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**BAY ROAD HEATHLAND  
SANCTUARY MANAGEMENT  
PLAN**

**DRAFT FOR PUBLIC COMMENT  
MAY 2004**

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1 **Vision**

2 Bay Road Heathland Sanctuary preserves a mosaic of indigenous heathland  
3 vegetation.

4  
5 The Sanctuary strives for ecological integrity of significant fauna and flora  
6 species within a maintained ecosystem.

7  
8 **Abstract**

9 Bay Road Heathland Sanctuary is an important link in Bayside's bushland and  
10 open space network. It is significant as the closest Sand Heath remnant to the  
11 CBD of Melbourne City.<sup>1</sup>

12  
13 It is a popular area for visitors. Walks are conducted throughout the  
14 Sanctuary by volunteer guides, including members of the Friends of Bay Road  
15 Heathland Sanctuary. The Friends work to an annual Action Plan in  
16 conjunction with Council to achieve the vision of Bay Road Heathland  
17 Sanctuary.

18  
19 The prime objective of the Sanctuary is to optimise indigenous species  
20 diversity in a series of mosaics. Another important objective is to promote and  
21 use the Sanctuary for both educational and scientific purposes.

22  
23 **Introduction**

24 Bay Road Heathland Sanctuary was purchased by the former City of  
25 Sandringham in 1939 and is located on Bay Road (opposite Marshall Avenue)  
26 between George Street and Miller Street in Sandringham. It is approximately  
27 two hectares in size and is located twenty kilometres south of the Melbourne  
28 GPO.

29  
30 The Sanctuary is near the crest of a very old sand dune. It slopes gently down  
31 to the south and west around a shallow drainage line with an elevation range  
32 from approximately 32.5m to 40.5m. Two hundred years ago this area was  
33 probably mainly covered with sandy heath plants and some small emergent  
34 manna gums. Most vegetation would have been less than three metres high.  
35 Other trees might have been found on the lower parts.

36  
37 There is no open surface water in the vicinity of the Sanctuary for use by  
38 fauna. Two artificial ponds constructed in the Sanctuary supply water for  
39 fauna.

40  
41 **Indigenous Vegetation**

42 Bay Road Heathland Sanctuary is recognised as a site of Biodiversity  
43 Significance in the Port Phillip and Westernport Region.<sup>2</sup>

44  
45 The dominant vegetation community is Sand Heath. Once widespread in  
46 Bayside, and famous as part of the 'Sandringham Flora', it is now restricted in

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<sup>1</sup> The Bushlands of Sandringham (Sandringham Environment Series No.7) - Daintry Fletcher, City of Sandringham, 1988

<sup>2</sup> BioSites Project Report - The State of Victoria (Flora & Fauna, Port Phillip Region Regional Services Division) Department of Natural Resources & Environment, 2002

1 Bayside to isolated remnants. This vegetation community occurs on deep  
 2 infertile sands and consists of a low, dense heathy shrub layer with some  
 3 small trees, grasses and herbs. Although Sand Heath has the greatest  
 4 diversity of indigenous flora in Bayside, there have been significant species  
 5 losses due to clearing for housing development in the 1940s and 1950s, and  
 6 invasion of Coast Tea-tree (*Leptospermum laevigatum*).

7  
 8 Several of the heathy species found within Bay Road Heathland Sanctuary  
 9 are regionally significant: Green She-oak (*Allocasuarina paradoxa*), Common  
 10 Aotus (*Aotus ericoides*), Showy Bossiaea (*Bossiaea cinerea*), Common  
 11 Wedge-pea (*Gompholobium huegelii*), Bundled Guinea-flower (*Hibbertia*  
 12 *prostrata*), Wedding Bush (*Ricinocarpos pinifolius*) and Small Grass-tree  
 13 (*Xanthorrhoea minor*).<sup>3</sup>

### 14 15 **Orchids**

16 Terrestrial orchids are an important facet of the Sanctuary's flora. Sutton  
 17 (1911) notes that the Sandringham flora boasted almost sixty species of  
 18 orchids from seventeen genera. This has been reduced to less than twenty  
 19 species of eight genera currently surviving in the municipality with only seven  
 20 species from five genera found within the Sanctuary. To ensure that  
 21 management of these species is appropriate and timely, Council undertakes  
 22 annual surveying of orchid colonies. The number of orchid plants in Bay Road  
 23 Heathland has increased since rabbit controls were implemented within the  
 24 Sanctuary.

