



**Proposal for a
Biobank Site at
Waitara Creek
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 several bushland reserves in the Waitara Creek Catchment.

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.

Waitara Creek Catchment reserves form part of an important green corridor due to their connectivity with Berowra Valley National Park, and they contribute to the NSW Green Corridors program, a Government priority action identified in the NSW 2021 Plan.

The public notice period is from 3 November - 1 December 2016.

1.1 Biobanking Agreement site:

The proposal is to establish an approximately 31 hectare biobank site at the Waitara Creek Upper Catchment. **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.

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

Dog Pound Creek Bushland

Lot and DP: Part of Lot 40 DP 576173, Lot 21 DP 712741, Part of Lot 68 DP 752053

Ginger Meggs Park

Lot and DP: Lot 3 DP 868063

Waitara Creek Bushland

Lot and DP: Lot 41 DP 576173, Lot 6 DP 252696, Lot 10 DP 737216, Lot 50 DP 250520, Lot 21 DP 219175

Normanhurst Park

Lot and DP: Los 18-20 DP 3468, Lot Z DP 416673, Lot 23 DP 220061.

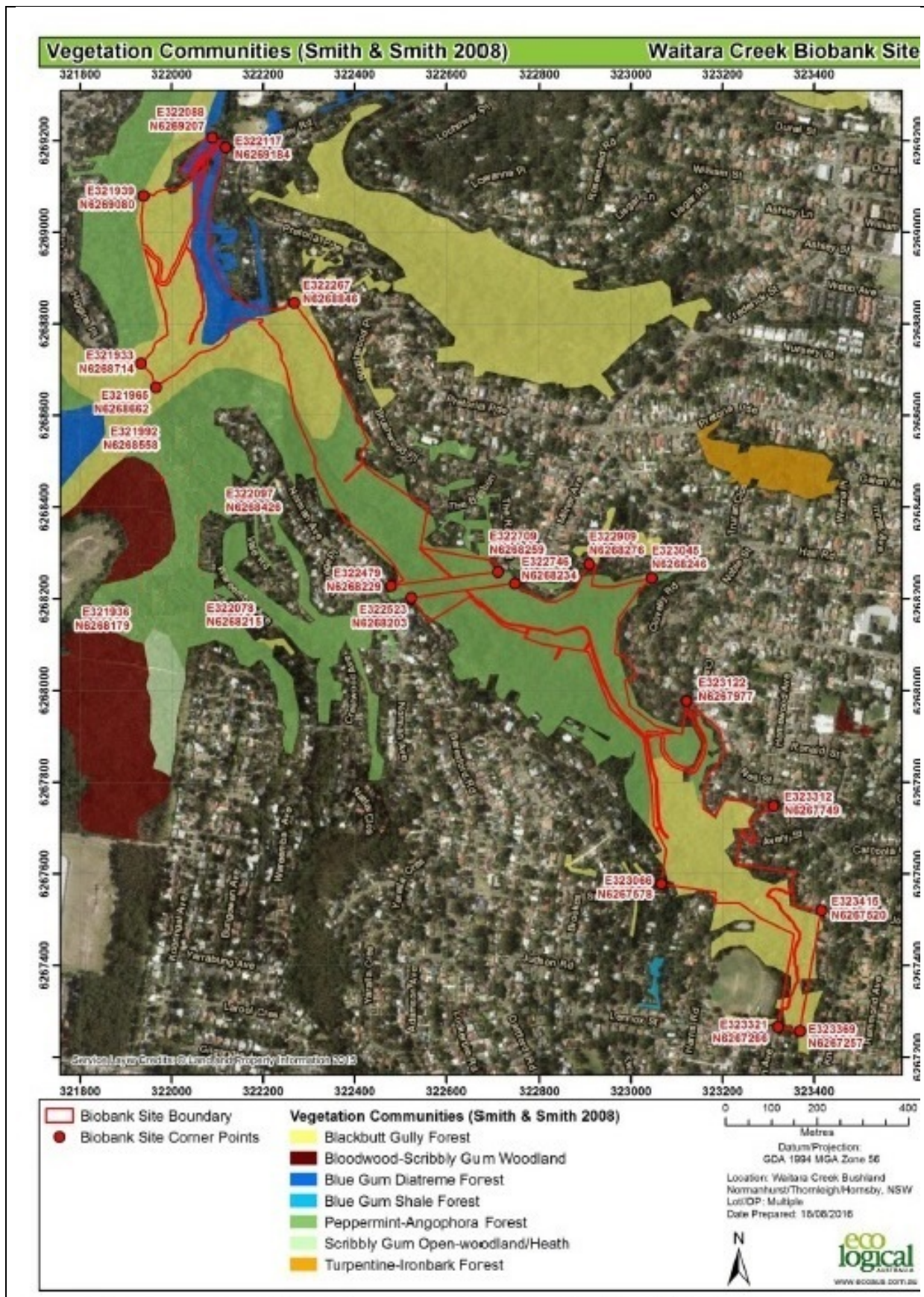
It is proposed that the Biobank site be limited to the natural area and will exclude the transmission line easements, other easements or services and access trails traversing the land.

