



BioBanking and Development

A Guide for Local Aboriginal Land Councils

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1. An introduction to this Guide

This BioBanking Guide (the Guide) will assist Aboriginal people and communities who own developable land to understand the potential benefits and risks associated with developing land in conjunction with the BioBanking Scheme.

The Guide has been written specifically for Aboriginal communities and particularly Local Aboriginal Land Councils (LALCs) within NSW.

Please note: While all care has been taken in the preparation of this Guide, it is not a substitute for legal, financial and property advice in individual cases. Aboriginal communities and the land they own are diverse and as a result not all issues identified within the Guide will be relevant to everyone. The information provided is current as of August 2011.

This Guide provides information on:

- What BioBanking is;
- How the BioBanking Scheme works;
- How offsetting development through the BioBanking Scheme applies to LALCs; and
- Legislative implications.

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2. What is biodiversity?

Biodiversity is the life that surrounds us and provides our social and cultural context. Biodiversity is a defining part of personal and community identity, especially for Aboriginal peoples and communities, who have specific connections and inherent rights over land and waters.

Biodiversity is the variety of all life forms on earth – the different plants, animals and microorganisms and the ecosystems of which they are a part. Biodiversity can be assessed at three levels: the genetic diversity, the species diversity and ecosystem diversity. These three levels combine to create the complexity of life on Earth.

Biodiversity is fundamental to Aboriginal physical, social, cultural, spiritual and economic wellbeing and also has its own intrinsic worth. Healthy ecosystems are critical to the wellbeing of current and future generations.

2.1 Why is biodiversity important to Aboriginal peoples?

The natural environment has special significance for Aboriginal people. Aboriginal people and their Country (traditional lands and waters) are interconnected by the spiritual significance of natural landscapes. In particular:

- Connection and re-connection with Country is an important part of Aboriginal culture;
- Aboriginal identity and the physical, cultural, and spiritual wellbeing of Aboriginal people is strongly linked to the health of the land, and the ability of Aboriginal people to access the land:
- Access to Country and its resources are essential for Aboriginal people to continue important cultural practices;
- Without biodiversity many of the important traditions (e.g. fishing, hunting, and gathering)
 will be lost. This has been clearly seen since European settlement in both urban and
 agricultural areas, where displacement has occurred and the biodiversity has been
 significantly impacted.

Today, under the *Aboriginal Land Rights Act* 1983 (NSW) (**ALRA**) LALCs are the primary means by which the stewardship of Country is being maintained and promoted. LALCs are required to improve, protect and foster the best interests of all Aboriginal people in their areas.

2.2 Development, biodiversity conservation and BioBanking

Development leading to the loss of remnant native vegetation has been a significant factor in the ongoing loss of biodiversity throughout NSW. As a consequence, the NSW Government requires developers to meet a range of environmental criteria and standards to ensure that the environmental impacts associated with developments are minimised. However, these legislative requirements are often limited in their ability to conserve biodiversity as they do not, in general, promote an integrated or holistic view of biodiversity. Development is often viewed as something negative due to its biodiversity impacts, and the developers can often incur significant financial costs and time delays in meeting the required environmental criteria.

In response to this situation, the Office of Environment and Heritage (**OEH**) has developed the BioBanking Scheme to provide a state-wide biodiversity offset scheme for developers which aims to ensure that impacts from development are balanced with positive conservation measures in a consistent manner. By participating in the BioBanking Scheme, LALCs who wish to develop on their land can contribute to the conservation and protection of biodiversity and threatened species, while potentially minimising the costs associated with obtaining development approval.



3.1 A general overview

BioBanking is a voluntary scheme established by the NSW State Government in 2008 to protect biodiversity within NSW while facilitating development. The BioBanking Scheme (formally known as the Biodiversity Banking and Offsets Scheme) is a market-based program designed to give developers the potential to develop their land in an environmentally sustainable way, while also providing landowners with an economic benefit in return for conserving the biodiversity on their land.

BioBanking aims to make up for biodiversity losses to date resulting from activities such as urban development. The fundamental idea behind BioBanking is that all development should either "improve or maintain" biodiversity values. Under the BioBanking Scheme, land can only be cleared for development by offsetting the lost biodiversity by protecting and improving biodiversity somewhere else.

The BioBanking Scheme works by assigning "credits" to a piece of land that represents the value of the biodiversity present on that land. If the landowner then wants to develop and/or clear their land, they would have to buy from someone else the amount of corresponding credits that would be lost from their site as an offset to the development. This provides an alternate process from the normal development application channels, such as the threatened species assessment of significance process, which includes preparing species impact statements.

Participation in the Scheme is optional. The Scheme is enacted under the *Threatened Species Conservation Act* 1995 (NSW) (**TSC Act**) and can be used as an alternative pathway to the development assessment requirements under parts of the *Environmental Planning and Assessment Act* 1979 (NSW) (**EP&A Act**), for instance Parts 4 and 5.

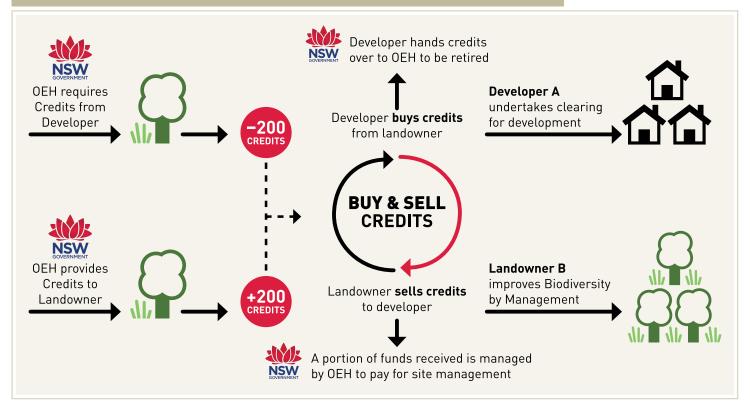
For example:

Consider two individuals (Developer A and Landowner B). Developer A owns 50 hectares of land and wants to clear all of it. Developer A obtains a **Biodiversity Statement** from the Government that states that, under the BioBanking Scheme, the land is worth 200 biodiversity credits. To clear the 50 hectares Developer A would be required to buy 200 credits from other landowners. The developer searches the OEH online BioBanking public register (www. environment.nsw.gov.au/bimspr/index.htm) to identify landowners who hold and are willing to sell their credits, and finds Landowner B.

Landowner B owns 200 hectares of land worth 200 biodiversity credits. The slope and geology of the land makes it unsuited to development. Landowner B decides that participating in the BioBanking Scheme will give the greatest economic return for the land whilst also protecting and conserving the biodiversity values. As there is some demand for the biodiversity credits from developers, Landowner B then enters into a legally binding **BioBanking Agreement** with the Government which commits the owner to maintain or improve biodiversity values on the land **in perpetuity**.

Developer A and Landowner B can then negotiate with each other to agree the appropriate price for the 200 credits (the actual area of land required to make up 200 credits will vary according to the condition of the land). As a minimum, the sale price per credit must be high enough to cover the cost of improving/maintaining the biodiversity values on Landowner B's land. The credits bought by Developer A are used to offset the loss in credits from the development by handing them over to the State Government ("**retiring**" the credits). Once the credits have been retired they cannot be reused.

BioBanking Scheme - Overview of buying and selling credits



The outcome of this system is that for every development that removes native vegetation, a portion of land with equivalent biodiversity value is locked away and protected against deterioration. By operating the system as an optional market-based supply and demand driven scheme it allows for both landowners and developers to only participate when it is in their economic interest.

LALCs may wish to consider participating in the Scheme both as developers looking to offset losses and as landowners looking to establish BioBank sites and preserve the natural values of their land in perpetuity. This Guide provides information for Aboriginal landowners and LALCs looking to develop their land through the BioBanking Scheme and outlines the associated risks and benefits.

