown Hill Creek Channel Upgrade from Anzac Highway to the Confluence with Keswick Creek	$49.1		
Sub-Total Cost	$119.1	$119.1	$119.1
Part B Works			
Flood Control Dam at Brown Hill Creek Recreation Reserve	$10.8	-	-
Minor Channel Works in Mitcham	$0.8	$2.1	$2.1
Channel upgrade between Hampton Street & Cross Road	$2.8	$2.8	$2.8
Bypass Culvert between Malcolm Street and Forestville Reserve	$14.1	$19.0	$18.1
Bypass Culvert between Hampton Street and Malcolm Street	-	$11.0	$8.5
Sub-Total Cost	$28.5	$34.9	$31.5
TOTAL CAPITAL COST	**$147.6**	**$154.0**	**$150.6**

A Dam is Not Required

Upper Brownhill Creek Channel Upgrade is the preferred option or No Dam Option 3A. Option 3A involves:

- $2.1million channel works in the Mitcham area.
- One additional diversion culvert, 1,500m in length, from Hampton Street in Hawthorn to Malcolm Street in Millswood.
- Note that with a dam, there will be 5,270m of diversion culverts in Unley.
- 860m of the No Dam culvert length will be in Unley, but using the rail corridor, not the streets of Unley.
- Worley Parsons found that it is feasible.
- Should be cost neutral when the dam is properly costed. Study underway.
- With downstream works expanded, the dam is not required. The system will accommodate the flow from both short and long duration rain events.

Dam Provides No Protection for Short Duration Rain Events

TABLE 9 FLOW REDUCTION AFFORDED BY SMALLER DAM AT SITE 1

LOCATION	PEAK FLOW (m^3/s)			
	BASE CASE *(no dams)*		DAM AT SITE 1 *(12 m height to spillway)*	
	36 Hour Storm	90 Minute Storm	36 Hour Storm	90 Minute Storm
Scotch College	26.1	3.7	19.5	3.7
Belair Road	30.2	18.7	21.7	18.7
Cross Road	36.4	27.8	27.7	27.8
Goodwood Road	37.1	29.4	28.2	29.4
Anzac Highway	38.9	33.9	29.7	33.9

Dam Still a Risk

- **The dam is still being politically driven.**
- **The development industry** sees the dam as a panacea to protect large scale urban infill and increased commercial development in the West Torrens council area. 30 Year Plan.
- **There is a very strong push to ensure that a dam is built at site 1 (Seven Pines) or site 2 (Ellisons Gully).**
- **A channel upgrade solution for upper Brownhill Creek might finally bring all councils, communities and community groups together to complete the stormwater plan. This would potentially mean no dam and no large hi-speed diversion culverts in upper Brownhill Creek (Unley).**

What Type of Dam?

- Not a small earth dam blending into the environment.
- Extreme Hazard dam ANCOLD Guidelines
- Concrete
- Design/ Scale/ Cost
- Impact on the community

Heritage and Environment at Risk of Destruction

Site 1: *Seven Pines*

- Brownhill Creek Recreation Park
- Dam tombstone
- Kaurna and Colonial Heritage site
- Natural Monument (IUCN)
- Threatened species
- Significant Trees (State and National)
- National Trust (At Risk Register)
- Last section of state protected creek line
- A community resource
- Gateway to Yurrebilla

Site 2: *Ellisons Gully*

- 2006 Master Plan site
- Out of Park. But!
- Historical walking trail (Mitcham Water Works)
- Important colonial market gardening and mining history.

What Can We Do?

- We are the custodians!
- Inform and mobilize the community.
- Keep adding to the huge community No Dam petition.
- Help provide financial, intellectual and logistical support to the No Dam campaign.
- Knowledge is power (keep improving our information leaflets, website and videos).
- Be there to support our deputations and campaign events.
- Together we can save the heritage and environment of Brownhill Creek Valley/ Wirraparinga and Ellisons Gully. We can have **Flood Mitigation Without a Dam!**

<u>We have benefited from past legacies.</u>

<u>What legacy do we want to leave for future generations?</u>