### 25 26 **Fire Management**

27 At least three wildfires have occurred in the Sanctuary. Significant  
 28 regeneration of Sand Heath species after these fires prompted the  
 29 consideration of an ecological fire regime for the Sanctuary. In 2003, Council  
 30 implemented a controlled burn to eradicate the dominate Coast Tea-tree  
 31 (*Leptospermum laevigatum*) and encourage the regeneration of soil stored  
 32 seed.

### 33 34 **Fauna Management**

35 Several species of fauna found in Bay Road Heathland Sanctuary have both  
 36 municipal and regional significance.<sup>4</sup> In recent years, four fauna studies have  
 37 been undertaken with reference to the Sanctuary. In addition, there is  
 38 anecdotal information regarding the presence of unidentified lizard species  
 39 and frogs species in the Sanctuary.

40  
 41 Based on this information, the requirements of the following fauna species  
 42 need to be considered when planning management activities: Superb Fairy  
 43 Wrens; Blotched Blue-tongue Lizards and other skinks; Banjo Frogs; Blue-  
 44 winged Parrots and Brown Goshawks. Of particular concern are Superb Fairy  
 45 Wrens as they are sedentary and surveys conducted by the Friends group  
 46 and others indicate that numbers within the Sanctuary have fallen in recent  
 47 years.

---

<sup>3</sup> Bay Road Heathland Management Plan - Bayside City Council, July 1996

<sup>4</sup> Bayside City Council Fauna Survey & Management Guidelines - Chris Pavey, WBM Oceanics  
 Australia 1996

1 There also needs to be further work into the identification and breeding levels  
2 of other reptiles. Opportunities to encourage additional species into the  
3 Sanctuary, through the provision of wildlife corridors, should also be  
4 investigated.

### 5 6 **Pest Animal Management**

7 Rabbits have not been found in the Sanctuary for several years. Regular  
8 monitoring and pro-active control systems assist in maintaining this outcome.

9  
10 Feral cat trapping is undertaken as individual animals are noted and reported  
11 to Council. Fox control will be undertaken at appropriate times if active fox  
12 dens or other evidence of fox activity is recorded.

### 13 14 **Pollution**

15 Rubbish finds its way into the Sanctuary either via visitors or the wind. The  
16 main impacts are its negative impact on flora and fauna and its unsightliness.  
17 Food scraps, animal excreta and litter generally increase nutrient levels in the  
18 soil and affect the dietary intake of animals, which can lead to disease.

### 19 20 **Visitor Access & Fencing**

21 The Sanctuary is open to the public on Thursdays, from 7.30am to 2.30pm all  
22 year round, and on Sundays, from 2pm to 4pm during the annual Spring Open  
23 Days. The Spring Open Days are a popular event with Volunteer Guides  
24 available to answer questions or take short walks through the Sanctuary. On-  
25 site parking is not available at the Sanctuary, but public transport to the area  
26 is good.

27  
28 Bay Road Heathland Sanctuary is a significant asset in Bayside's public open  
29 space, however it is not readily obvious or identifiable to visitors. Currently  
30 Bay Road Heathland Sanctuary is largely inaccessible to the public as a key is  
31 required to gain entry. There is a high security fence on the Bay Road  
32 boundary with padlocked gates and smaller locked gates on the Sandringham  
33 College oval. Both fences and gates have been damaged on occasion by  
34 people seeking access to the Sanctuary.

35  
36 Council, the Friends of Bay Road Heathland Sanctuary and the Sandringham  
37 College Environment Group are the only groups that have key access to the  
38 Sanctuary. Some neighbouring properties also have access gates in the  
39 eastern boundary fence. Wider community access is only encouraged during  
40 opening times of the Sanctuary and during the annual Spring Open Days.  
41 There are also many organised educational visits, particularly with secondary  
42 and tertiary students.

43  
44 The nature of the Sanctuary and its assets need to be more obvious to the  
45 community. Current signage does not identify public opening times or why  
46 there is a need for fencing around the Sanctuary. Installation of Council's  
47 standard mesh fence would be consistent with fencing in other heathland  
48 reserves and also make the Sanctuary more visually appealing to visitors.  
49 Rationalisation of fencing within the Sanctuary and removal of superfluous  
50 'rabbit proof' fencing would also alleviate maintenance issues.

1 Allowing an authorised thoroughfare through the Sanctuary adjacent to the  
2 Arboretum would be more welcoming, reduce the incentive for unauthorised  
3 access to areas of high conservation value and provide opportunities for the  
4 community to become more aware of the conservation values of the  
5 Sanctuary. Previously, this area contained a platform, which enabled visitors  
6 to view the entire Sanctuary from an elevated position. Subsequent  
7 deterioration to this structure forced Council to remove access to ensure  
8 public safety. Restoration of the viewing platform would provide an ideal site  
9 for interpretation of the Sanctuary's flora and fauna.

