



**Proposal for a  
Biobank Site at  
Arcadia Park  
Bushland  
November 2016**



## Definitions

**Biobank site or Biobank** means land designated by the Biobanking Agreement to be a Biobank site for the purposes of the *Threatened Species Conservation Act 1995*.

**Biobanking Agreement** means an agreement entered into under Division 2 of Part 7A of the *Threatened Species Conservation Act 1995* between Hornsby Shire Council and the Minister for the purpose of establishing a biobank on the proposed Biobank site.

**Biodiversity Credits** means credits created for the Biobank site for management actions that improve biodiversity values. The number and class of credits created for the Biobank site will be specified in the Biobanking Agreement.

**Biobanking Regulation** means the *Threatened Species Conservation (Biodiversity Banking) Regulation 2008*.

**BioBanking Trust Fund** means the trust fund established under Part 7A of the *Threatened Species Conservation Act 1995* to hold funds from the sale of credits from the biobank site.

**Total Fund Deposit** is defined by clause 26 of the Biobanking Regulation and means the present value of all scheduled management payments in respect to the Biobank site for the period that starts from the time the Biobanking Agreement is entered into and extends in perpetuity. It is equivalent to the present value of all the estimated short term and long term costs needed to manage the Biobank site in perpetuity. The BioBanking Trust Fund holds the Total Fund Deposit, and the NSW Environment Trust, as the fund manager, then makes payments to the owners of biobank sites in accordance with biobanking agreements.

**Minister** means the Minister administering the *Threatened Species Conservation Act 1995*.

# 1. Purpose

In accordance with Section 47 of the *Local Government Act 1993*, Council is giving notice to the public of its intention to create a Biobanking Agreement (within the meaning of Part 7A of the *Threatened Species Conservation Act 1995*), at Arcadia Park Bushland.

The Biobank site will be created for the purpose of conservation, providing in perpetuity preservation and funding of management actions. Further information on biobanking is available at: <http://www.environment.nsw.gov.au/biobanking/>

The purpose of creating a Biobanking agreement is to provide funding to manage the land for biodiversity conservation and allow for public enjoyment. This is done through registering a Biobanking agreement on the property title to ensure biodiversity is protected and managed forever. The ongoing funding for management would be provided from the sale of biodiversity credits generated on the land. Biodiversity credits are a way of putting a value on our native flora and fauna. These credits are placed on the market and purchased to offset the loss of vegetation through development.

Arcadia Park Bushland forms part of an important green corridor linking private land to the west and Berowra Valley National Park, to the east.

**The public notice period is from 1-28 November 2016.**

## 1.1 Biobanking Agreement site:

The proposal is to establish an approximately 14 hectare biobank site in Arcadia Park Bushland. **Figure 1** shows a map of the proposed Biobank site, including Council owned and managed lands and an aerial photo of the surrounding local area. The land is made up of Council owned community land (Lot 761) and Operational land (Lot 3).

The reserves are comprised of the following lots and addresses shown in **Figure 1**:

