

BUSHCARE SITE ASSESSMENT PLAN

SITE LOCATION: REID PARK BUSHCARE

GROUP OBJECTIVES

- To remove non-endemic species
- To increase the health and diversity of the endemic plant species
- To create a green corridor for wildlife
- To engage the community in Bushcare activities.

SITE DESCRIPTION AS AT JUNE 2012

General Description

Location: Below the Southern end of Avenue Rd

Aspect: Located on a moderate to steep West facing slope

Soil: The soil is highly disturbed in areas due to dumped land fill on the reserve from the construction of the road, infrastructure and urban residential construction. There is some remnant of the original topography in areas including rocky outcrops, benches and small gullies. It is mapped as Hawkesbury Soil Landscape and contains mostly clayey sands subsoils. (Flora and fauna survey 06-07)

Catchment: Mosman Bay and Sydney Harbour

Vegetation Community: Sydney sandstone Gully Forest, regrowth Sydney Sandstone Gully Forest and disturbed Sydney Sandstone Gully Forest (Flora and Fauna survey 06-07)

Canopy species: *Angophora costata*, *E.botryoides*, *Cerratapetalum apetalum*, *E.piperita*, (Flora and Fauna Survey 06-07)

Site Management Issues:

- Dumping of garden refuse in reserve
- Weed infiltration from adjoining properties
- Excess nutrients from storm water runoff
- Erosion in disturbed areas
- Weeds invasion into better areas
- Low presence of midstorey species in some areas, due to lack of fire
- Access to the the reserve

MANAGEMENT PLAN July 2010 – June 2012

Weed Management

Priority Weeds:

- Madiera Vine (*Androdera cordifolia*)
- Moth Vine (*Araujia sericifera*)

- Asthma weed (*Parietaria judaica*)
- Trad (*Tradescantia fluminensis*)
- Ehrharta (*Ehrharta erecta*)
- Bidens (*Bidens pilosa*)
- Turkey rhubarb (*Acetosa cordifolia*)
- Small leaved Privet (*Ligustrum sinense*)
- Large Leaved Privet (*Ligustrum lucidum*)
- Asparagus (*Asparagus asparagoides*)
- Balloon vine (*Cadiospermum grandiflorum*)

Native Vegetation Management

(Plan and content by Reid Park Bushcare Group and Site Supervisor, James Robertson)

The General health of the site is expressed in the 06/07 Flora and Fauna survey as less than 10 % weed cover in the northern end of the Bushcare site and between 30-70% weed cover in the Southern end of the reserve.

To meet the objectives of the Reid Park Bushcare Group, including the removal of non-endemic species and increasing the health and diversity of the endemic plant species, the following activities are undertaken;

- Hand weeding and bagging removed non-endemic vegetation
- Covering weed waste piles with black plastic for composting on site
- Cut and poisoning, stem scrapping, drilling and filling and spraying of vegetation with glyphosate and on occasion 'starane' (to be undertaken by site supervisor only)
- Native seed dispersal (seed from on site)
- Planting (usually only if an area is completely degraded and/or there is no resilience)
- Transplanting ground covers and brush-matting.

The sites perimeter is basically a footpath to the east and a storm water canal to the west, this makes it easier to manage compared with sites that have largely residential properties bordering bush reserves. There are two defined drainage lines (see drainage and water management) both have gross pollutant traps, weed plumes are mainly confined to the lower drainage line where *Tradescantia fluminensis* is the problem. The later is controlled by hand weeding to ensure the weed doesn't spread into the native vegetation on either side. In areas where it is safe to do so the site supervisor will spray the *T.fluminensis* with 'starane'. The other weed of significance is *Ehrharta erecta* which is either removed by hand or sprayed where it can be safely done without off target kills.

The following is a key to the map indicating priority work zones based on bushland condition and type of bushland regeneration works required:

RED: this area is where primary work is needed for instance *Tradescantia fluminensis*, *Celtis sp.*, *Ehrharta erecta* and various other weeds are present. We have weeded into much of these areas using spraying to control the edges. One of these areas is very steep so volunteers shouldn't work here.

GREEN: these areas have had tube stock planted here after the area has been completely weeded. Seed from the reserve has been scattered over the disturbed soil. This planting will continue along the southern tip of the reserve.

BLUE: These areas will continue to be maintained as they have excellent resilience and mainly ground cover weeds to be removed in order for regeneration to continue. The odd woody weed and vines are removed however these are not often found. Follow-up is the key on this site in general; all the weeds removed can be seen in the reports from each visit.

WHITE: these areas are in very good condition and we will continue to monitor and weed any outbreaks when needed. The canopy and ground covers are excellent however the mid-storey needs to be encouraged. Removing the mesic



Tracks and Public Access

- There are no public pathways or walking track located on the Bushcare site.

Drainage / Water Management

Main drainage feature is the gully at the northern end of the reserve. Stormwater discharges from the gully to a large open concrete channel emptying to Mosman Bay. Other medium sized and small stormwater drains direct road runoff into the reserve and join the open concrete channel. (Flora and Fauna Survey 06-07)

Fire Management

Any burn piles should be reviewed at the beginning of the calendar year to ensure the pile is scheduled for burning.

Major Projects / Tree Works

- Any potential tree removals (hazardous or weed tree removal) are to be addressed with the Bushcare Officer.