10  
11 Two memorial benches provide seating. One is located in the Arboretum and  
12 one along the path through the centre of the heathland.

### 13 14 **Arboretum**

15 The Arboretum was originally established as a specimen area to promote  
16 indigenous plants found throughout Bayside. It was comprised of thematic  
17 beds containing various species of shrubs as well as trees. Over time, this  
18 area has become neglected and most of the interpretative material has been  
19 lost. Many of the species planted in these beds are coastal species and not  
20 species that would normally be represented in a Sand Heath vegetation  
21 community. Furthermore, some have proven to be invasive weeds in the  
22 context of a Sand Heath vegetation community.

23  
24 In its current form, the Arboretum is in direct conflict with the vision of Bay  
25 Road Heathland Sanctuary.

### 26 27 **Promotion & Awareness**

28 Currently, volunteer guides are available during the Spring Open Day season  
29 and a self-guided Nature Walk brochure is available (from local libraries and  
30 Bayside City Council). Information boards are located at the entrance to the  
31 Sanctuary on Bay Road and by the viewing platform.

32 The Sanctuary is a popular excursion destination for local schools.  
33 Sandringham College uses the Sanctuary for numerous field work  
34 opportunities. Biodiversity is studied in Environmental Science, Biology and  
35 Outdoor and Environmental Studies. Environmental Science students use the  
36 Sanctuary for practical experience in Bushland Management - working under  
37 the supervision of Council to weed, prune, revegetate and collect seeds.  
38 Additionally, they use the Sanctuary for case studies in Bushland  
39 Management - focussing on threats to specific species and communities, and  
40 management strategies to protect these.

41  
42 Various other opportunities exist to promote the Sanctuary. Educational visits  
43 are arranged through CSIRO and the Australian Centre for Research in Urban  
44 Ecology and tertiary education institutions also conduct research projects at  
45 the Sanctuary.

46  
47 Interpretative materials are important to gain support for the overall  
48 management aims of the Sanctuary and to raise awareness and  
49 understanding of the value of the heathland vegetation.

1 **Volunteers**

2 Volunteers have an important role in the management of the Sanctuary.  
3 Volunteer activities are facilitated through Council's Service Provider.  
4 Currently two volunteer groups work within the Sanctuary: the Friends of Bay  
5 Road Heathland Sanctuary and the Sandringham College Conservation  
6 Group. Both groups work within the Sanctuary according to annual Action  
7 Plans consistent with the Management Plan and agreed on by Council.

8  
9 **Adjacent Use**

10 Different land uses surround the Sanctuary ranging from Business Use,  
11 Residential Use and Mixed Use (as identified in Amendment C39 of Bayside's  
12 Planning Scheme) as well as educational and recreational uses on the  
13 neighbouring Sandringham College grounds.

14  
15 Each of these uses has the potential to impact upon the area. It is important  
16 for Council to develop open communication systems and positive relationships  
17 with each abutting occupier.

18  
19 Issues associated with adjacent use include the following:

- 20 • Over-shadowing of the Sanctuary by buildings - creating shade, rain or  
21 wind shadows that may have a detrimental effect on the vegetation.
- 22 • Lighting - development guidelines should recognise that excessive lighting  
23 can be harmful to insects that play important ecological roles.
- 24 • Environmental weeds - future planting or landscaping of adjacent areas  
25 should take into account the type of vegetation planted - no 'environmental  
26 weeds' <sup>5</sup> should preferably be planted or retained in adjacent properties.
- 27 • Domestic pets - future residential development guidelines should also  
28 recognise the detrimental effect of cats on native fauna and consider  
29 domestic cat curfews on adjacent properties.

30  
31 Strategies to address these impacts are referred in the Municipal Strategic  
32 Statement (MSS Clause 21.07 - Objective 6) and the Local Planning Policy  
33 (Clause 22.05).