**Lot and DP:** Part Lot 761 D.P. 1121447 and Part Lot 3 D.P. 618142

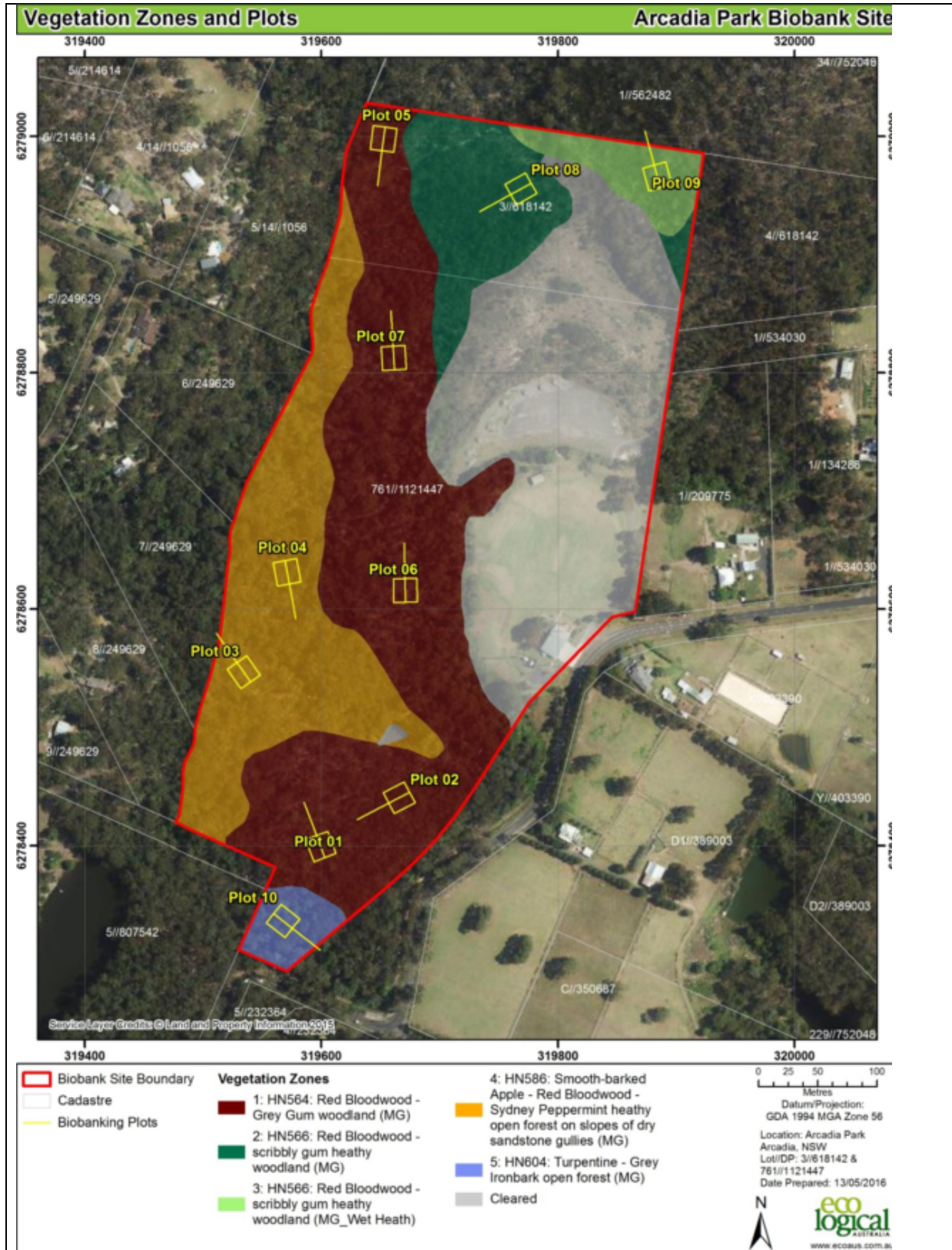
It is proposed that the Biobank site be limited to the natural area and will exclude the transmission line easements, other easements or services and access trails traversing the land.

Biobanking within the reserves will not impact on this area but will improve the site's amenity through increased biodiversity (weed) management.

## 1.2 Term

A Biobanking Agreement is registered on the property title to ensure biodiversity is protected and managed in perpetuity.

Figure 1: Proposed Biobank Site and Council Managed Lands: Arcadia Park Bushland



### 1.3 Details of the proposal

Hornsby Council has received inquiries regarding the purchasing of biobanking credits for various vegetation communities and species that occur within the Arcadia Park Bushland reserve system. Credits created at the Biobank site would be placed on the biodiversity credits register and then sold to prospective buyers.

Upon sale of the credits, Council will receive an ongoing, annual payment to manage the bushland for the purpose of conservation. This means the bushland would be managed in-perpetuity with an external source of funding providing Council with long term savings.

A general overview of the Biobanking scheme is provided in **Figure 2**. The proposed Biobank site will be established through the placing of a Biobanking Agreement (under Part 7A of the *Threatened Species Conservation Act 1995*), over the two reserves.

