

Wirraparinga Project Annual Progress Report 2021 - 2022

Project details

Name of organisation: Brownhill Creek Association Incorporated (BCA)

Project title: Wirraparinga Project

Full amount of the 2021 -22 Grant awarded to your project: \$ 20,000 (excluding GST)

Project Report

1. Describe the outcomes and key achievements of your project. Photos can be attached.

The project has again made considerable progress during 2021/22. Through a combination of BCA and the Friends of Brownhill Creek volunteer time, inputs from schools, community groups, local residents, contractors and DEW / Green Adelaide staff, the Park is being rejuvenated with selected area control of major weed species along with selected contractor weed slashing, invasive tree removal and herbicide spraying.

The activity in the Park has resulted in a very significant upsurge in visitor numbers such that parking areas have been overflowing particularly during weekends. The impact of COVID and improved amenity has contributed to a lasting increase in the number of regular walkers/runners as well as occasional visitors. BCA and the Friends of Brownhill Creek (FoBC) continue to attract additional financial and in-kind support from other community groups. These included Mitcham Historical Society, Mitcham Rotary Club and benefactors such as the Suzanne Elliott Charitable Trust.

2. What are the outputs of your project for this period?

Task no.	Description & technique	Outputs 2021/2022
1	Maintenance of 5 “stepping stone” Restoration sites. The stepping stone Restoration sites are: <ol style="list-style-type: none">1. Entrance (Map 2 – Location 3)2. White Bridge Downstream (Map 2 – Location 14)3. White Bridge Upstream (Map 2 – Location 17)4. Demo (Map 2 – Location 24)	<ol style="list-style-type: none">1. Entrance. Halo spraying, slashing around new plantings and follow up drill and fill of ash tree stumps. EBS contractor works (see Inv R220308 and photos Ha and Hb). Extensive volunteer work and input from 5 local schools and BCA involving hand weeding, planting and education

Task no.	Description & technique	Outputs 2021/2022
	<p>5. Manure Pits (Map 2 – Location 29)</p> <p>Works will include:</p> <ul style="list-style-type: none"> • Periodic removal of exotic trees and woody weeds (e.g. olive, ash, hawthorn, blackberry, peppercorn, allepo pine) in and at the edges of the sites using “cut and swab”, “drill and fill” and selective herbicide spraying as appropriate. FoBC will systematically monitor and treat woody weeds in the sites. Contract services for selective spraying e.g. for invasive blackberry and ivy will be employed on an as needed basis. • FoBC will provide herbaceous weed (e.g. kikuyu, rice grass, control in the Restoration sites by brush cutting and halo herbicide spraying around replant vegetation. Hand pulling broom and boneseed when seasonally appropriate. • In particular: <ul style="list-style-type: none"> ○ 1. Entrance – remove and poison emerging ash trees within and close to the creek line. Consult with MCC to encourage control of suckering elm trees as part of the Brownhill Keswick Creek stormwater management plan. ○ 2. White Bridge Downstream – brush cut around replanted trees, remove tree guards as appropriate ○ 3. White Bridge Upstream – brush cut and halo spray new plantings, remove and collect tree guards as appropriate. ○ 4. Demo – brush cut only on road side location around tree plantings ○ 5. Manure Pits – contract for mulching dead, fallen acacias and clearing, herbicide spraying of African ivy upstream of manure pits. 	<p>days (see photos O, P, Q, R, V, W, Xa, Xb, Ya, Yb, Yc, Za and Zb). Consultation with MCC is ongoing about weed control on their land</p> <ol style="list-style-type: none"> 2. White Bridge Downstream. Brush cutting around replanted trees for weed control was done by FoBC, BCA and ECS contractors (Part of INV 1858. See photo D). On the northern hillside below and adjacent to The White Bridge extensive drill and fill/basal bark spraying was undertaken by EBS contractors (see Invoices R211206 and part of Inv R220308, along with photos E, F & G). 3. White Bridge Upstream. Maintenance of the replanting area. The 0.75ha area immediately upstream of the White Bridge, was cleared of woody weed species July/August 2017 with further site preparation in the first half of 2018. Seedling planting occurred in August 2018 and May 2019. Selected weeding, slashing and spraying has occurred during 2021-2022 with working bees from FoBC, local residents, several school classes and Urrbrae TAFE (organised by Ron Belchambers). Tree guards from established plants have been removed and taken for recycling. Growth of most replant species has been exceptional. Slashing and spraying undertaken by EBS (see Inv R210806 & Inv R211118). Urrbrae TAFE students worked at this site (see photos S and T). 4. Demo site – brush cutting around new plantings on the roadside area has been done during one FoBC working bee. 5. Manure Pits. The area upstream of the Manure Pits that had been replanted approximately 15 years ago. The Yurrebilla trail upstream of the footbridge, along with the Mercedes College revegetation site, was overtaken by invasive weed species. Soursob Bob contractors sprayed Vinca, Cape and Irish Ivy, Madeira Vine, Cape Broom, Blackberry and Thistles, while chainsawing fallen trees to improve access (see Inv BHC2204). Ron and Wayne did brushcutting and DEW slashed the track.