Below is work plan for the 2012 – 2014 periods. This Work plan is a guide only and may change due to seasonal fluctuations, volunteer numbers and changed site priorities.

	Task	Month	Bushcare Support
2012	<ul style="list-style-type: none"> Control fast growing weeds in green, blue and white zones. Target control of Trad and Ehrharta. Some primary work targeting Trad along drainage lines. 	July	<p>Council: Notification of jacaranda removals.</p> <p>Bushcare Support: Removal of Jacarandas</p>
	<ul style="list-style-type: none"> Control fast growing weeds in all areas. Target control of Trad and Ehrharta. Some primary work targeting Trad along drainage lines. 	August	<p>Site supervisor: undertake spot spray as required</p>
	<ul style="list-style-type: none"> Maintenance hand weeding in green Blue and white areas. Planting 	September	<p>Council: Supply plants : 3 trays over September/ October (include <i>E. boitroides</i>, <i>E. piperita</i>, <i>A. costata</i>)</p> <p>Site supervisor: undertake spot spray as required</p>
	<ul style="list-style-type: none"> Maintenance hand weeding in green Blue and white areas. Planting 	October	<p>Site supervisor: undertake spot spray as required</p>
	<ul style="list-style-type: none"> Secondary weed control in red zones Maintenance of planted areas 	November	<p>Site supervisor: undertake spot spray as required</p>
Closed over Christmas and New Year period	<ul style="list-style-type: none"> Secondary weed control in red zones Maintenance of 	December	<p>Site supervisor: undertake spot spray as required</p>

	planted areas		
2013	<ul style="list-style-type: none"> • Work in the perimeters of the reserve – hand control of weeds 	January	Site supervisor: maintenance weed and spot spray
	<ul style="list-style-type: none"> • Mulching the southern tip • Follow-up weed control around planted areas 	February	Council: Supply 3 cubic metres of mulch Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> • Preparing for planting including hand weeding • Planting 	March	Council: Supply plants : 2 trays of grasses and mid-storey species Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> • Hand weeding around regenerating plants • Seed collection and distribution 	April	Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> • Maintenance and follow-up weed control • Brush matting where required 	May	Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> • Control fast growing weeds in green, blue and white zones. Target control of Trad and Ehrharta. • Some primary work targeting Trad along drainage lines. 	June	Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> • Control fast growing weeds in green, blue and white zones. Target control of Trad and Ehrharta. • Some primary 	July	Council: To investigate future tree removal works (discuss with Bushcare group) Site supervisor: undertake spot

	work targeting Trad along drainage lines.		spray as required
	<ul style="list-style-type: none"> Control fast growing weeds in all areas. Target control of Trad and ehrharta. Some primary work targeting trad along drainage lines. 	August	Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> Maintenance hand weeding in green Blue and white areas. Planting 	September	Council: Supply plants : 3 trays over September/ October Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> Maintenance hand weeding in green Blue and white areas. Planting 	October	Council: Supply plants : 3 trays over September/ October Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> Secondary weed control in red zones Maintenance of planted areas 	November	Site supervisor: undertake spot spray as required
Closed over Christmas and New Year period	<ul style="list-style-type: none"> Secondary weed control in red zones Maintenance of planted areas 	December	Site supervisor: undertake spot spray as required
2014	<ul style="list-style-type: none"> Work the perimeters of the reserve – hand control of weeds 	January	Site supervisor: maintenance weed and spot spray
	<ul style="list-style-type: none"> Mulching where required Follow-up weed control around planted areas 	February	Council: Supply 3 cubic metres of mulch Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> Preparing for 	March	Council:

	planting including hand weeding <ul style="list-style-type: none"> • Planting 		Supply plants - 2 trays of grasses and mid-storey species Site supervisor: undertake spot spray as required
	<ul style="list-style-type: none"> • Hand weeding around regenerating plants • Seed collection and distribution 	April	Site supervisor: undertake spot spray as required
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Previous Work Zones (superseded) as described in the 2010 work plan for reference only:

Zone 1: Contains good bush. This area requires sweeps through the site once or twice a month to maintain area. The site contains a good mix of low–upper stratum layers. Moth Vine, Balloon vine, Trad, Acetosa and Ehrharta are the main target weeds in this zone. This area is boarded by a Gross Pollutant trap which is the boundary of the millet road Bushcare site.

Zone 2: Has been worked in the lower areas and contains a good coverage of native ground covers in the worked sections. The upper slope is weed infested in most parts and access is difficult. A physical barrier using a sediment fence will help to hold the site and prevent constant influxes of weed propagules into lower areas worked. Continued planting in the lower areas during spring and autumn is recommended. A new section has been worked by the volunteer group. Primary removal of privet and trad was undertaken in this area which was then planted. This area will further benefit from a logged embankment and jute matting in sections. Regular spot spray required in site undertaken by site supervisor.

Zone 3: This area has been worked in the lower areas and in the upper areas along the footpath. Access is difficult in sections and will require Bushcare support to assist in controlling weeds such as balloon vine and asparagus fern and to undertake jute matting and planting if required. A continued sweep for annuals is required on a continual basis to encourage the spread of native groundcovers. Small Pittosporums should be removed to encourage more light. The area will benefit from target removal of asparagus fern and balloon vine, further plantings and regular maintenance sweeps. Regular spot spray required in site undertaken by site supervisor.



Map (now superseded) showing work zones for previous 2010 work plan for reference only.