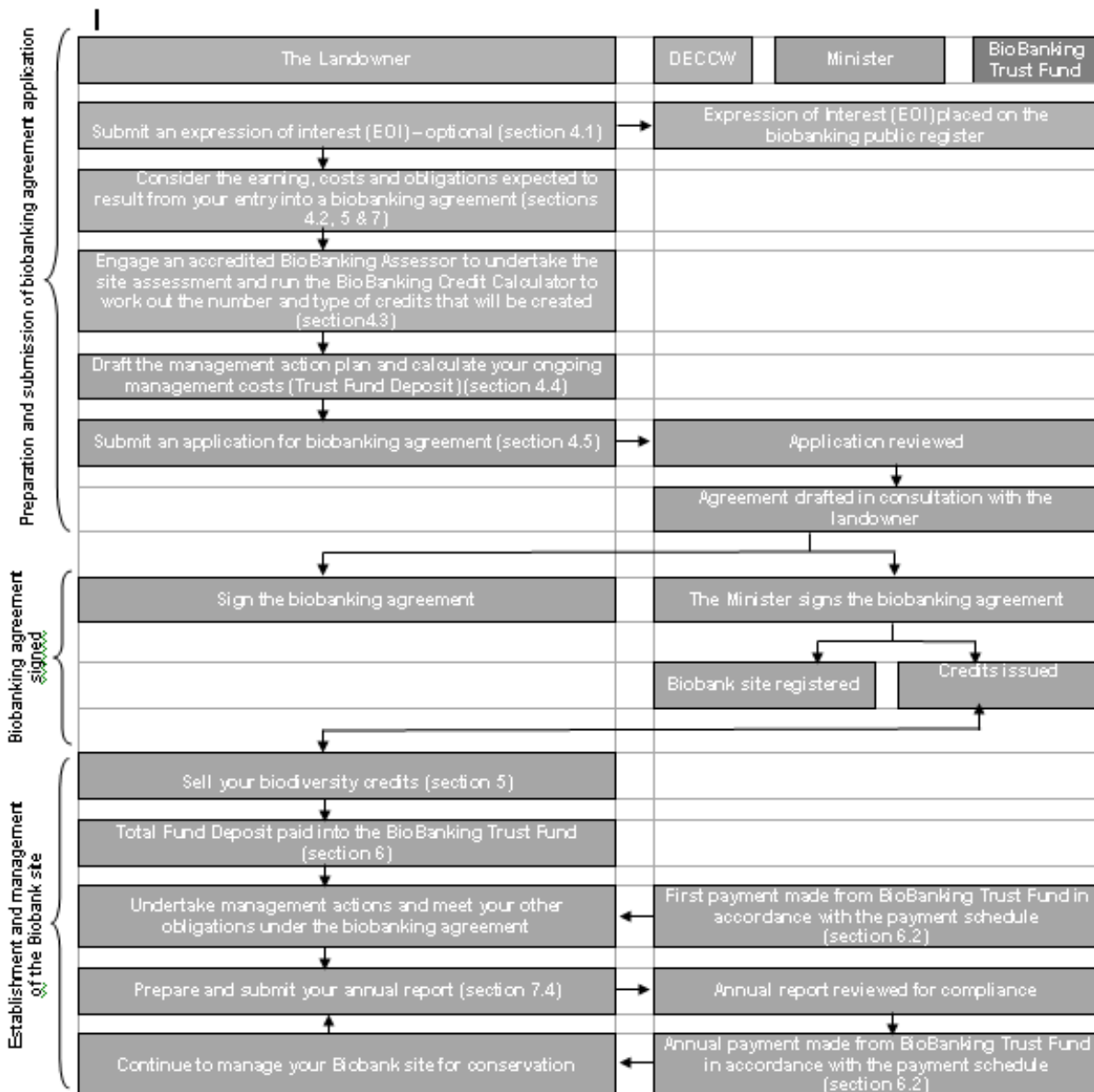
Biobanking Agreements are a type of permanent conservation covenant in which landowners are paid to protect and manage bushland and:

- limit what a landholder may or may not do on a Biobank site;
- are registered on the land's title and bind future landholders; and
- create a right in favour of the Minister to enforce the agreement and hold the landholder to the obligations contained in it.