Task no.	Description & technique	Outputs 2021/2022
	<ul style="list-style-type: none"> Protection of significant trees – park entrance “shelter tree” and Monarch of the Glen: <ul style="list-style-type: none"> During 2019-20 significant removal of exotic trees (ash and willow) was undertaken in the Creek line around the Shelter tree and another significant red gum just downstream from it. Work to protect the root zone of these two significant trees is planned. Plant suitable groundcover and low growth endemic species on the flat root zone area of the shelter tree. Explore the possibility of increasing native biodiversity and habitat on the floodplain area immediately adjacent to the Shelter tree. Works to be subject to acceptable, agreed plan and availability of adequate sub-project funds. 	<p>Protection of significant trees – Park entrance Kurna shelter tree, Willawilla Karra Kuu and Monarch of the Glen Kurna Shelter Tree in Brownhill Creek Tourist Park.</p> <p>During 2021/2022 considerable work has been undertaken to protect the Kurna shelter tree at the Park entrance. The Kurna Shelter Tree Project Stage 2 involved further planting within the root zone and along the creek, extensive follow up weed control and the creation of a safe and culturally sensitive viewing area. An interpretive sign with a QR Code link to a webpage was installed and many school and community events held at the site. Community fundraising for this project was matched by DEW and Green Adelaide funded the purchase of native plants and specialist bush care for the restoration of the adjacent creek line. EBS contractors INV R220308 and photos Ha, Hb and Hc.</p> <p>BCA worked closely with DEW to find ways to improve the growing conditions for the Monarch of the Glen. It is pleasing to report that all the time and effort expended in 2021-2022 resulted in the establishment of a tree management plan and an agreement to relocate 3 caravan sites and remediate the root zone. These works will occur in 2022-2023.</p>
2	<p>Woody plant control in Grey Box Woodland (Map 2 – Location 9)</p> <p>Initiate and contract woody weed (primarily olive) control in Grey Box woodland immediately W of the caravan park (sloping land between houses and creek). Contract work in the two previous years has controlled woody weeds close to the pines at Location 9 (Map 2). Additional clearing of exotic competitive vegetation close to several significant Euc. camaldulensis will be contracted.</p> <ul style="list-style-type: none"> The area has been inspected and agreed with Eric de Smit. 	<p>A small amount of work was undertaken by FoBC as follow up in the area of treated woody weed regrowth to the south of the previous work and close to the existing pine plantation area. (Map 2, location 9).</p>
3	<p>Identify and begin gradual Restoration of Southern Brown Bandicoot habitat area. (Map 2 - Location 25)</p> <ul style="list-style-type: none"> An area identified last year was partially cleared, enclosed with high vermin proof fencing and planted with bandicoot preferred species. This area will be maintained with hand weeding and monitored with movement sensor cameras. Data will be entered in the national endangered species log. Monitor blackberry and bracken to ensure open area remains suitable for bandicoot foraging area, not overtaken by blackberry or bracken. Contract spot spraying as needed (target Artichoke Thistle (Spot Spraying Glyphosate), 	<p>A partnership between Dr Jasmin Packer and her BandiBunch team from Adelaide University, BCA, the FoBC and local residents has confirmed the continued presence of a bandicoot breeding colony in the area on the north side of the Creek from Seven Pines (Map 2 location 19 to 26). The grazing exclusion fenced area (Map 2, location 25) was maintained as a refuge with ‘bandicoot bungalows’ being used, Monitoring and careful weed control that avoided the use of herbicides was undertaken. BCA and the FoBC also partnered with Dr Jasmin Packer and her team on a larger Bolstering Bandicoots Project funded by Green Adelaide.</p>