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: Waitara Creek Upper Catchment reserves



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 Waitara Creek catchment. 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.

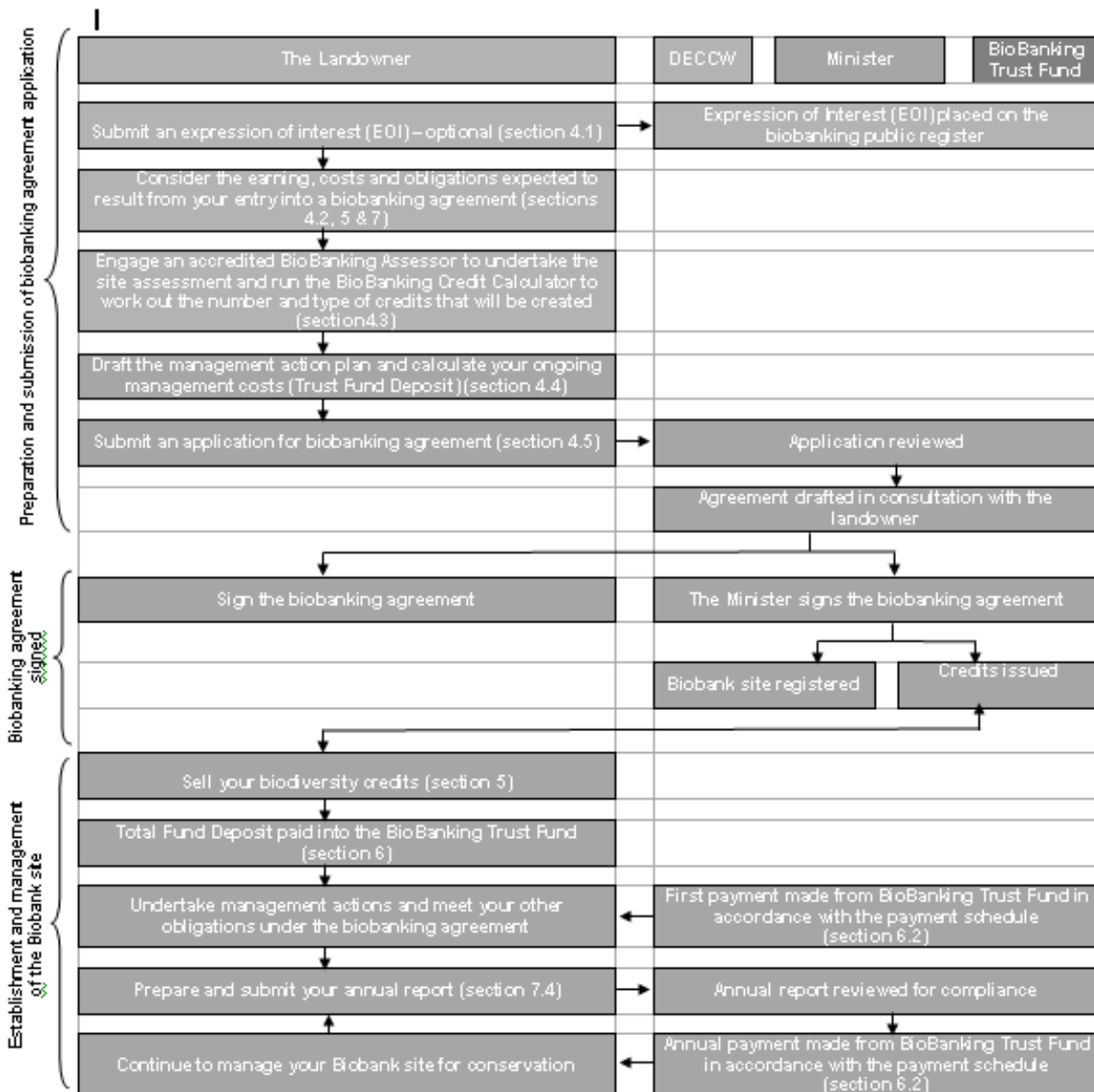
Biobanking Agreements are a type of permanent conservation covenant in which landowners are paid to protect and manage bushland and:

- 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 Waitara Creek Upper Catchment 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 Blue Gum Diatreme Forest that forms part of the Critically Endangered Blue Gum High Forest, and its role in conserving a number of threatened species especially the endangered plant *Epacris purpurascens* var. *purpurascens*, habitat for threatened fauna as well as locally significant tall forest communities. 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 (being Waitara Creek Upper Catchment reserves) will continue to be managed under the Community and Crown Land Generic Plans of Management for District 2 and 3 & 9 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.