Funding of the Biobank site will be determined through Biobank calculations derived through the biobanking assessment for the site and the costs of management of the land and will be in the order of \$2,600,000. This fund is generated through the sale of credits with the money placed in a trust fund managed by OEH. Annual payment will be provided to Council from the Biobanking Trust Fund in order to implement management actions specified within the Biobanking Agreement. Council may either use these funds to engage contractors or undertake the management actions itself. Annual reporting to OEH and a five (5) yearly review of the management plan will also be required.

**Figure 2: General overview of Biobanking scheme**  
 (Source: Guide to establishing a biobank site DECCW, 2009)

## GENERAL OVERVIEW OF BIOBANKING SCHEME



## 1.4 Environmental considerations

Council is seeking to consider Arcadia Park Bushland reserves as a biobanking site due to its high conservation significance, connectivity directly adjoining Berowra Valley National Park, excellent condition and its role in conserving native vegetation and habitat for a number of threatened species including *Tetratheca glandulosa*. More detail is provided in **Attachments 1 and 2**.

## 1.5 Restrictions on use / ownership

A search of Council records, in relation to the reserve, has identified that the lands:

- are owned by Hornsby Shire Council;
- are not already the subject of a requirement to carry out biodiversity conservation measures of an ongoing nature under a condition of an approval or offset arrangement;
- are not the subject of an Aboriginal Land Claim under the Aboriginal Land Rights Act 1983; and
- are not subject to any covenant, lease or other interests except for:
  - Transmission lines
  - Easements for batter
  - Easements for support
  - Easements to drain water
  - Easements for fire protection
  - Covenants relating to the above easements
  - Sewer lines

The biobank will exclude all the easements that benefit parties other than Council, as well as areas within 2 metres of public infrastructure not owned by Council.

## 1.6 Proposed management

The proposed Biobank site will continue to be managed under the Community and Crown Land Generic Plans of Management for District 6 as Natural Areas under the *Local Government Act 1993*. The primary purpose of management is for biodiversity conservation whilst allowing for passive recreation in a natural setting. The biobanking agreement will ensure this occurs in perpetuity and receives funding to enable the required management actions.

Council has prepared a preliminary site management plan. This preliminary plan includes a list of management actions and costs that will inform the management actions for the biobanking assessment. A summary of the proposed management actions is provided in **Attachment 3**.

## 1.7 Proposed permissible developments and activities

Actions specified in the Biobanking Agreement 'Management actions and management plans – Attachment 3' are for the primary purpose of improving the biodiversity value of the site and under s.127K of the *Threatened Species Conservation Act 1995*. Such actions are considered to be 'exempt development' under the *Environmental Planning and Assessment Act 1979*. See biobanking standard template: <http://www.environment.nsw.gov.au/resources/biobanking/09693bbagreementexample.pdf>)

Any other developments or activities can only occur if they are listed in clauses 3.5 or 3.6 of the Agreement. **Tables 1 & 2** include proposed actions to be considered for inclusion within the proposed Biobanking Agreement, subject to Biobanking Agreement assessments and consultation (including with OEH and key stakeholders).

Since the objective of a Biobanking Agreement is to improve the value of the site for its biodiversity, OEH's position is that permitted developments and activities on land that is subject to the Biobanking Agreement must be consistent with that objective and will also only agree to their inclusion if the locations and intensity (e.g. number of people at a time, frequencies) of the development/activity are specified. If such parameters of an intended development or activity are presently unknown, it is suggested that the development or activity as "subject to the written consent of the Director General of OEH" be included within the clauses 3.5 or 3.6 of the agreement, and such restrictions could be negotiated at that later time. It should be noted that additional relevant environmental approvals will also be required for such development or activities.

Otherwise, developments or activities not identified at all in clauses 3.5 or 3.6 of the agreement, once made, will not be allowed without subsequent variation to the agreement.