34  

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<sup>5</sup> Deemed as any species listed in "Environmental Weeds - A field guide for SE Australia",  
Kate Blood - CRC Weed Management Systems 2001

1 **PROPOSED MANAGEMENT ACTIONS**

2  
3 **PRIORITY - SHORT TERM (1-2 years)**

4  
5 *Capital Works - Estimated Cost*

- 6 • Install standard bushland fencing along southern (Arboretum) side and create  
7 public access through the Sanctuary adjacent to the Arboretum. \$27,000  
8 • Reinstate interpretative viewing platform. \$30,000  
9 • Install interpretative material on the viewing platform to improve visitor  
10 understanding and awareness of the values of the Sanctuary. \$5,000

11  
12 *Management Issues - Covered in Open Space Contract Workloads*

- 13 • Use plants of local provenance only in any revegetation within the Sanctuary.  
14 • Monitor for new weed species to ensure prompt eradication.  
15 • Ensure volunteer actions plans are complimentary to the objectives of the  
16 management of the Sanctuary.  
17 • Control and eradicate weed species within burn sites.  
18 • Monitor regeneration of burn sites.  
19 • Identify and locate populations of significant species within the Sanctuary and  
20 collect seed for future propagation.  
21 • Implement an appropriate fire regime for the Sanctuary to achieve maximum  
22 diversity of indigenous plants.  
23 • Manage Bracken (*Pteridium esculentum*) to keep in balance with other heath  
24 species.  
25 • Survey orchid colonies annually.  
26 • Retain Eucalypt screen along Sandringham College fence line.  
27 • Maintain ponds as a source of fresh water for local fauna. Ponds to be kept weed  
28 free, regularly filled and in good condition.  
29 • Maintain existing internal pathway within the Sanctuary for Spring Open Days  
30 and other visitors.  
31 • Retain Coast Tea-tree screen on Bay Road to provide a sense of enclosure and  
32 setting to enhance the natural experience of the Sanctuary. Manage and gradually  
33 replace Coast Tea-tree with indigenous Sand Heath species to contain the negative  
34 influence on the heathland vegetation.  
35 • Monitor for pest animal appearance (foxes, feral cats, rabbits) and control as  
36 necessary.  
37 • Continue to promote the Spring Open Day season with Volunteer Guides and  
38 coordinate a Volunteer Guide Roster.

39  
40 *Planning Issues - Council Staff Resources*

- 41 • Prohibit new entrances to the Sanctuary from adjacent properties to the east or  
42 west.  
43 • Prevent future planting of 'environmental weeds' from adjacent properties.  
44 • Investigate a 'cat curfew' on any new residential property adjacent to the  
45 Sanctuary.  
46 • Consider "neighbourhood" planning controls on future adjacent properties to limit  
47 wind, sun, rain shadows and artificial lighting on the Sanctuary as specified in the  
48 MSS, Local Planning Policy and Industrial Area Strategy.

49

1 *Research Projects*

- 2 • Identify possible hybrid species and manage to reduce spread throughout the  
3 Sanctuary.  
4 • Record changes in vegetation through vegetation surveys and from photo  
5 monitoring points.  
6

7 **PRIORITY- MEDIUM (3-4 years)**

8  
9 *Capital Works - Estimated cost*

- 10 • Install appropriate signage at access points to show opening times. \$4,500  
11 • Landscape entry points on Bay Road and Sandringham College oval to provide a  
12 'visitor friendly' entrance that conveys conservation values of the Sanctuary.  
13 \$7,500  
14 • Remove high security fence on Sandringham College oval and replace with  
15 standard bushland-style fencing. \$18,200  
16 • Remove high security fence on Bay Road and replace with standard bushland-  
17 style fencing. \$16,200  
18

19 *Management Issues - Covered in Open Space Contract Workloads*

- 20 • Remove Coast Tea-tree stand located between 2003 burn site and Arboretum to  
21 reduce likelihood of seedling invasion into burn site.  
22 • Arboretum - remove planted coastal species and restore heathland species  
23 consistent with Sand Heath Ecological Vegetation Class. Tree species to remain in  
24 Arboretum unless invasive.  
25 • Monitor for openings in Coast Tea-tree canopy and replant using *Eucalyptus*  
26 *pyroriana* (or indigenous shrub species).  
27 • Maintain some open grass areas for the provision of habitat for insectivorous  
28 birds.  
29 • Collect litter from the Sanctuary.  
30 • Minimise the impact of the adjacent land uses on the Sanctuary by encouraging  
31 adjacent land users to become involved with the Sanctuary.  
32

33 *Research Projects - Council Staff Resources*

- 34 • Identify indigenous fauna of the Sanctuary to allow appropriate management of  
35 habitat requirements for species present.  
36

37 **PRIORITY - LOW (5-6 years)**

38  
39 *Capital Works - Estimated Cost*

- 40 • Install seating/picnic tables alongside Arboretum western fringe. \$23,500  
41 • Rationalise internal fencing - remove 'rabbit proof' fencing. \$3,000  
42