Task no.	Description & technique	Outputs 2021/2022
	Work with DEW/Green Adelaide District Ecologist to continue development of a bandicoot friendly vegetation management plan.	During the 2021/22 financial year the meadow area (Map 2, location 22) was slashed by DEW staff and spot spraying of artichoke weeds was done. Infill native planting was carried out on the advice of ecologists.
4	<p>Local School and TAFE engagement:</p> <p>1. School Restoration Quadrat Sites (3 sites, Map 2 – Locations 4, 17, 31) The BCA Ed and Reveg Committee has established three, 30m x 10m quadrat sites for particular schools to rehabilitate and monitor through locating, describing, planning, planting and maintaining. The aim is for the schools to “own” the Restoration process. The sites are associated with the stepping stone Restoration sites. They are:</p> <ul style="list-style-type: none"> • Scotch College – Entrance (Map 2 – Location 4) • Urrbrae High – White Bridge Upstream (Map 2 – Location 17) • Mercedes College – Manure Pits (Map 2 – Location 31) <p>Schools will monitor the sites with photo-points, weeding is planned along with development of location specific herbarium specimens. Information on plant identification through images and references is being collated and stored on school computing systems. FoBC will provide assistance with site preparation (e.g. brush cutting and spraying for weed control)</p> <p>2. Brownhill Creek Environment Education Day with five schools Annual Environment Education Days involving students from 5 schools (Year 4 to Year 11) are organised by BCA’s Education and Revegetation Committee. Twelve workshops that focus on cultural heritage through soil, water, plants and animals will be presented by students, some teachers and other expert volunteers. There will be Kaurana, DEW and Green Adelaide involvement.</p> <p>3. TAFE student involvement Members of FoBC and BCA will provide input to several TAFE field visits. These are associated with courses on weed and plant control, culture and heritage appreciation, vegetation planning/management and brushcutting/drill and fill.</p>	<p>1. Three sites have been set out. The Scotch College site (Map 2, location 4) has had very successful outcomes this year. Regular weed control, expansion with further planting and a favourable growing season has led to excellent results with strong student participation. The Urrbrae High site (Map 2, location 17) is incorporated into the major planting upstream of the White Bridge. Successful weed control from various schools, volunteers, contractors and Urrbrae TAFE students. The native plants are continuing to grow well. The Mercedes site (Map 2, location 31) was machine mowed in about October 2019. Teacher changes at Mercedes has resulted in limited contact with the site in the last year. More preparatory work (selective herbicide application) before any new planting can occur.</p> <p>2. Environment Education Action Day and Schools’ Planting Day A very successful Environment Action Day was held on Tuesday 19th October 2021 with around 300 students, staff and helpers from 5 schools (Kaurana, Green Adelaide and DEW involvement). In addition a schools’ planting day was held on Monday 20th June 2022 (Kaurana, Green Adelaide and DEW involvement). See photos W, Xa, Xb, Ya, Yb, and Yc.</p> <p>3. TAFE student involvement (see photos S and T). Two groups of TAFE students were engaged with BCA/FoBC members during the year. One group visited the Park to identify and collect specimens of weed species as part of their course. A second group undertaking a course in environmental management visited to learn about restoration works being undertaken and practice brushcutting/drill and fill. A student was casually employed by one of the contractors to carry out woody weed control in the Park and two other students became volunteers.</p>
5	<p>Selected area woody plant control Several areas in the Park will be worked on to reduce the incidence of invasive woody and herbaceous species (olive, ash, hawthorn, aleppo pine, peppercorn, elm, dog rose, willow, broom, boneseed, periwinkle, African ivy):</p>	<ul style="list-style-type: none"> • Significant tree protection – chain sawing of invasive trees in the root zone of significant trees and arbouricide applied by ECS contractors downstream of The White Bridge (see INV 1858, photos A, B and C). SourSob Bob contractors worked on the north side of the creek against the hill (clear ash and olive around Euc.

Task no.	Description & technique	Outputs 2021/2022
	<ul style="list-style-type: none"> • Significant tree protection – clear competing invasive trees (ash and hawthorn) immediately around established Eucalypts next to the trail on the north side of the creek between locations 9 and 16 (Map 2) and on the north side of the creek against the hill (clear ash and olive around Euc. viminalis on hill side) between locations 17 to 26. • Entrance site – maintain replant area including into the creek flat and if opportunity presents clear regrowth trees (cut, swab and basal spray) and bushes (cut and swab) at northern edge of replanting. • Complete the removal of feral trees (olive, pine, broom, ash, and blackberry) between creek and road from 2nd house entrance to Demo site (Map 2, location 23). Advice to be sought re need for blackberry control on this southern side of the creek. Contract spraying will be engaged after quotes obtained. • Maintain riparian area immediately downstream of the Manure Pits (Map 2, location 28), to be selectively slashed (blackberry and periwinkle) and herbicide sprayed. • Clear – (herbicide spray) regrowth olive, hawthorn, boneseed, pine and small poplar in the hillside area on the south side of the Creek from location 21 – 30 (Map 2). 	<p>viminalis on hill side) between locations 17 to 26 (see INV BHC2205, photos I, J and K).</p> <ul style="list-style-type: none"> • Entrance site – Described in 1, 1 above. • Complete the removal of feral trees (olive, pine, broom, ash, and blackberry) between creek and road from 2nd house entrance to Demo site (Map 2, location 23). This was done by FoBC volunteers. • Maintain riparian area immediately downstream of the Manure Pits (Map 2, location 28). Described in 1, 5 above. • Clear – (herbicide spray) regrowth olive, hawthorn, boneseed, pine and small poplar in the hillside area on the south side of the Creek from location 21 – 30 (Map 2). Follow up by FoBC volunteers. • Woody regrowth (olive, pine, and hawthorn) on the eastern slope opposite the caravan park (Map 2, location 11) was followed up by FoBC volunteers and MCC continued to undertake weed control on adjacent land.