A more detailed description of how the BioBanking Scheme works and how LALC's can participate as developers is provided in **Section 4** of this Guide. **Sections 5 - 8** provide more detail about specific issues LALCs should be aware of before deciding on using BioBanking as part of their development pathway.

3.2 What's in it for me?

As a developer there are a number of benefits that you may receive by pursuing development in conjunction with the BioBanking Scheme. By participating in the BioBanking Scheme as a developer, Aboriginal landowners and LALCs will be contributing to the long-term preservation of biodiversity values across the state. If a LALC or a landowner has a specific interest in the preservation and protection of biodiversity, the BioBanking Scheme may provide a way for these conservation aims and objectives to be met while also permitting development to occur.

Significantly the BioBanking Scheme allows for landowners who are undertaking development to choose which parcels of land are used to offset a development. This means that a LALC may be able to offset development in one area of its property through the conservation of another portion of their property. This would allow biodiversity values on one part of the site to be preserved while also permitting development. In this case, the landowner would receive both the benefit of development and conservation. Similarly, a LALC may wish to offset their development with land held by other LALCs or Aboriginal landowners, thereby ensuring the

protection of land and of environmental or cultural values for the wider Aboriginal community, while also promoting cooperation between Aboriginal organisations. For example, a developer may have two sites to choose from to offset its development, one site containing low cultural values and one with high cultural values. By choosing to offset the development against the site of higher cultural value, the developer is positively contributing to the preservation of Aboriginal culture and heritage.

It is considered that these **environmental** and **cultural** gains associated with the Scheme are amongst the most significant benefits that Aboriginal developers will receive through participation in the Scheme. Sustainable development is a significant issue for LALCs and it is recommended that all LALCs consult with the NSW Aboriginal Land Council (**NSWALC**) about the potential for participation in BioBanking when considering development options and land dealings. If a LALC or Aboriginal landowner does not have a specific interest in conserving biodiversity, BioBanking may not be the most suitable development pathway available.

In addition to the environmental and possible site conservation benefits, there may be **economic** benefits. The standard development pathways and approvals processes in regards to the assessment of development impacts on biodiversity values (i.e. Statement of Environmental Effects, Species Impact Statements etc.) can be both costly and time consuming. By participating in the BioBanking Scheme as a developer, you enter into a streamlined assessment process that simplifies the process of obtaining approval. Importantly, the Scheme provides confidence and certainty in regards to ecological aspects of the development and lowers the risks developers face. Furthermore, once a developer has offset their development, they have no further obligations or requirements to look after the offset site, as can often be the case in traditional offsetting agreements.

The BioBanking Scheme has also been designed in such a way as to aid both landowners and developers in **understanding the value of biodiversity** on their sites. This understanding may help shape the decision making process of Aboriginal landowners considering development by providing an indicative dollar value to the biodiversity present. The BioBanking methodology allows developers to identify any potential threatened species / biodiversity constraints and allows them to forecast the cost of the potential offsets and include them in the financial feasibility analysis for a proposed development. It may be that the value of biodiversity on-site, once incorporated into an economic assessment, may show that proceeding with a proposed development could be a poor economic decision.

There are also **sustainable development** benefits that may be received through participating in the BioBanking Scheme. Under the Scheme, the biodiversity values on site (and the value of the loss of biodiversity through development) are calculated through the **BioBanking Assessment Methodology and Credit Calculator**. The Assessment Methodology and Credit Calculator are publically available for free on the OEH website; www.environment.nsw.gov.au.

LALCs and Aboriginal developers may wish to use these tools to run different development scenarios to identify the development options that minimise impacts upon biodiversity.

Sustainable development is considered to be a key aspect of the land management to be practiced by LALCs and Aboriginal landowners. NSWALC has published a toolkit on sustainable land-use options for Aboriginal developers that provides further information on this issue. This is available from the NSWALC website, www.alc.org.au or by contacting the NSWALC Policy and Research Unit (details are noted in Section 8).



4. How does BioBanking work?

To participate in BioBanking a LALC or landowner can act in three different roles:

- A developer wishing to offset environmental impacts associated with a development proposal;
- A landowner wishing to establish a BioBank Site; and
- A trader of biodiversity credits.

The primary focus of this Guide is to explain how BioBanking works for LALCs as developers. However, some LALCs also have the potential to act as landowners or traders depending on their financial and land ownership status. NSWALC has prepared a *Guide to BioBanking for Aboriginal Landowners*. It is recommended that landowners obtain a copy of this document and consult with NSWALC about their suitability for participating in the Scheme

All three of these roles are based on obtaining or exchanging biodiversity credits.

4.1 How do you obtain biodiversity credits?

A LALC or any Aboriginal landowner may contract a qualified BioBanking Assessor (www.environment.nsw.gov.au/BioBanking/assessors.htm) to come out to their property and assess the area of land they are considering developing.

The Assessor would use a specific assessment methodology prepared by OEH (the *BioBanking Assessment Methodology*) to identify the biodiversity values on site (for example identifying the presence of threatened species and threatened ecological communities). Based on the proposed development footprint the Assessor will then identify the value of the biodiversity to be lost through the development and the number of credits the developer must obtain to offset this loss. This is done through the use of the *Biodiversity Credit Calculator*.

The same process would be applied for a LALC looking to conserve their land, except that instead of identifying the number of credits required based on the relative loss of biodiversity, the Assessor would assign credits based on the potential improvement in biodiversity improvement through land management.

There are two types of credits that can be required/awarded under the Scheme:

- Species Credits: If the site contains certain threatened species that will be impacted by
 the development it may require additional credits depending on the population present. The
 135 threatened species for which species credits would be awarded are listed at:
 www.environment.nsw.gov.au/BioBanking/vegtypedatabase.htm; and
- Ecosystems Credits: The ecosystem credits are calculated based on the type and quality of vegetation (plants) present on the site and the fauna (animal) species known or expected to be present based on geographic location and habitat types. Typically, rare ecosystems will be worth more credits than common ecosystems.

Importantly for both species and ecosystem credits, under the BioBanking Credit Calculator it is the change in the biodiversity values associated with the development/establishment of a BioBank site, rather than the existing biodiversity values that determine the number of credits associated with the land. For a developer it is the relative loss (before and after construction) of biodiversity that determines the number of credits they will need to offset their impacts. For a landowner conserving biodiversity, it is the potential improvement in biodiversity values through long-term management that determines the number of credits that they would receive for a site. The outcome of this relative gain/loss system is that, in general, a development with a small footprint area may require the conservation BioBanking of a large area of land. This is because development clearing will typically lead to the complete loss of biodiversity value in an area (e.g. a loss of 100 ecosystem credits), where as the improvement in biodiversity value through long-term management of a similar sized area may only generate a small gain in value (e.g. a gain of 10 ecosystem credits). This is extremely important for developers to be aware of, as they can only offset their impacts if they can find landowners with the right amount and type of credits. Developers can utilise multiple landowners to offset their development.

A list of all credits issued and traded is maintained in the Biodiversity Credits Register on the OEH BioBanking website (see Section 8 for contact details).

Potential for Improvement Threatend Species Values Ecosystem Values Land Management Actions Available

Number of Credits

The above figure summarises how the BioBanking Credit Calculator works for a developer looking to offset their development.

4.2 How do I offset a development?

4.2.1 Are all developments able to utilise BioBanking?

There are some prohibitions on the type of developments that can be offset through the BioBanking Scheme. Provided below is a list of criteria which may prevent a LALC who wishes to develop from participating in the Scheme:

- If the development would not normally require assessment under Parts 3A, 4 or 5 of the EP&A Act then it is not suitable for participation in the scheme. That is; BioBanking only functions as an environmental assessment protocol for developments that are captured by Parts 3A, 4 and 5 of the EP&A Act. It is highly likely that developments proposed by Aboriginal landowners would be assessed under these sections of the EP&A Act and therefore would be eligible for participation in the BioBanking Scheme. Please note that at the time of writing Part 3A of the EP&A Act is under review, and advice should be sought in relation to developments which would previously fallen under this section of the Act.
- The Native Vegetation Act 2003 provides for protection of certain vegetation species and communities across the state. Developers will be unable to utilise the BioBanking Scheme where the land proposed for development triggers the provisions of the Native Vegetation Act 2003. It is likely that most developments proposed by Aboriginal landowners would not trigger these provisions, although further advice regarding this is recommended.
- The development is specifically prohibited under an environmental planning instrument (e.g. Local Environmental Plans – LEP or State Environmental Planning Policies - SEPP).