Permissible development on the biobank site	
Description of development	Management zone/s
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"> • 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 • fire trail and walking track formalisation and maintenance for the purpose of biodiversity management and protection • erosion and surface drainage works for the purpose of biodiversity management and protection • seating and /or shelters as required along existing walking tracks • temporary hide structures, up to 3 at any time, for professional fauna monitoring purposes only. 	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.

Permissible human activities on the biobank site	
Description of human activities	Management zone/s
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

Waitara Creek Upper Catchment reserves significant stands of Blue Gum High Forest, a critically endangered ecological community listed under the NSW Threatened Species Act. The community has been severely depleted, with over 95% of its original extent now cleared (Tozer 2003, Threatened Species Scientific Committee 2005).

Council's vegetation mapping (Smith and Smith 2008) has distinguished Blue Gum High Forest into two forms occurring on different geology – Blue Gum Shale Forest growing on Wianamatta Shale and Blue Gum Diatreme Forest growing on volcanic diatremes. The Dog Pound Creek Bushland contains the Blue Gum Diatreme forest form and approximately half of the remaining examples including some in the best condition.

Blue Gum Diatreme Forest is naturally very rare occurring only in the Hornsby Diatreme system and has been systematically removed by mining and logging. Of the remaining area of Blue Gum Diatreme Forest (14 ha, Smith and Smith 2008), most occurs on land owned or managed by Hornsby Council with only 0.5 ha of the community conserved in the adjoining Berowra Valley National Park. This proposed biobanking site contains 48% of the remaining Blue Gum Diatreme Forest and has a major role to play in the conservation of this form of the community.

In 2004 Council purchased a large parcel of privately owned land in Dog Pound Creek in 2004 to conserve the Blue Gum Diatreme Forest and has undertaken significant bush regeneration in the reserves resulting in their present good condition.

Community bush regeneration has also contributed to the reserves' current condition with 25 volunteers working in five Bushcare groups who have undertaken substantial bush regeneration work in the reserves.

The conservation values of the reserves have been recognised by Macquarie University undertaking research and teaching in the reserves (Leishman and Noble) for many years, and have been experienced by bushwalkers in Council's free guided bushwalks following tracks that lead into the Great North Walk.

The reserves provide habitat for Threatened Fauna including the Powerful Owl, Glossy Black-cockatoo, Grey-headed Flying Fox and the Eastern Bentwing-bat which are all dependent on the forest ecosystem. They contain four threatened plant species, including *Galium australe* an endangered herb species once presumed extinct, which is known from Dog Pound Creek, as well as the endangered *Grammitis stenophylla*, *Epacris purpurascens* var. *purpurascens* and *Syzigium paniculatum*. They provide habitat for critical weight range fauna species such as the Common Dunnart.

The reserves contain good examples of Blackbutt Gully Forest an important tall forest community that is locally significant in the Hornsby Shire due to only small areas being conserved in Ku-ring-gai Chase and Berowra Valley National Parks (Thomas and Benson 1985, Smith and Smith 2008). The reserves form a connected network of green corridors to Berowra Valley National Park and also connect to Lane Cove National Park via a series of stepping stone linkages.

These reserves being located adjacent to Berowra Valley National Park and within Council actively managed bushland valleys, and being in good condition provide good long term conservation prospects for this stand of Blue Gum High Forest and other tall forest types 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.