3. Who did you engage and involve to become partners in your project and what role did they play?

The Friends of Brownhill Creek (on-ground works/expertise); Kaurana Elders and Kaurana community (advice, guidance, workshops and art work); Mitcham Historical Society (support, advice and networking plus financial grant); The Rotary Club of Mitcham (financial support and on-ground volunteer work); DEW/Green Adelaide Rangers/Education Officers/Support Staff (financial support, expert advice and guidance, on-ground works and Ed & Reveg Committee); local schools/teachers (Ed & Reveg Committee, on-ground works); Urrbrae TAFE (on-ground works, expertise, Ed & Reveg Committee); Dr Jasmin Packer and her Adelaide University team (bandicoot monitoring, educational workshops, dog owner survey); Walking SA (advice, mapping skills and support); political support from Nicolle Flint MP/Louise Miller-Frost MP: Federal Members for Boothby, Sam Duluk MP/Catherine Hutchesson MP: State Members for Waite and Ministers for Environment and Water David Speirs MP/Susan Close MP (financial support, strategic planning, advice and general support; local property owners, visitors staying at the Brownhill Creek Caravan Park and members of the general public (on-ground volunteer work); Carrick Hill Trust, Mitcham Council, DEW, owners of SP Estate (Wirraringa Loop Trail support for our project work along the trail in Brownhill Creek Recreation Park); Mitcham Heritage Research Centre (advice and support); Suzanne Elliot Charitable Trust (financial support); Conservation Volunteers Australia (previous on-ground works, camera monitoring of Southern Brown Bandicoot colony); private benefactors; The Bee Hub and local residents.

4. Is your project successful? How are you measuring and evaluating it?

- Extremely successful!
- Community connections, goodwill, volunteer numbers and momentum have all increased.
- The improved outcomes for the environment within Brownhill Creek Recreation Park are marked and obvious.
- Visitation to the Park has increased substantially.
- BCA generated \$192,653.52 in total activity value associated with its activities in the financial year 2021-22. An 11 x multiplier.

We are measuring and evaluating the project based on the number of hectares under revegetation, maintenance and habitat restoration programmes, the increase in partnerships, volunteer participation and community connections, the increase in visitation to the park and the dollar value of total activity.

5. Describe the lessons learnt during the implementation of your project. Is everything going as planned?

- The importance of partnerships and drawing together as much expertise and support as possible from every source possible.
- 'Grass roots' community projects can be highly successful with the support of key political representatives and government authorities.
- BCA's Steering Committee has the necessary drive, vision and skills to manage the final year of this 5 year programme with a proven track record of success.

6. How will your project be supported and maintained in the future?

The Wirraparinga Project has only 1 more year to run and BCA believes that this proven programme should be funded and extended for a further 5 years.

An extension would provide continuity for weed control and community/volunteer activities and capitalise on the initial investment.

Schools, community groups, local residents and private benefactors are committing to long-term support and maintenance works.

Nature-based tourism may generate future funding opportunities when the Carrick Hill Pavilion opens and the Wirraparinga Loop Trail is fully operational.

Financial acquittal

7. Has the full amount of the 2021/2022 grant awarded to your organisation been expended? No

The total amount expended in 2021/22 was \$17,161.10. This left a balance of \$2,838.90 from the \$20,000. It was decided (on the advice of DEW) to delay the expenditure of the balance until the 2022-2023 FY to allow for drill and fill work on woody weeds to take full effect before follow-up contractor works are undertaken. The \$2,838.90 will carry over to the 2022-2023 FY leaving a total of \$22,838.90 to allocate to planned projects.

8. Details of how grant funding has been expended are included in the report below, with copies of invoices and payment receipts attached.