For further information regarding land eligibility, planning and LEPs and SEPPs see NSWALCs Planning Fact Sheets available from www.alc.org.au or contact the Policy and Research Unit at NSWALC (see Section 8 for contact details).

4.2.2 Obtaining a BioBanking Statement

In order to utilise BioBanking to offset the impacts of a development, the developer must obtain a **BioBanking Statement**. A BioBanking Statement is an official statement issued under the TSC Act 1995 by the Minister for the Environment. The statement will:

- Specify the number and class of credits that need to be purchased and retired, prior to the commencement of works, to offset the loss of biodiversity credits associated with the development; and
- Include other on-site environmental management conditions in order to minimise the impact of the development on biodiversity values.

These criteria are determined through the application of the BioBanking Assessment Methodology and Credit Calculator by an accredited BioBanking Assessor. In considering an application for a BioBanking Statement, the OEH will also consider any on-site measures or environmental contributions connected with the development that the developer proposes to undertake to minimise the impact on biodiversity values. The application form for a BioBanking Statement and details of the necessary supporting documentation are available on the OEH BioBanking website.

Assuming the BioBanking Statement application is approved and issued, the developer would then submit the Statement to the relevant development consent authority as part of the proposed development application. Once an approved BioBanking Statement has been submitted as part of a development application, the consent authority cannot request further biodiversity information to be provided. The conditions of the Biodiversity Statement would be included in the development consent conditions issued.

Until development consent is granted, the Statement and the credit requirements will remain valid for two years. After development consent is granted the Statement will lapse when the development consent lapses or after a period of five years if works have not yet started.

At September 2011, the cost of obtaining a Biobanking Statement is \$10,800, and if modifications to a Biobanking Statement are required, a further application fee of \$1,188 is applied. It should be noted that obtaining a statement does not guarantee that credits will be available for purchase. Further information about BioBanking costs can be found in **Section 4.6**.

It should be noted that the BioBanking Assessment Methodology and Calculator can be used (by a LALC themselves or through an accredited assessor) to identify biodiversity constraints on a site or to compare potential development options, even if the LALC does not wish to obtain a formal BioBanking Statement or participate in a BioBanking offset arrangement. The results from applying the BioBanking Assessment Methodology effectively highlight areas of value and high conservation significance that developers should consider in their plans.

Once a Biodiversity Statement has been obtained, it is the responsibility of the developer to then go and find landowners who wish to conserve their land through BioBanking and purchase the required number and class of credits to offset the development. How LALCs as developers can buy and retire the required credits under the BioBanking Statement is described in Section 4.4. The typical steps required to establish a BioBanking Agreement by a LALC are summarised in **Figure 4.2**.

LALCs will also need to consider whether NSWALC approval is required for their proposed activities pursuant to Part 2 Division 4 of the ALRA and, in particular s42G of the ALRA. Activities requiring development applications to be made are land dealings. The NSWALC Policy on the Assessment and Approval of Local Aboriginal Land Council Land Dealings (available: http://www.alc.org.au/land-councils/lalc-land-dealings.aspx), the ALRA and the *Aboriginal Land Rights Regulation* 2002 (NSW) (ALRR) set out the requirements needed to obtain NSWALC approval for a land dealing. LALCs should have careful regard to these requirements when making their applications for NSWALC consent. LALCs should refer to NSWALCs website to access land dealings information and relevant fact sheets. Once a land dealing is approved by NSWALC and a land dealing approval certificate is issued, processes involved with developing using BioBanking can be pursued. BioBanking is an alternative to the current threatened species assessment of significance process, including species impact statements and concurrence or consultation with the Minister for the Environment or the Chief Executive Officer of OEH (formerly the Director-General of DECCW)¹ under the EP&A Act. It is not mandatory, and the standard assessment of significance process can be adopted if preferred.

Please note: Entering into a BioBanking Agreement (an agreement is required in order to establish a BioBank site on land in perpetuity) is defined as a land dealing and requires NSWALC approval under s40(c) of the ALRA. Please see NSWALC's *Guide to BioBanking for Aboriginal Landowners* (available from www.alc.org.au) for more information regarding this process.

¹ Note that references in the TSC Act to the Director-General are to the Director-General of DECCW. Most of the functions of DECCW have now been transferred to the Office of Environment and Heritage (OEH), a separate office within the NSW Department of Premier and Cabinet.

BioBanking Process (excluding processes required under the ALRA) - LALCs will need to follow land dealing processes required under the ALRA prior to engaging in BioBanking.

Preliminary Assessment

It is recommended that prior to formally applying for a BioBanking Statement, LALCS undertake a preliminary assessment to determine the suitability for BioBanking as part of their development plans. This should include initial discussions with the development consent authority and a review of the BioBanking Public Registers to identify the type of credits available. It should also involve seeking independent legal, financial and property advice. There is also the potential to advertise on the 'List of wanted credits' (www.environment.nsw.gov.au/BioBanking/listwantedcredits.htm) to show to others that you may be looking for some credits. The BioBanking Credit Calculator could be used to compare development options.

Detailed Assessment

An accredited BioBanking Assessor is engaged to undertake a site assessment and operate the BioBanking Credit Calculator to work out the number of credits required to offset the biodiversity impacts of the proposal. The site assessment will identify and assess any relevant negative direct and indirect impacts that the development is likely to have on biodiversity values and the on-site measures available/required to mitigate these impacts.

Submit Application

LALCs must lodge a land dealings application form with NSWALC and follow processes under the ALRA, ALRR and the NSWALC Policy on the Assessment and Approval of LALC Land Dealings . Following approval by NSWALC a BioBanking Statement Application should be submitted to OEH by the LALC or landowner undertaking the development along with the application fee (currently \$10,540) and relevant supporting documentation. This application form is available on the OEH BioBanking website (www.environment.nsw.gov.au/BioBanking/forms.htm).

OEH Review

OEH will review the Application. It is considered that liaison with OEH throughout the previous stage will facilitate the review.

OEH Issue Statement

OEH issue the approved BioBanking Statement to the LALC or landowner undertaking the development. This is submitted to the determining authority as part of the Development Application.

Offest Development Impact

Following issue of the BioBanking Statement, the LALC or landowner undertaking the development must identify and purchase and retire the required number of credits.

4.2.3 The conditions of a BioBanking Statement and 'red flags'

The BioBanking Statement will outline the required number and type of biodiversity credits that a developer will be required to obtain and retire in order to offset its biodiversity impact of development. The Minister for the Environment will not issue a BioBanking Statement unless they are satisfied that the development will pass what is called the **improve or maintain test**. That is; the overall impact on state biodiversity levels due to the development will need to either stay the same or be improved. As such, the Statement will require sufficient on-site impact mitigation measures and sufficient purchase and retirement of biodiversity credits to satisfy this improve or maintain criteria.



This is significant as there are some vegetation communities which are so rare that the Minister may consider it impossible for any development to meet the improve or maintain criteria. Areas that contain communities that fall into this category are called 'red flag' areas.

A red flag area is one in which the biodiversity conservation values are considered to be extremely high due to:

- The vegetation belonging to a community which has been cleared across its catchment area by more than 70 per cent and not of low vegetative condition;
- The area contains an endangered or critically endangered ecological community that is not of low vegetative condition; and
- The area contains threatened species which are considered unable to sustain any further loss.

Land that is 'red flagged' cannot normally be cleared and offset within the BioBanking Scheme. If a developer wishes to develop a red flag area, approval from the Chief Executive Officer of the OEH would be required. If any LALCs have vegetation on the land that they wish to develop which is likely or known to be a 'red flag' area, it is recommended that they consult with OEH about the potential for obtaining a determination from the Chief Executive Officer prior to the submission of a BioBanking Statement application.