**Table 1: Permissible development on the Biobank site  
(as required within Biobanking Agreement clause 3.5)**

Clause 3.5 The landowner shall be permitted to carry out, or cause or permit to be carried out, the development specified in the following table in the management zone specified in the table.

<b>Permissible development on the biobank site</b>	
<b>Description of development</b>	<b>Management zone/s</b>
Any development within the meaning of section 127(1) of the Threatened Species Conservation Act reasonably considered necessary to remove or reduce an imminent risk of serious personal injury or damage to property.	All zones
Implementation of all forms of hazard reduction works as directed under the Rural Fires Act	All zones
Development not identified in Attachment C comprising of: <ul style="list-style-type: none"> <li>• installation and maintenance of fencing, gates and signage (including signage protection shelters where required) for the purpose of environmental education, limiting human disturbance, facilitating the regeneration of native flora and the protection of native flora</li> <li>• fire trail and walking track formalisation and maintenance for the purpose of biodiversity management and protection</li> <li>• erosion and surface drainage works for the purpose of biodiversity management and protection</li> <li>• seating and /or shelters as required along existing walking tracks</li> <li>• temporary hide structures, up to 3 at any time, for professional fauna monitoring purposes only.</li> </ul>	All zones, at locations across the site as determined by Hornsby Shire Council
Environmental management works, as defined in the State Environmental Planning Policy (Infrastructure) 2007, subject to the written consent of the Chief Executive of OEH	All zones
Use of registered easements as allowed by the Conveyancing Act 1919	All zones
Carrying out of any activity authorised by or carried out in accordance with Petroleum Exploration Licence (PEL) 463 of the Petroleum (Onshore) Act 1991 or any other petroleum title that may be granted under that Act	All zones

**Table 2: Permissible human activities  
(as required within Biobanking Agreement clause 3.6)**

Clause 3.6 Notwithstanding clause 3.1 of the Biobanking Agreement standard template, the landowner may carry out or cause or permit to be carried out any human activities specified in the following table, in the management zone specified in the table.

<b>Permissible human activities on the biobank site</b>	
<b>Description of human activities</b>	<b>Management zone/s</b>
Any human activity reasonably considered necessary to remove or reduce an imminent risk of serious personal injury or damage to property.	All zones
Passive recreation, with the exception of overnight stays and/or camp fires, by small groups to the extent that the condition of vegetation on site is not degraded. Such passive recreation can include, but is not limited to, picnics, bush walking, bird watching and walking of dogs on leash.	All zones
Vehicular access for the purposes of undertaking management actions or infrastructure activities. Wherever possible, vehicles should use existing fire trails. Infrastructure providers must at all times attempt to give written notice to the landowner before entering the site.	Existing fire trails
Slashing and/or mowing of ground cover	All zones, at locations across the site as determined by Hornsby Shire Council

**Additional notes:**

No development or activity can be carried out unless the land owner has the necessary licences, consents, authorisations, permits or approvals in order to lawfully comply with and carry out its obligations under the agreement.

# Attachment 1: Environmental values of the proposed Biobank site

Vegetation communities throughout Arcadia Park bushland vary from ridgetop woodland to gully forests. The upper slopes and ridges support Bloodwood-Scribbly Gum Woodland which is one of the more common communities in Hornsby Shire. The lower slopes support Grey Gum-Scribbly Gum Woodland with Peppermint-Angophora Forest occurring in the gullies. Sydney Turpentine Ironbark Forest is located on the upper slopes with a shale influence.

The vegetation communities support a diverse array of flora species including *Tetratheca glandulosa* (not recorded in this survey) which is listed as a threatened species under the *NSW Threatened Species Conservation Act 1995* and *Grevillea parviflora ssp. supplicans* (not recorded in this survey) which is listed as a threatened species under the *NSW Threatened Species Conservation Act 1995 and Commonwealth Environment Protection and Biodiversity Conservation Act 1999*.

The reserve also provides habitat for Threatened Fauna including the Powerful Owl, Glossy Black-cockatoo, Grey-headed Flying Fox, Little Eagle and the Eastern Bentwing-bat which are all dependent on the forest ecosystem.