2021-2022 Grant Expenditure: Total Activity Costs

Contractor Works: Total Cost (See attached invoices and receipts)	Volunteer hours: Total Hours (see attached)	Volunteer hours value (hours x \$45.10)	Other contributions from BCA (\$):	Contributions from other sources (\$): Rotary Club of Mitcham; Suzanne Elliott Charitable Trust; DEW; Federal Department of Industry	Grant funding spent (\$)	Total activity generated (\$): 11 x multiplier
\$17,161.10	2,926	\$131,962.60	\$529.82	\$43,000.00	\$17,161.10	\$192,653.52

Supporting documents

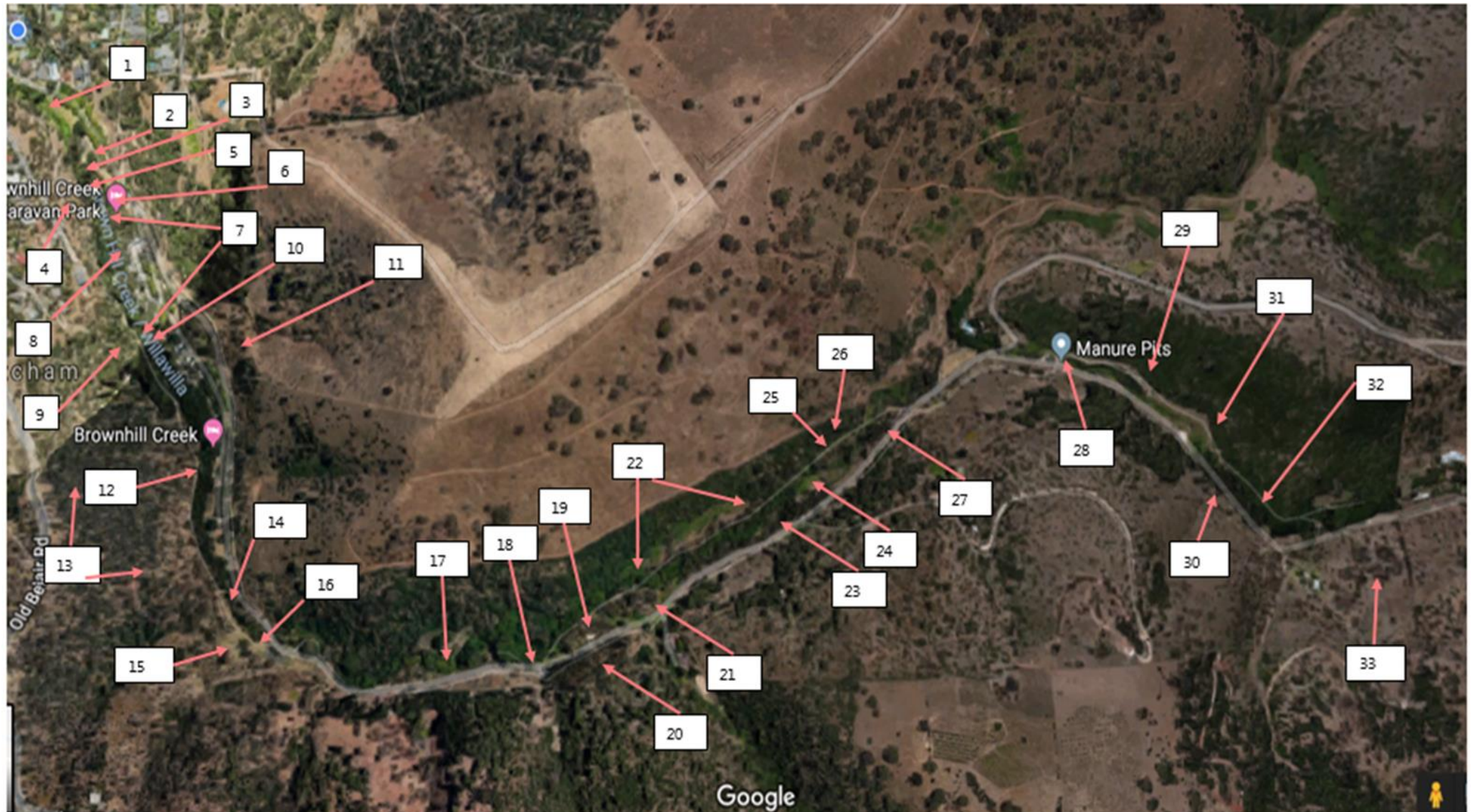
Friends of Brownhill Creek – Works 2018 - 2023

This listing of desired works, both immediate and aspirational, is included in this document for purposes of clarity and reference.