While there are some exceptions to the limitations of 'red flag' areas, the potential for LALCs to use BioBanking on sites that have 'red flag' communities is considered to be minimal. A full definition of red flag areas is provided in Section 2.2 in the *BioBanking Assessment Methodology* (available on the OEH website).

4.3 How do I establish a BioBank Site?

This guide is primarily focussed on assisting those developers interested in utilising the development approval pathway offered by BioBanking, rather than for landowners wishing to establish BioBank sites on their properties. If an Aboriginal landowner wishes to establish a BioBank site on their land or trade biodiversity credits it is recommended that they contact NSWALC and discuss the processes involved.

In brief, a landowner would need to obtain a **BioBanking Agreement** from the Minister for the Environment. This agreement would award the landowner the number and class of credits that the on-going management of the land parcel in question would generate. Once entered into, a BioBanking Agreement lasts in perpetuity (forever) and cannot easily be revoked. The landowner is then required to maintain and improve the biodiversity values of that piece of land.

In order to fund the long-term management of the BioBanked area, the landowner would then sell their credits to an interested party (e.g. a developer or conservationist) who wish to purchase credits. A portion of the profits is channelled into a long-term fund managed by OEH to pay for site management, while the remainder is received as direct profit to the landowner. OEH will issue annual payments to the landowner from the long-term fund to cover the costs of land management.

The BioBanking Agreement is attached to the title deed of the land; should a BioBanked site change ownership, the requirements for conservation management actions are transferred to the new owner.

For further information, NSWALC has produced a *Guide to BioBanking for Aboriginal Landowners* which is available at www.alc.org.au.

4.4 How do I get the credits I need?

As developers are required by their BioBanking Statements to purchase and retire a certain number and class of credits to offset their impacts, the BioBanking Scheme in effect creates a trading market for biodiversity credits. To date participation in the Scheme has been limited and as a result the current trading market is small.

It is likely that credits will normally be bought by the developer from a landowner who has established a BioBank site, however any individual (and bodies like LALCs) can purchase, sell or retire BioBanking credits (i.e. hand them over to the Minister for the Environment, preventing any further trading of the credits).

Once a BioBanking Statement has been granted the credit details of the Statement are lodged on the BioBanking Public Register maintained on the OEH BioBanking website. This allows landowners who need to buy credits to enable development to identify other landowners who may have suitable credits to sell. To assist in this, OEH maintains an Expression of Interest register on their website; upon which landowners indicate the type and quantity of credits they have available for developers to purchase. It is recommended that developers search this database prior to obtaining a BioBanking Statement to establish the likelihood of being able to find sufficient biodiversity credits to offset their development.

Further, developers may want to directly approach landowners (e.g. other LALCs) known to them that may have suitable land for offsetting their development. Once the two parties have come to an agreement and determined an appropriate credit price, the transfer of credits is officially done by submitting an application to transfer biodiversity credits form to the OEH. This form and further assistance in the process is available on the OEH BioBanking website.

4.4.1 Will there be enough credits available to offset my development?

It is important to know that not all credits are equal in value. When a certified BioBanking Assessor comes to your land and assesses the biodiversity value of the site and the impact of development they will generate a "**credit profile**". This profile describes the vegetation on the site in terms of:

- CMA sub-region The Catchment Management Authority Subregion in which the LALC development area lies;
- Vegetation type The type of vegetation present on-site. There are approximately 1600 vegetation types within NSW;
- Vegetation formation A broad level of vegetation classification which groups the vegetation types into 12 formations;
- Surrounding vegetation cover The extent of vegetation cover (e.g. 0-10% of the area is vegetated) adjacent to the site of interest (within a 1,000 ha area); and
- Patch size, including low condition The relevant minimum patch size of vegetation capable
 of sustaining the threatened species identified on site. For example, a site with only one
 threatened species is likely to be able to sustain its population over a small area, whereas
 sites with many species will require larger areas. This will depend on the ecology of the
 species present.

Importantly, this credit profile will be used in a BioBanking Statement to determine the quantity and class of biodiversity credits that the developer must obtain to offset the development's impacts. Similarly, a landowner establishing a BioBank site on their property will have a specific credit profile for the biodiversity present and potential improvement through management.

To ensure the improve or maintain test (Section 4.2.3) takes into account the variety of ecosystems within NSW, the BioBanking Scheme utilises a 'like for like' system of offsets. This means that a developer can only offset the impacts of its development by purchasing and retiring credits from landowners that have a credit profile that is compatible with their own credit profile.



The credit profile does not have to be exactly the same but must meet a set of conditions, typically including:

- The number of credits obtained and retired is equal to or greater than the number of credits required at the development site;
- The CMA sub-region is the same for both the BioBank site from which the credits are obtained and the development site;
- The vegetation type is the same at both the BioBank site from which the credits are
 obtained and the development site. It is also possible for a developer to select a BioBank
 site which has a different vegetation type (but same formation) if the alternative vegetation
 has been cleared to an equal or greater extent than the vegetation type at the development
 site; and
- The vegetation formation is the same for both the BioBank site from which the credits are obtained and the development site.

Where there are threatened species present on the development site there are further criteria which must also be met which may actually increase the number of potential offset locations based on the known distribution of the species (e.g. credits from different subregions or CMA areas may be permissible). These tight constraints on acceptable offsets are designed to ensure that all developments either improve or maintain the biodiversity values across the State.

It is important that developers are aware of these limitations and thoroughly check whether it is likely that suitable credits will be available for purchase. It is recommended that LALCs consult with NSWALC and accredited BioBanking Assessors in this regard.

4.4.2 How much will the credits cost me?

The price that LALCs or Aboriginal developers pay to obtain their required credits will vary according to the rarity of their credit profile and the supply of these credits by landowners. As a minimum, the price of the credits should reflect the costs incurred by landowners in undertaking the management requirements outlined in the BioBanking Agreement (**Section 4.2.2**) as well as covering the costs of establishing the BioBank site. This is difficult for developers to estimate and will vary considerable between sites.

As of August 2011 six BioBanking Agreements have been entered into, all within the greater Sydney region.

Credits for these communities have traded between \$2,563-\$9,500 per credit. The variance in these prices largely reflects the differing improvement and maintenance costs suffered by the landowners of the BioBanked land. However, it is worth noting that the exact sale price is determined in negotiation between the respective parties, and currently there is no overall market price for any one type of credit. As a guide, approximately 55 credits have been bought per trade in order to offset developments involving the clearing of up to 15 ha of remnant vegetation.

In addition, landowners across NSW have submitted expressions of interest in establishing BioBank sites for approximately 20,000 hectares of land. It is likely that some of this land will be traded in the near future.

Developers should be aware that there are alternative development pathways to the BioBanking Scheme. Depending on the price and number of credits required, as well as the extent of environmental impact assessment required on site, offsetting through BioBanking might not be the most economically viable approach available. In general, it is expected that the environmental costs for developments involving large-scale clearance and complex ecosystems will be lower under the BioBanking Scheme than through existing assessment mechanisms. LALCs should seek expert legal, financial and property advice prior to any engagement with the Scheme.

It should also be noted that there are significant other costs associated with participating in BioBanking as a developer (**Section 4.6**). For example, submission of an application for a BioBanking Statement will cost in excess of \$10,000.