The reserve is located adjacent to large tracts of bushland on private property. The reserve is approximately 1km from Crown Land and a further 1km from Marramarra national Park to the north and 2km to Berowra Valley national Park to the south. The ongoing management of this site through the implementation of management actions contained in the biobanking agreement provides good long term conservation prospects for this stand of native vegetation and ensures the connectivity of this corridor in the long term.

This high conservation significance, connectivity, resilience, good condition and long term viability make this a preferred biobanking site in terms of the securing a conservation outcome for the listed community as well as its diatreme form. The reserves provide important green corridors and habitat for a number of threatened and significant species and forest communities that would be further protected in perpetuity through a biobank partnership agreement.

## **References:**

Hornsby Shire Council (2006) *Hornsby Shire Biodiversity Conservation Strategy 2006*. Hornsby Shire Council, Hornsby.

NSW National Parks and Wildlife Service (2005) *Berowra Valley Regional Park Plan of Management 2005*. NSW National Parks and Wildlife Service, Hurstville.

Smith, P. and Smith, J. (1990). *Vegetation and fauna of Berowra Valley Bushland Park. Report and maps prepared for Hornsby Shire Council, September 1990*. P & J Smith Ecological Consultants, Blaxland.

Smith, P. and Smith, J. (2008). *Native vegetation communities of Hornsby Shire:2008 update. Report and GIS layers prepared for Hornsby Shire Council, November 2008*. P & J Smith Ecological Consultants, Blaxland.



## Attachment 2: Vegetation communities

Plant community type	Area (ha)
<i>Red Bloodwood - Grey Gum woodland on the edges of the Cumberland Plain, Sydney Basin Bioregion</i>	6.64
<i>Turpentine - Grey Ironbark open forest on shale in the lower Blue Mountains, Sydney Basin Bioregion</i>	0.4
<i>Smooth-barked Apple - Red Bloodwood - Sydney Peppermint heathy open forest on slopes of dry sandstone gullies of western and southern Sydney, Sydney Basin Bioregion</i>	3.76
<i>Red Bloodwood - scribbly gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion</i>	2.36

## Attachment 3: Proposed management actions

Council has prepared a preliminary site management plan. **Figure 3** shows proposed managements zones and actions.

Annual reporting to OEH and a five (5) yearly review of the management plan (as part of the Biobanking Agreement) will be required. In addition to annual condition and photo point monitoring,

Council is investigating options for monitoring the impacts of fire management on flora diversity, threatened flora, invertebrate and vertebrate populations and soil health. Monitoring will provide valuable information to assist Council and the Hornsby/Ku-ring-gai District Bush Fire Management Committee to manage vegetation, fire and post fire weed and predation issues.

There are a number of actions included within the preliminary site management plan, such as bushfire management works, but excluded from the Biobanking Total Funds Deposit calculations and as such from funding under the Biobanking Agreement.

There is, however, leeway to include unfunded actions within the Biobanking Agreement management plan. Whilst having no impact upon Council's reporting requirements, it will provide a single point of reference for site management.

**Figure 3: Management actions and zones within the proposed biobanking site**

<b>Reserves</b>	<b>Action</b>
Arcadia Park Bushland	Primary and secondary bush regeneration
	Maintenance weeding
	Planting if required
	Control of feral herbivores
	Vertebrate pest control
	Signage, security
	Bushfire management - community Firewise education and hazard reduction burns
	Bushfire management works including manual works in asset protection zones
	Maintenance of walking trails
	Establish new trail
	Fire trail maintenance
	Maintain Catchment Remediation devices
	Upgrade Catchment Remediation devices

# Management Zones



Biobank Site Boundary  
 Cadastre

### Management Zone

- 1
- 2
- 3
- 4
- 5

0 25 50 100  
Metres  
Datum/Projection:  
GDA 1994 MGA Zone 56

N  
**eco**  
**logical**  
AUSTRALIA  
www.ecoaus.com.au  
Prepared by: VH Date: 13/05/2016