The list has been compiled following consultation (over time) with members of the FOBC and input from local and state government agency personnel. The intention is that these works are consistent with the overall objectives of both the Brownhill Creek Recreation Park Management Plan (June 2003) Department of Environment and Heritage and its informing document, the Brownhill Creek Recreation Park Vegetation Management Plan (2001). It is clear that not all of the desired works will have an immediate, or even a mid-term priority, however it is important that the need is identified and is revisited over time. It is anticipated that some of the “aspirational” works can be considered as stand-alone projects that may attract support/sponsorship from external sources.

As work proceeds this list will be revised and in so doing a record of achievement can be built and promoted.

Map . Brownhill Creek – Activity Location Map 2018 - 2023



Note: Numbers are location numbers associated with the explanation in the attached table. The five Restoration sites and three school revegetation quadrats are described in the attached table.

Table: Friends of Brownhill Creek – Immediate and aspirational activity plan

Location number	Location description	Actions and works needed	Vegetation Priority
1	Pre park entrance – Mitcham City Council	Remove elms and willows from creek line consistent with the Brownhill Keswick Creek Restoration plan – replant with trees, understory and riparian species to join up existing plantings near footbridge and upstream at the Entrance Restoration Site. Negotiations underway.	2
2	Park stone monument	Tom Price Memorial plaque successfully researched, manufactured and attached to the stone monument in 2019 – Works completed. The Brownhill Creek Tourist Park sign should be removed from the monument and this is still to be negotiated.	
3	Restoration Site 1 - Entrance Understory planting on west side of creek	Planting was by school group – maintain with halo slashing and herbicide spraying until plants well established and plant guards can be removed. Progressing well.	2
4	School Revegetation Quadrat - Scotch College revegetation quadrat	30m x 10 m quadrat established June 2018. Students to monitor and maintain 200+ ground species. Some selective herbicide spraying will be needed to maximise establishment. Progressing well.	1
5	Slope on W side of creek adjacent tennis court	Remove olive, ash, hawthorn and pine from sloping bank. Earlier work (~15 years ago) removed feral trees on adjacent area. This needs to be extended to complete the clearing and enable better growth of existing red gums. Work progressing well.	2
6	Significant red gum - Kurna shelter tree	Stage 1 completed and Stage 2 close to completion as per arborist Kym Knight's recommendation's – remove competing feral trees surrounding, protect the root zone with mulch and establish native understory plants. Protect the root zone from compaction with mulch, safely control visitation and erect an interpretive sign. In 2021-22 Andrew Tilley and Greg Szymaniak created a safe and culturally appropriate viewing area, while controlling erosion. BCA Project Officer Ron Bellchambers was supported by Kurna Elders, DEW, Green Adelaide, Scotch College, the FoBC, local schools, Mitcham Rotary Club, Mitcham Historical Society, the Suzanne Elliott Charitable Trust and EBS contractors to achieve the following: Weed control, the adjacent creek line was revegetated, infill planting of the root zone, landscaping, an interpretive sign was installed, a Kurna place of reconciliation and reflection was finished and engagement with Kurna artist Brad Darkson.	2
7	Significant red gums along riverine corridor	12 red gums (Euc. camaldulensis) trees have been identified as being significant because of their size and hence age – each should be identified and works to protect them undertaken – especially removal of competitive feral trees growing within the root zone /drip line area. Work progressing well.	2

8	Creek line and wet area immediately W of caretakers cottage	Remove juvenile ash trees lining the creek channel. Work completed.	2
9	Grey box grassy woodland – area W of caravan park	Remove regrowth olives, hawthorn, ash and pine and patch of watsonia – contract with Trees for Life scheduled for December 2018. Completed with follow up maintenance ongoing.	1
10	Monarch of the Glen	Make continued representations to DEW licensing and maintenance to increase public access to view the tree and to remove the camp/caravan sites immediately surrounding the tree. A successful outcome, with 3 caravan sites to be relocated and the root zone to be restored in the 2022-2023 Financial Year.	2
11	Blue gum grassy woodland - area E of road and caravan park (adjoining Springwood Park)	Maintain area with removal of regrowth feral trees and vegetation. Maintain walking trail (part of Wirrparinga trail) with seasonal plant slashing/herbicide. Completed with follow up maintenance ongoing.	3
12	Walking trail on south side of creek – White bridge to Northbrooke Ave	DEW have undertaken to upgrade this trail to Class 4 standard. Significant improvements have been undertaken.	2
13	Grey box grassy woodland between Old Belair Rd and S side of Creek	Major conservation area of the Park. Needs selective and careful weeding maintenance mostly by trained contract input. Main method is to work outwards from the good areas and weed the invading species. Needs to be done.	
14	Restoration site 2 - White Bridge Downstream	Seasonal maintenance to remove competition weeds especially in halo around establishing plants. Remove tree guards when plants are established. Control blackberry and ivy along creek line – possible contract in summer when blackberry growing well and can be easily identified. Work completed with ongoing maintenance.	2
15	Lions Park	Area used to be maintained by the Mitcham Lions with regular mowing and maintenance of the picnic tables. Small peppercorn and ash trees around the mown area need to be removed. Mitcham Lions Club closed and DEW has taken over mowing. The Friends of Brownhill Creek and BCA have carried out extensive planting.	
16	Revegetation of bridge bypass immediately downstream of White Bridge	Planted in July 2018 by DEW. Verbal agreement is that this site will be maintained by DEW until re-established. Halo spraying and control of blackberry will be needed. Maintenance work ongoing by BCA and the FoBC.	2
17	Restoration site 3 - White Bridge Upstream And School Revegetation Quadrat - Urrbrae Agricultural High School	Major works with feral vegetation removal and replanting during May to August 2018. Maintenance to be done by BCA, Brownhill Creek valley residents, Brownhill Creek Rotary (especially of 35 red gums). Urrbrae Agricultural High School have quadrat site on east side of fallen stone pine – they should maintain and monitor that area as replanted. Work completed with ongoing maintenance.	2 & 3
18	Planting opposite Ron Bellchambers gate	Seasonal maintenance of new planting with halo slashing and spraying. Remove tree guards as plants become established. Ongoing maintenance.	2