4.5 What vegetation can be BioBanked?

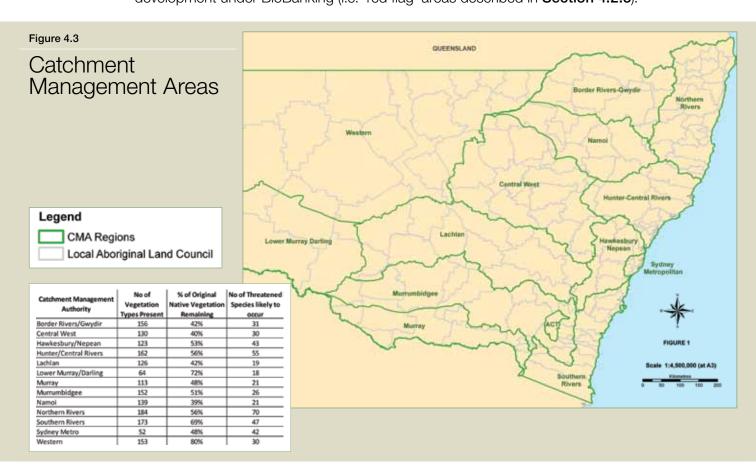
The BioBanking Scheme is based around protecting all existing vegetation communities including both threatened and non-threatened communities. To help assign credits to these communities OEH established three databases:

- Vegetation Type Database A database which lists and describes approximately 1600 vegetation types present within each Catchment Management Authority (CMA) subregion. For each vegetation type, the database includes an estimate of how much of the community has been cleared and its legal status. These factors will alter the value of the relevant biodiversity credits available.
- Vegetation Benchmarks Database This database describes what is considered to be
 the natural condition of the different vegetation classes within the state. By knowing what
 typifies the natural condition, it is possible to estimate how much potential there is for
 deterioration in a site through development.
- Threatened Species Profile Database This database provides a detailed profile on each of the threatened species and populations within NSW, this is used to predict the occurrence of threatened species within the vegetation types.

All three databases are available on the OEH website (http://www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm) and can be searched by LALCs or individuals to identify the type of biodiversity communities that may be disturbed through development, how rare the communities are, what an undisturbed community may look like, and the threatened species that may be present.

For those LALCs with an existing knowledge of the flora and fauna of their land this may be an important tool in assessing whether offsetting impact throught BioBanking is a good option for their site (e.g. if the vegetation to be lost is abundant within the region, then there may be significant opportunity to offset the impacts of the development).

Figure 4.3 indicates the relevant Catchment Management Authority areas for each LALC and the expected biodiversity within each area. Developers should be aware that while all eligible vegetation can be BioBanked for conservation, not all vegetation can be cleared for development under BioBanking (i.e. 'red flag' areas described in **Section 4.2.3**).



4.6 Summary of BioBanking Costs

There are a range of costs that a developer participating in the BioBanking Scheme will incur. The table below summarises the expected developer costs.

Landowner Cost	Description
Preliminary review	Before committing to a BioBanking Assessment it is recommended that a preliminary review of site suitability is undertaken. Such a review is likely to cost between \$1,000 and \$2,000.
BioBanking Site Assessment Costs	A certified BioBanking Assessor will need to be engaged to undertake the BioBanking Assessments. This will involve field-work and operation of the BioBanking Credit Calculator. The costs will vary depending on the site size and complexity of the ecosystem (e.g. whether fauna trapping is required). Costs of around \$250 per hectare would be expected for this stage.
NSWALC Approval Processes	LALCs must complete an application for land dealings. The current cost associated with this is \$250
BioBanking Statement Application Fee	Once the assessment methodology has been fulfilled and credit calculator applied, the developer can submit a BioBanking Statement application. As of July 2011 the fee for this is \$10,400.
Purchase of Biodiveristy Credits	Once a BioBanking Statement has been issued (and submitted as part of an approved Development Application) the developer is required to obtain the requisite number of credits with compatible credit profiles. The cost associated with this stage will vary depending on the type and quantity of credits required. There may also be search and transaction costs associated with establishing a trade of credits. Previous trades have proceeded at a cost of between \$2,500-\$9,500 per credit.
Retirement of Credit Fee	Once the requisite number of credits have been purchased by a developer, they need to be retired by handing them over to the State Government. This process attracts a fee of \$520.
Other BioBanking fees	Other landowner BioBanking fees include: Application fee for modification of a BioBanking Statement (\$1,144) Biodiversity credit transfer (\$104)

Participation in the BioBanking Scheme is legally binding. Non-compliance with the Scheme requirements may result in additional costs being incurred, or in the voiding of development approval.

It should be noted that obtaining a BioBanking Statement does not guarantee that credits will be available for purchase. No fees will be refunded in the event the BioBanking Statement lapses before credits are purchased and retired.



5. Who are the participants in BioBanking?

The key stakeholders for any parcel of land that is part of a BioBanking Statement are:

- The relevant LALC;
- NSWALC;
- The Minister for the Environment; and
- OEH.

The following sections outline the roles and responsibilities for each of these stakeholders under a BioBanking Agreement.

5.1 The stakeholders

5.1.1 LALCs and Aboriginal Landowners

Any LALC considering obtaining a BioBanking Statement as part of a development must consult with the LALC members in order to come to an agreement on whether the development is appropriate and whether offsetting impacts through BioBanking is in the best interests of the community. LALCs must consider the culture and heritage significance of the land to Aboriginal peoples prior to passing of any resolution approving any dealing with the land.

Once a BioBanking Statement has been obtained the LALC must ensure that they complete any required management actions as well as obtain and retire the requisite number of Biodiveristy Credits. Once the credits have been obtained, they must be retired to the State Government by the LALC. The form for the retiring of credits is available on the OEH website.

5.1.2 NSWALC

NSWALC is the approving body for a LALCs land dealings including development proposals with or without an associated BioBanking Statement. A LALC land dealing, or any agreement/contract that might relate to that land dealing, that requires approval is void and of no effect unless NSWALC approval is given.

NSWALC has also prepared a number of resources relating to land dealings, planning, BioBanking and other sustainable land use options for LALCs and Aboriginal landowners. These are available on the NSWALC website – www.alc.org.au.

5.1.3 The Minister for the Environment

The BioBanking Statement is a legal agreement between the landowner and the NSW Minister for the Environment. The Minister will not sign the Statement unless satisfied that the development will result in either the improvement or maintenance of biodiversity values across the state through land management actions and participation in the BioBanking Scheme.

5.1.4 OEH

OEH has primary responsibility for the development, implementation and evaluation of the BioBanking Scheme, which means monitoring and enforcing compliance at BioBank sites.



6. What are the potential risks?

It is very important that LALCs are aware of the potential risks associated with utilising BioBanking. The risks can be the same whether a small or large development is proposed. Consequently, it is important that LALCs are aware of these risks and put safeguards in place to manage them. It is also important to note that the specific risks for individual LALCs may not be limited to the ones identified within the Guide.

The table below summarises the range of risks that landowners should be aware of when thinking about using BioBanking as part of the development process.

Risk	Consideration	Appropriate action	
Key BioBanking Scheme Risks			
Restrictions	There are restrictions on the type of developments to which BioBanking can be applied.	The Developer should consult with OEH if in doubt over the compatibility of the development with the BioBanking Scheme.	
Restrictions	There are restrictions on the type of vegetation communities and species which can be offset under BioBanking.	The developer should consult with an accredited BioBanking Assessor as to the likelihood of red-flags occurring within the development footprint prior to submitting a BioBanking Statement Application. Where these occur, the developer may wish to consider utilising standard Part 4 or 5 assessment protocols under the EP&A Act. A red-flag will severely limit the chance that offsetting a development under BioBanking will be permitted. Parts 4 and 5 of the EP&A Act do not utilise the same red-flag assessment protocol and may provide alternative avenues through which development approval, prohibited under BioBanking, may be granted. Under Parts 4 and 5 of the EP&A, a wider, less formalised set of offset options may be available to a developer.	
Application Rejection	The Minister may decide the development does not meet the 'improve or maintain' criteria and reject the application.	Once an application has been rejected, the developer may wish to consider alternative development approval pathways. By consulting with an accredited BioBanking Assessor prior to submission of the application the risk of rejection is minimised. If an application for a BioBanking Statement is refused, the Minister may waive the whole or any part of the refundable component of the application fee paid.	
Lapse of Statement	A BioBanking Statement will lapse within 2 years if the determining authority has not approved the development to which it is related.	Developers should time the obtaining of the BioBanking Statement to fit in with the submission of a development application.	
Lapse of Statement	A BioBanking Statement will lapse either within 5 years following the receipt of development consent if construction works have not commenced or when the development consent expires (whichever is the sooner).	Developers should be aware of the timeframes within which they must obtain and retire the required number of biodiversity credits.	