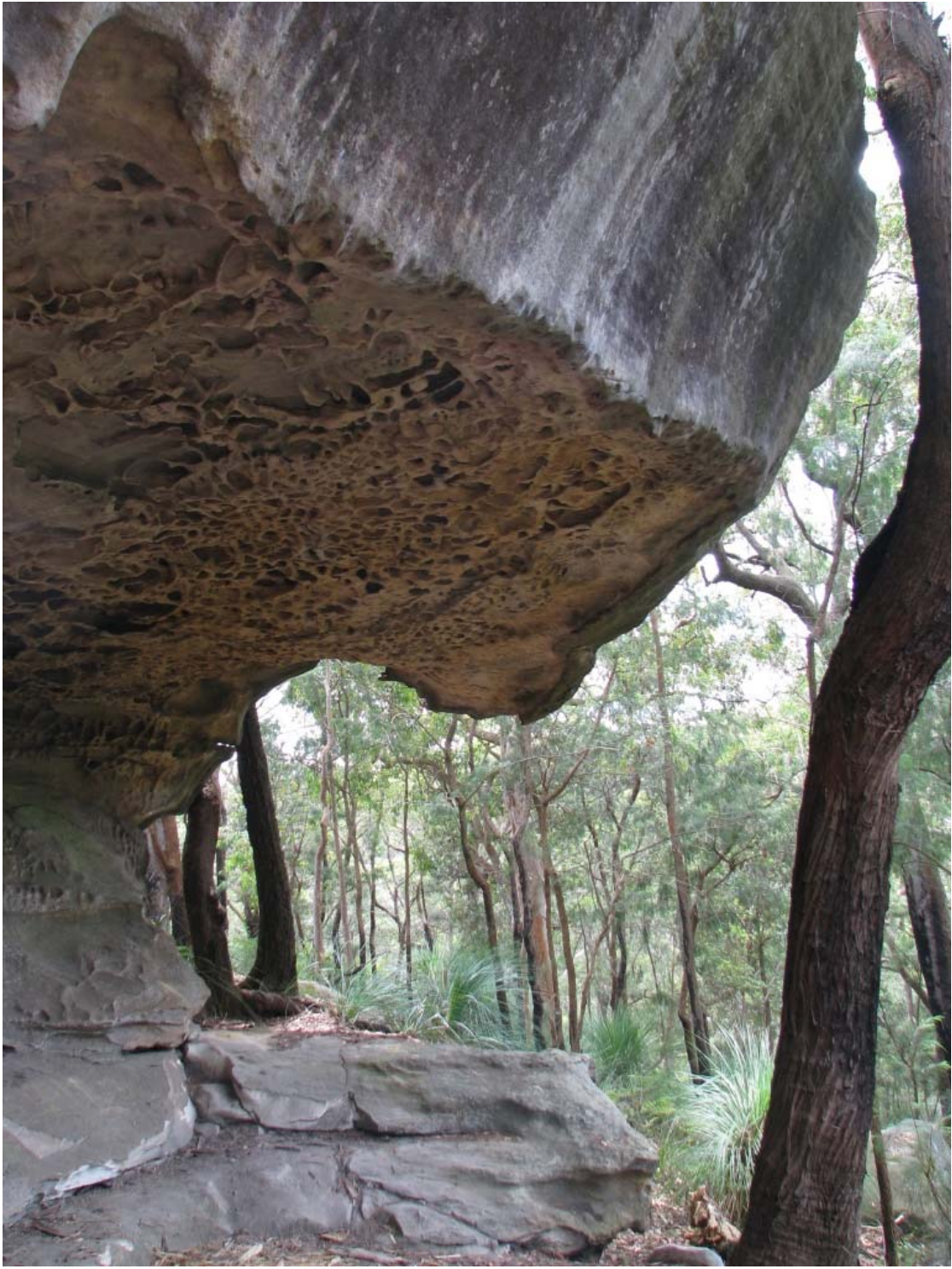
References:

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

Summary of potential ecosystem credits generated Plant community type	Condition	Area (ha)	Credits generated	Credits/ha
<i>Sydney Blue Gum - Blackbutt - Smooth-barked Apple moist shrubby open forest on shale ridges of the Hornsby Plateau, Sydney Basin Bioregion</i>	Moderate to Good	3.54	37	10.45
<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>	Moderate to Good	17.7	211	11.92
<i>Red Bloodwood - scribbly gum heathy woodland on sandstone plateaux of the Sydney Basin Bioregion</i>	Moderate to Good	0.63	6	9.52
<i>Water Gum - Coachwood riparian scrub along sandstone streams, Sydney Basin Bioregion</i>	Moderate to Good	5.08	48	9.45
<i>Turpentine - Grey Ironbark open forest on shale in the lower Blue Mountains, Sydney Basin Bioregion</i>	Moderate to Good	3.64	45	12.36
<i>Total</i>		30.59	347	11.34

Summary of potential species credits generated Species	Count	Credits generated	Credits/ha
<i>Epacris purpurascens</i> var. <i>purpurascens</i>	24	170	7.1

Attachment 3: Proposed management actions

Council has prepared a preliminary site management plan. **Table 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.

Table 3: Management actions and zones within the proposed biobanking site

Reserves	Action
Dog Pound Creek Ginger Meggs Park Waitara Creek Bushland Normanhurst Park	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	