19	Seven Pines	Area and picnic tables maintained by Mitcham Lions – weeds on roadside slope needs periodic removal/control. DEW have taken on this task.	
20	Dry slope on south side of road opposite Seven Pines	Clear invasive weeds around plantings – identify opportunity for small number of new plants (shrubs and grasses) suited to blue gum woodland. Work completed with ongoing maintenance.	1
21	Planting on north side of road opposite second house driveway	Seasonal maintenance of new planting with halo slashing and spraying. Remove tree guards as plants become established. Ongoing maintenance.	2 & 3
22	Bandicoot habit area next to slashed area on N side of creek	Maintain dense cover vegetation – blackberry – from base of hillslope upwards. Control declared weeds (artichoke, blackberry, hawthorn, ash) on flat slashed area. After image capture survey identify locations for controlled bandicoot “house” installation and monitor. Aim is to validate successful increase in bandicoot habitat. Ongoing maintenance.	3
23	Riverine area between road and creek	Complete the removal of feral trees (ash, pine, olive), control watsonia and blackberry with herbicide – possible contract. Work completed with ongoing maintenance.	2
24	Restoration site 4 - Demo –riverine area in from sugar gum car park	Replant (“stepping stone” site) on north side of creek is established but heavily overgrown. Very difficult to control growth of competitive species because it is well watered and fertile. Minimum maintenance apart from possible contract. Replant area on south side of creek – maintain with slashing and spraying for kikuyu – add a few new suitable plants. Work completed with ongoing maintenance.	2
25	Bandicoot area, north side of creek above flood level	Maintain area with blackberry and native raspberry running up into hill side. Keep broom controlled. Discourage free roaming dogs. Have DEW install signs. Investigate fencing to limit dog and people entering bandicoot habitat area. Fencing and signage to be completed in the 2022-2023 Financial Year with ongoing maintenance.	3
26	Hillslope with Euc. viminalis (manna gum)	As opportunity arises encourage/facilitate competing olive removal from the slope. Aim is to conserve the Eucalypts and encourage understory vegetation for extended bandicoot habitat. Progressing well.	3
27	South side of creek – remnant Kauria shelter tree	Maintain area around replanting. Identify support and works to conserve the remnant shelter tree (need for metal or wooden prop to stabilise). Need for interpretive sign? To be investigated.	2
28	Manure pits	Maintain area in and around manure pits with slashing and spraying. Creek area around footbridge is heavily infested with blackberry, cape ivy, thistles, and wild mint and needs contract spraying to control. Work complete with ongoing maintenance.	2
29	Restoration site 5 – Manure Pits	Trees on north side of creek need maintenance. Dead acacias need cutting and layering in-situ, ivy from creek line needs contract spraying. Slashing of area between trail and creek for weed competition control until recent plantings have fully established. Tree plantings on south side of creek next to road need halo slashing	2 & 4

		and spraying to aide establishment. Poplar suckers from parent trees on south side of road need regular control. Work complete with ongoing maintenance.	
30	South side of road on hill slope	If opportunity presents, remove poplars and pines from this slope and replant with blue gum woodland species. Planting on slope need halo maintenance to encourage establishment. To be investigated.	4
31	School Revegetation Quadrat - Mercedes College	A 30m x 10m area at the east end of the replant area has been marked. Weed control (spraying) is needed with the aim of having planting in autumn 2019. Mercedes College to monitor and maintain. To be investigated.	2
32	Creek line area to east of the Manure Pits Restoration site (5)	As opportunity presents, contract removal of large ash, and elms within and next to creek to extend the Restoration area upstream. This would present another area for planting red gum riverine vegetation. To be investigated.	2 & 4
33	Marcus's area – blue gum woodland	Occasional maintenance needed for olive regrowth control. Investigate opportunity for picnic table location to encourage more visitation to this end of the Park. Weed control completed with ongoing maintenance.	4

Please find the following attached:

Photos (before and after).