Risk	Consideration	Appropriate action
Legal Risks		
Aboriginal Land Rights Act (ALRA)	Under the ALRA, NSWALC approval is required for a LALC to make a development application in relation to LALC land. A BioBanking Statement will be required for any development application wishing to offset its impacts through BioBanking.	A LALC will need to comply with the new land dealings process set out in the Aboriginal Land Rights Act 1983 (NSW) (ALRA) and Aboriginal Land Rights Regulation 2002 (NSW) (ALRR) and the NSWALC Policy on the Assessment and Approval of LALC Land Dealings and obtain NSWALC approval before any BioBanking land dealing commences.
Other Legislation	The BioBanking Statement will form part of the conditions of consent for the development which will be issued by the appropriate consent authority. Failing to acquire and retire the mandatory number of credits may void the consent.	It is the responsibility of the developer to identify and obtain the required credits to offset the proposed development. OEH maintains a number of public registers on its BioBanking website to assist in this.
Other legislation	A developer is required to comply with any additional development standards related to biodiversity and set forth in an existing environment planning instrument (e.g. LEP).	Developers should identify the required biodiversity measures set forth in any relevant environmental planning instruments and ensure that these are fulfilled within the development site. It is likely that in doing so, the required number of credits to be obtained may be significantly reduced.
Economic Risks		
Market Risks	Obtaining a BioBanking Statement does not mean there will be landowners available to provide the required credits.	Developers should establish the likely level of supply for their required credits prior to obtaining a BioBanking Statement. The OEH website provides a forum for this to be done.
Market Risks	Due to uncertainty in the market place, credits may need to be bought at a price that overestimates the value of the credits.	Until the market is strongly established landowners should use the online OEH expression of interest registers to find potential credit trading partners and to enter into discussions to work out a deal and credit price which is acceptable to both before officially committing to the Scheme. Nevertheless, there remains risks in underestimating the price of credits. Alternatively, landowners may wish to wait until the market operation is further developed and likely to reflect a true price.



Risk	Consideration	Appropriate action	
Social and cultural	Irisks		
Land Management Requirements	A BioBanking Statement may require the undertaking of land management actions which prevent access to cultural areas of significance or limit the ability to participate in cultural practices.	A LALC should consider the likely management actions associated with a development to ensure biodiversity values are either maintained or improved prior to submission of an application for a BioBanking Statement. Certified BioBanking Assessors would be able to assist in identifying required actions. LALC members must be consulted with regarding whether required management options will impact on cultural practices.	
Social and Cultural Risks	Offsetting developments through BioBanking may provide environmental support for projects that are not in the best interest of Aboriginal communities.	All decisions that affect access and use of Country should be carefully considered by LALCs. In particular, the consistency of each proposed development with cultural practices, traditions and identity should be carefully considered. Community support must be sought prior to obtaining development approval or a BioBanking Statement. It is important for LALCs to obtain independent legal advice in relation to any proposed development and how it may affect the conduct of cultural activities.	
Developmental risk	ks		
Alterations to Changes to design drawings will alter the impact upon the environment.		An application or BioBanking Statement may be modified at any time for a fee. The costs associated with obtaining a BioBanking Statement will be minimised by only submitting an application once plans are finalised.	
Staged Developments	Developments requiring multiple stages of construction may require the obtaining of multiple BioBanking Statements.	Developers should assess the timeframes over which staging will occur and the need to obtain multiple BioBanking Statements. It may be more cost effective to utilise standard EP&A Act assessment pathways.	
Opportunity Costs	The BioBanking Assessment Methodology and Credit Calculator will quantify the value of biodiversity on site.	LALCs may wish to incorporate these biodiversity values in their decision-making regarding developments.	
LALCs will also ne	ed to consider the following points i	in relation the ALRA and BioBanking	
ALRA	NSWALC may require that a land dealing application (e.g. development application) be assessed by an expert advisory panel before NSWALC will consider and make a determination on the approval. Should this be required the cost of this will be required to be paid by the LALC.	Consultation with NSWALC should be undertaken as early as possible.	
ALRA Land dealings made in breach of the requirements of the ALRA are void under s42C of the ALRA.		Consultation with NSWALC should be undertaken as early as possible.	
ALRA Restrictions on land dealings apply to land that is subject to native title rights or land that is reserved or dedicated under the NP&W Act (see s42 and 42A of the ALRA).		Ensure all appropriate enquiries are made with regard to native title interests and interaction with the NP&W Act. A federal court determination as to native title interests may have to be obtained.	

7. I'm interested, what do I do next?

Any LALC or Aboriginal developer interested in BioBanking should contact the Policy and Research Unit at NSWALC. NSWALC will be able provide you with further information about what steps should be taken to investigate the potential for using BioBanking in conjunction with development on your land. As the costs of obtaining a BioBanking Statement can be quite high it is important that Aboriginal landowners make sure that BioBanking is a wise option for their site as early as possible.

Recommended steps that landowners may want to take to help make a decision about BioBanking are shown in the following figure.

Is it appropriate?

- Is the biodiversity on site valuable?
- Is it culturally appropriate?
- Is BioBanking applicable to my development? (Section 4.2)

Talk

- Consult with NSWALC
- Have LALC members been consulted with?

Is it risky?

- Consider the potential risks and costs (Section 5)
- Consider the potential benefits (Section 3.2)

Criteria

- Will my development impact on a Red Flag area?
- Will my development improve or maintain biodiversity values? (Section 4.5)

Research

- Search the OEH public registers
- Talk to potential landowners who may be able to provide credits

Preliminary Review

 Contract a certified BioBanking Assessor to conduct a preliminary assessment of development options

Decide

- Make a decision whether or not to proceed with obtaining a BioBanking Statement
- Talk with NSWALC about how to get the official process started
- Undertake procedures outlined in the NSWALC Policy on the Assessment and Approval of LALC Land Dealings and required under the ALRA and ALRR.

8. Links and resources

There are a number of resources available for LALCs wishing to find out more about the BioBanking Scheme and the potential for participating in the Scheme.

NSW Aboriginal Land Council

NSWALC contact details Telephone: (02) 9689 4444 Email: biobanking@alc.org.au Website: www.alc.org.au The Policy and Research Unit at NSWALC has developed resources for Aboriginal landowners in relation to the BioBanking Scheme, other sustainable land use options and Aboriginal culture and heritage protection.

For more information regarding NSWALC or the BioBanking Scheme please visit the NSWALC website or speak to the Policy and Research Unit.

Websites and documents of interest

OEH BioBanking Website www.environment.nsw.gov.au/biobanking/

This website provides access to the following resources:

- BioBanking Agreement application form
- BioBanking Agreement template
- BioBanking Assessment Methodology
- BioBanking Assessment Methodology and Credit Calculator Operational Manual
- BioBanking and other conservation options for private land
- BioBanking Credit Calculator
- BioBanking public register

- BioBank site expression of interest (EOI) form
- List of BioBanking Assessors
- Overview of the biodiversity credits market
- Threatened Species Conservation (Biodiversity Banking) Regulation 2008
- Threatened Species Profile Database
- Vegetation Benchmarks Database
- Vegetation Types Database.