Declaration

We declare that the information given on this form is complete and correct.



Professor Wayne Meyer: BCA Chairperson



Ron Bellchambers: BCA Community Engagement and Projects Officer

On behalf of Brownhill Creek Association:

Date: 4/11/2022

Photos of Weed Control Contractor Works

Photo A. Before clearing around a significant river red gum, part of a plan to save significant trees in Brownhill Creek Recreation Park



Photo B. After clearing by ECS contractors



Photo C. ECS contractors chainsawing



Photo D. ECS contractors weed spraying



Photo E. EBS contractors preparing for drill and fill weed control



Photo F. Before EBS drill and fill on hill above The White Bridge



Photo G. After EBS drill and fill on hill above The White Bridge



Photo Ha. EBS contractors preparing to work on planting and weed control along the creek



Photo Hb. EBS contractor controlling ash along the creek



Photo Hc. EBS contractors controlling erosion with native planting



Photo I. Soursob Bob contractors preparing for chainsawing of olives



Photo J. Before clearing of olives around *Eucalyptus viminalis* by Soursob Bob contractors



Photo K. After clearing: BCA Chair Professor Wayne Meyer inspecting weed control work by Soursob Bob contractors



Photo L. Brushcutting around native plantings at The White Bridge site



Photos of Community Contributions to Project

Photo Ma. Friends of Brownhill Creek Recreation Park



Photo Mb. Friends of Brownhill Creek Recreation Park working bee



Photo Na. Citizen Science Week bandicoot workshop with Dr Jasmin Packer and her team from Adelaide University, Auntie Lynette Crocker, BCA and The BeeHub.



Photo Nb. Dr Peter Dillon (FoBC) undertaking his water monitoring project along Brownhill Creek/Willawilla.



Photo O. Community partnerships: Mitcham Rotary Club working bee



Photo P. Urrbrae Agricultural High School: regular bushcare work



Photo Q. Mercedes College: regular weeding and community service



Photo R. Scotch College Year 11/12 Outdoor Education Students: regular weeding and community service



Photo S. Urrbrae TAFE Conservation and Ecosystem Management students regularly practice brushcutting in the Park



Photo T. Urrbrae TAFE students learning drill and fill technique



Photo U. Volunteers Greg Szymaniak and Ron Bellchambers work regularly together



Photo V. BCA Community Engagement & Projects Officer Ron Bellchambers with DEW Senior Ranger Sam Everingham. Sam is a constant source of knowledge and support



Photo W. BCA Education & Revegetation Committee Schools' Environment Action Day with Green Adelaide Chair, Professor Chris Daniels, as keynote speaker



Photo Xa. Allan Sumner delivering an inspiring Kaurana Welcome to Country and Smoking Ceremony at the Environment Action Day



Photo Xb. Uncle Jeffrey Newchurch leading a powerful Kurna Heritage Workshop at the Environment Action Day



Photo Ya. BCA Chair Professor Wayne Meyer and Urrbrae Agricultural High School teacher Vanessa Greenslade mentoring students at the BCA Education & Revegetation Committee Schools' Planting Day



Photo Yb. Schools' Planting Day



Photo Yc. Schools' Planting Day



Photo Za. **Before** Kurna Shelter Tree Project



Photo Zb. **After** Kurna Shelter Tree Project with Stages 1 and 2 complete



Volunteer Hours for 2021-2022 Financial Year

Volunteer Hours 2021-2022 Financial Year

Ron Bellchambers (BCA Community Engagement and Projects Officer): 1,608 hours @ \$45.10 per hour = \$72,520.80

Greg Szymaniak: 416 hours @ \$45.10 = \$18,761.60

Schools and TAFE: 505 hours @ \$45.10 = \$22,775.50

Friends of Brownhill Creek Recreation Park: 312 hours @ \$45.10 per hour = \$14,071.20

Local residents: 40 hours @ \$45.10 per hour = \$1,804.00

BCA committee: 45 hours @ \$45.10 per hour = \$2,029.50

Total: 2,926 hours @ \$45.10 per hour = \$131,962.60