Australian Taxation Office (ATO):

www.ato.gov.au

Environmental Trust:

www.environment.nsw.gov.au/grants/envtrust.htm

Land and Property Information:

www.lands.nsw.gov.au

EcoTourism Australia:

www.ecotourism.org.au/eco_certification.asp

Environmental Defender's Office - publications:

www.edo.org.au/edonsw/site/publications

Greenhouse Gas Reduction Scheme:

www.greenhousegas.nsw.gov.au/

Department of Trade and Investment, Regional Infrastructure and Services

- Carbon accounting and trading:

www.dpi.nsw.gov.au/forests/carbon/trading

Department of Trade and Investment, Regional Infrastructure and Services

- Solar Power:

www.industry.nsw.gov.au/energy/sustainable/renewable/solar

Department of Trade and Investment, Regional Infrastructure and Services

- Wind Power:

www.industry.nsw.gov.au/energy/sustainable/renewable/wind

Australian Bureau of Meteorology:

www.bom.gov.au/

Other contacts

Office of Environment and Heritage

PO Box A290

Sydney South NSW 1232 Phone: (02) 9995 6753 Fax: (02) 9995 6795

Email: biobanking@environment.nsw.gov.au

The Office of Environment and Heritage is a division of the NSW Department of Premier and Cabinet. OEH was formed on 4 April 2011 following an announcement of new administrative arrangements for the public service in NSW, which saw most of the functions of the Department of Environment, Climate Change and Water transferred to the new Office of Environment and Heritage. The Office regulates industry, protects and conserves the NSW environment, manages over 850 national parks and reserves and protects the natural, cultural and built heritage in NSW.

The Environmental Defenders Office Ltd

Level 1, 89 York Street Sydney NSW 2000 Phone: (02) 9262 6989 Fax: (02) 9262 6998

Freecall: (NSW only) 1800 626 239

The Environmental Defender's Office Ltd (EDO) is a not-for-profit community legal centre specialising in public interest environmental law. The EDO assists individuals and community groups who are working to protect the natural and built environment. The EDO is part of a national network of centres that help to protect the environment through law in their States. The EDO undertakes casework, provides scientific assessment and advice, education and law reform. The EDO also provides free initial legal advice to the community.

Nature Conservation Trust

PO Box 883 Orange NSW 2800

Phone: (02) 6365 7543 Fax: (02) 6365 7768 Website: www.nct.org.au

The Nature Conservation Trust is a not-forprofit organisation set up under the *Nature Conservation Trust Act 2001* to promote nature conservation on private land in NSW. The Trust protects properties with high conservation values through a fund, conservation agreements and stewardship programs.

OEH Conservation Partners Program

PO Box A290 Sydney South NSW 1232

Phone: (02) 9995 6768 Fax: (02) 9995 6791

Website: www.environment.nsw.gov.au/cpp/

ConservationPartners.htm

The Conservation Partners Program supports landowners in voluntarily protecting and managing native vegetation, wildlife habitat, geological features, historic heritage and Aboriginal cultural heritage on their properties.

Community Environment Network

PO Box 149 Ourimbah NSW 2258

Phone: (02) 4349 4756 Fax: (02) 4349 4755

Website: www.cen.org.au/landforwildlife

The Community Environment Network's Land for Wildlife program registration scheme is designed for landowners who wish to manage areas for biodiversity and wildlife habitat protection.

Friends of Grasslands

PO Box 987 Civic Square ACT 2608

Phone: (02) 6241 4065 Website: www.fog.org.au

Friends of Grasslands if a not-for-profit association run by volunteers with aims to protect and ultimately recover grassy ecosystems.

Landcare Australia Limited

PO Box 5666 West Chatswood NSW 1515

Phone: (02) 9412 1040 Fax: (02) 9412 1060

Website: www.landcare.com.au

Landcare Australia Limited is a not-for-profit company that promotes and sponsors the Australian landcare movement. Landcare raises funds for local land care groups, raises sponsorship from the corporate sector and runs campaigns and produces resources for the landcare and coast care movements.

Greening Australia

PO Box 74 Yarraluma ACT 2600

Phone: (02) 6202 1600 Fax: (02) 6202 1650

Website: www.greeningaustralia.org.au



Humane Society International

PO Box 439 Avalon NSW 2107

Phone: (02) 9973 1728 Fax: (02) 9973 1729 Website: www.hsi.org.au

The Humane Society International Australia is a non-government organisation that works for wildlife conservation and animal protection.

Border Rivers-Gwydir CMA

PO Box 411 Inverell NSW 2360

Phone: (02) 6728 8020 Fax: (02) 6728 8098

Website: www.brg.cma.nsw.gov.au

Catchment Management Authorities (CMAs) were established by the NSW State Government. CMAs are responsible for managing natural resources and working with groups such as farmers, landcare, communities, local government, industry and state agencies for natural resource management outcomes.

Central West CMA

PO Box 227 Wellington NSW 2820

Phone: (02) 6840 7800 Fax: (02) 6840 7801

Website: www.cw.cma.nsw.gov.au

Hawkesbury-Nepean CMA

Locked Bag 2048 Goulburn NSW 2580

Phone: (02) 4828 6747 Fax: (02) 4828 6750

Website: www.hn.cma.nsw.gov.au

Hunter-Central Rivers CMA

Private Bag 2010 Paterson NSW 2421

Phone: (02) 4930 1030 Fax: (02) 4930 1013

Website: www.hcr.cma.nsw.gov.au

Lachlan CMA

2 Sherriff Street Forbes 2871

Phone: (02) 6851 9500 or 1800 885 747

Fax: (02) 6851 6991

Website: www.lachlan.cma.nsw.gov.au

Lower Murray Darling CMA

PO Box 363 Buronga NSW 2739

Phone: (03) 5021 9460 Fax: (03) 5021 1308

Website: www.lmd.cma.nsw.gov.au

Murray CMA

PO Box 835 Deniliquin NSW 2710

Phone: (03) 5880 1400 Fax: (03) 5880 1444

Website: www.murray.cma.nsw.gov.au

Murrumbidgee CMA

PO Box 5224 Wagga Wagga NSW 2650

Phone: (02) 6932 3232 Fax: (02) 6932 3269

Website: www.murrumbidgee.cma.nsw.gov.au

Namoi CMA

PO Box 546 Gunnedah NSW 2380

Phone: (02) 6742 9220 Fax: (02) 6742 4022

Website: www.namoi.cma.nsw.gov.au

Northern Rivers CMA

PO Box 618 Grafton NSW 2460

Phone: (02) 6642 0622 Fax: (02) 6642 0640

Website: www.northern.cma.nsw.gov.au

Southern Rivers CMA

PO Box 3095 - Wollongong East NSW

2500

Phone: (02) 4224 9700 Fax: (02) 4224 9669

Website: www.southern.cma.nsw.gov.au

Sydney Metropolitan CMA

PO BOX 3720 Parramatta 2124

Phone: (02) 9895 7898 Fax: (02) 9895 7330

Website: www.sydney.cma.nsw.gov.au

Western CMA

PO Box 307 Cobar NSW 2835

Phone: (02) 6836 1575 Fax: (02) 6836 2988

Website: www.western.cma.nsw.gov.au

9. Glossary

Accredited Assessor	See BioBanking Assessor.
ALRA	Aboriginal Land Rights Act 1983 (NSW).
BioBank Site	Land specified as a BioBank site to which BioBanking applies to.
BioBanking Agreement	An Agreement between the landowner and the Minister for the Environment (under Part 7A of the TSC Act) for the purpose of establishing a BioBank site. The Agreement states the management actions to be carried out to improve biodiversity values on the site and thereby create biodiversity credits under the Scheme (s. 127D of the TSC Act).
BioBanking Agreement Register	The register of BioBanking Agreements kept by the Director General of the Department of Premier and Cabinet (the OEH sits within this Department) under Part 7A of the TSC Act.
BioBanking Assessment Methodology (the methodology)	 The rules established under section 127B of the TSC Act. The BioBanking Assessment Methodology determines: The number and class of credits required to offset the loss in biodiversity values caused by development. The number and class of credits that may be created by management actions that improve biodiversity values at a BioBank site. The circumstances that improve or maintain biodiversity values.
BioBanking Assessment Methodology and Credit Calculator Operational Manual (the operational manual)	An operational manual that provides instructions on how to apply the methodology and the credit calculator, including the collection of data and field survey methods.
BioBanking Credit Calculator (the calculator)	A computer program that applies the methodology and calculates the number and classes of credits required at a development site or created at a BioBank site.
BioBanking Public Register	See biodiversity credits register.
BioBanking Regulation (the regulation)	The Threatened Species Conservation (Biodiversity Banking) Regulation 2008 (NSW).
BioBanking Scheme	The Biodiversity Banking and Offsets Scheme established under Part 7A of the TSC Act.
BioBanking Statement	A statement issued under s127ZL of the TSC Act, specifying the number and class of credits to be retired for a particular development in accordance with the methodology. Under s127ZN, the statement may include other conditions to minimise the impact of the development on biodiversity values. If provided to a consent or determining authority under the EP&A Act, the conditions must be included as conditions of development consent or approval under s127ZO(2).
BioBanking Trust Fund	The Trust Fund established under Part 7A of the TSC Act to hold funds from the sale of credits (the Total Fund Deposit). These funds are held in an account for the BioBank site. The fund manager makes payments to the owners of BioBank sites in accordance with BioBanking Agreements and the regulations.
Biodiversity Credits	Ecosystem or species credits required to offset the loss of biodiversity values on development sites or created on BioBank sites from management actions that improve biodiversity values.
Biodiversity Credits Register	The register of biodiversity credits kept by the General of the Department of Premier and Cabinet (the OEH sits within this Department) under Part 7A of the TSC Act.

Biodiversity Offsets ¹	One or more appropriate actions put in place in an appropriate location to counterbalance (offset) an impact on biodiversity values.
Biodiversity Values	These include the composition, structure and function of ecosystems, and (but not limited to) threatened species, populations and ecological communities, and their habitats. This does not include fish or marine vegetation within the meaning of Part 7A of the <i>Fisheries Management Act</i> 1994 (NSW) unless that fish or marine vegetation has been the subject of an order under s5A of the TSC Act.
CMA Area	The area of operation of a Catchment Management Authority, as described in Schedule 2 of the Catchment Management Authorities Act 2003 (NSW).
CMA Subregion	Subregions of catchment management authority areas as set out in the Environmental Outcomes Assessment Methodology, <i>Native Vegetation Regulation</i> 2005 (NSW).
Consent Authority	The Council, public authority or Minister who has the function of determining a particular development application under the EP&A Act.
Credit Calculator	A computer program that applies the methodology and calculates the number and classes of credits required at a development site or created at a BioBank site.
Credit Profile	A description of the credit created or required in a vegetation zone or group of zones, according to the attributes of CMA subregion, vegetation type, vegetation formation, surrounding vegetation cover, and patch size including low-condition vegetation.
OEH	The NSW Office of Environment and Heritage.
Development for which BioBanking is available (under s127J of the TSC Act)	 Any development other than: Any clearing of native vegetation, which must not be carried out except in accordance with development consent or property vegetation plan under the <i>Native Vegetation Act</i> 2003 (NSW). Development for which the regulations declare BioBanking is not available.
Ecosystem Credit	The class of biodiversity credits created or required for the impact on general biodiversity values and some threatened species; that is, for biodiversity values except threatened species or populations that require species credits. Species that require ecosystem credits are listed in the Threatened Species Profile Database (TSPD).
Endangered Ecological Community	See Threatened Ecological Community.
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW).
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999 (Cth).
Highly Cleared Vegetation Type	A vegetation type which has 10% or less of its estimated pre-1750 distribution in the CMA remaining (as shown by the Vegetation Types Database).
Impacts on Biodiversity Values	Refers to the loss in biodiversity values on or off the development site and the gain in biodiversity values at the BioBank site.

¹ Rules are contained within the BioBanking Assessment Methodology, under section 127B of the TSC Act. Available www.environment.nsw.gov.au/resources/biobanking/08385bbassessmethod.pdf

Improve or Maintain Biodiversity Values ²	A development is to be regarded as improving or maintaining hindiversity values if:
	biodiversity values if: a. The development does not directly impact on biodiversity values in a red flag area on the development site; or b. The development does directly impact on biodiversity value in a red flag area on the development site but the Director General makes a determination that the development may be regarded as improving or maintaining biodiversity values according to the BioBanking Assessment Methodology.
	 The direct impacts of the development on biodiversity values on the development site are offset by the retirement of biodiversity credits determined in accordance with the offset rules in the BioBanking Assessment Methodology. The Director General determines that any indirect impacts of the development on on-site and off-site biodiversity values that cannot be mitigated through on-site measures are offset by the retirement of biodiversity credits determined in accordance with the offset rules in the BioBanking Assessment Methodology.
Landscape Value	A measure of fragmentation, connectivity and adjacency of native vegetation at a site. Landscape Value comprises: Percent native vegetation cover in the 100-ha and 1,000-ha assessment circles in which the development or BioBank sites are located. Connectivity with surrounding vegetation. Total adjacent remnant area.
Low-condition Vegetation	 Woody native vegetation where: the native over-storey percentage of foliage cover is less than 25% of the lower value of the over-storey percentage of foliage cover benchmark for that vegetation type and less than 50% of ground cover vegetation is indigenous species; or greater than 90% of ground cover vegetation is cleared. Native grassland, wetland or herbfield where: less than 50% of ground cover vegetation is indigenous species; or greater than 90% of ground cover vegetation is cleared. If native vegetation is not in low condition, it is in moderate to good condition.
Management Actions	An action or proposed action carried out at a BioBank site in order to improve or maintain biodiversity values in respect of which biodiversity credits may be created.
NSWALC	New South Wales Aboriginal Land Council
Offset Rules ³	Circumstances in which credits can be used (retired) for a development to improve or maintain biodiversity values.
Public Register	The BioBanking public register established under s127ZZB of the TSC Act to provide details of all BioBanking Agreements and sites. Sections 127ZZD and 127ZZC provide for separate registers for BioBanking statements and biodiversity credits respectively.

 $^{^2\,} Bio Banking\, Assessment\, Methodology,\, under\, section\,\, 127B\,\, of\, the\,\, TSC\,\, Act.\,\, Available\,\, http://www.environment.nsw.gov.au/resources/biobanking/08385bbassessmethod.pdf$

 $^{^{\}rm 3}$ Rules are contained within the BioBanking Assessment Methodology, under section 127B of the TSC Act. Available www.environment.nsw.gov.au/resources/biobanking/08385bbassessmethod.pdf

Red Flag Area	An area of land (part of a development site) with high biodiversity conservation values. The impact of the development on the biodiversity values of a red flag area cannot be offset by the retirement of biodiversity credits unless the Director General determines that strict avoidance of the red flag area is unnecessary in the circumstances.	
Register of BioBanking Statements	See Public Register.	
Register of Biodiversity Credits	See biodiversity credits register.	
Retirement	A process to identify if credits have been used for a purpose such as to offset a development or achieve a conservation outcome. Credits cannot be transferred after they have been retired.	
Site Value	A quantitative measure of structural, compositional and functional condition of native vegetation, measured by site attributes.	
Species Credit	The class of biodiversity credit created or required for the impact on threatened species that cannot be reliably predicted to use an area of land based on habitat surrogates. Species that require species credits are listed in the Threatened Species Profile Database.	
Threatened Species Profile Database	The database containing information on habitat characteristics, range, response to management actions, survey requirements, and the class of biodiversity credits required for the species. It is used for calculation of ecosystem or species credits, filtering to determine the likely presence of threatened species, information on threatened species' ability to withstand loss, and threatened species' response to management.	
TSC Act	Threatened Species Conservation Act 1995 (NSW).	
Vegetation Type	The finest level of classification of native vegetation used in the methodology. Vegetation types are assigned to vegetation classes, which in turn are assigned to vegetation formations. There are approximately 1,600 vegetation types within NSW.	
Vegetation Types Database	A database which contains the information on each vegetation type used in the methodology and comprises a description of each vegetation type, its class and formation, the CMA area within which the vegetation type occurs, the percent cleared value of the vegetation type, and the source of the information.	



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