



# **Draft NSW Biodiversity Offsets Policy for Major Projects**

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## Introduction

The NSW Biodiversity Offsets Policy for Major Projects (the policy) is being introduced to clarify, standardise and improve biodiversity offsetting for major project approvals under the NSW planning system.

Biodiversity offsets are measures that provide benefits to biodiversity to compensate for adverse impacts of an action. They assist in achieving long-term conservation outcomes while providing development proponents with the ability to undertake actions that have unavoidable impacts on biodiversity.

For example, a proponent may require an area of native woodland to be cleared. To offset the clearing, another area of similar woodland can be protected and managed for conservation in perpetuity. Over time, the gain in biodiversity achieved by improving the similar area of woodland will counterbalance the biodiversity lost due to the clearing.

There is currently no standard method for assessing impacts of major projects on biodiversity. This can lead to wide variations in assessments and lengthy and costly debates around the adequacy of an assessment and its outcomes. Similarly, biodiversity offsets are usually negotiated between proponents and government on a case-by-case basis. The resulting offset requirements can vary widely, leading to uncertainty for proponents and the community. The lack of clear and standard guidance can also result in inferior environmental outcomes due to inconsistencies in biodiversity assessments and offset site selection and management.

The policy will address these issues by implementing clear and consistent guidance for assessing and offsetting the biodiversity impacts of major projects, striking an effective balance between the needs of proponents, communities and the environment.

This policy is currently in draft form. Please provide your comments on this draft by close of business Friday 9 May 2014 by:

- completing the online form – visit <http://engage.environment.nsw.gov.au/biodiversity-offsets-policy-for-major-projects>
- emailing [offsets.policy@environment.nsw.gov.au](mailto:offsets.policy@environment.nsw.gov.au).

## Transitional implementation

The policy will be phased into use via a transitional period prior to full implementation. The transitional period is likely to commence during the second half of 2014. During this time, proponents and the consent authority will apply the policy administratively. There will be some flexibility in its application to determine any problems and address finer details.

Feedback collected from key users throughout the transitional period will allow for the fine-tuning of the policy. At the conclusion of the transitional period, it is intended that the policy will be implemented through legislation. It is intended that this will occur approximately 18 months after the commencement of the transitional period.

## Definitions of offsets and supplementary measures

The policy refers to 'offsets' and 'supplementary measures' as ways of compensating for biodiversity losses. Across Australian and other jurisdictions, offsets are defined and categorised in many different ways. Further details of the requirements for offsets and supplementary measures are contained in this document. To provide clarity upfront, broad definitions for these measures are as follows:

- **Offsets:** Offsets are areas of land that are protected and managed to improve biodiversity values. Requirements for offsets are determined using an objective assessment of predicted loss of biodiversity at the development site and expected gain in biodiversity to be achieved at the offset site.
- **Supplementary measures:** Supplementary measures are other measures that are likely to lead to improvements in biodiversity that do not necessarily need to meet all the principles for offsets (as outlined in this document).

## Objectives

The policy has three key objectives:

1. to provide clear, efficient and certain guidance for stakeholders
2. to improve outcomes for the environment and communities
3. to provide a practical and achievable offset scheme for proponents.

Ways in which these objectives will be achieved are described below.

### Objective 1: To provide clear, efficient and certain guidance for stakeholders

This objective will be achieved through:

- **reduced negotiations**

Currently, there is wide variation in the ways impacts on biodiversity can be assessed. This can lead to protracted debates regarding the adequacy of the information used to assess biodiversity outcomes. Resolving such debates through negotiation can be time-consuming and a burden on government and proponent resources.

The policy provides a transparent and repeatable method for assessing impacts on biodiversity. This is contained in the Framework for Biodiversity Assessment (FBA) (see [www.environment.nsw.gov.au/biodivoffsets/1482fba.htm](http://www.environment.nsw.gov.au/biodivoffsets/1482fba.htm)), which is a tool that is applied by accredited ecological consultants. The FBA standardises the process for assessment, setting it out step-by-step. Providing a standard process for assessment of biodiversity impacts will provide certainty for proponents and save time.

- **knowing biodiversity requirements upfront**

The FBA will provide clear guidance on avoiding and minimising the biodiversity impacts of a project. It will also provide an objective and repeatable method for assessing a site's biodiversity values and determining offset requirements before a development application is submitted. This means that proponents will be able to save time and

money through factoring biodiversity considerations into their project design at an early stage.

- ***transparency in government decision-making***

The FBA will be applied using a standardised process and scientific methods to assess biodiversity impacts and offset requirements. As a result, offset decisions will not rely on variable approval processes, making the process transparent to the public and proponents.

## **Objective 2: To improve outcomes for communities and the environment**

This objective will be achieved through:

- ***enabling farmers to diversify their income stream***

The policy will enable farmers to expand ways of making money from their land by encouraging the use of biobanking agreements as the preferred method for securing offsets.

Under biobanking agreements, landowners agree to protect and manage an area of their land to improve its biodiversity values. This may be land that is already retained and managed to improve agricultural productivity or land that is unsuitable for agricultural production. In return for undertaking agreed management actions to improve biodiversity on these sites, landowners can receive upfront compensation and an ongoing annual payment. These payments are made by the proponent to fulfil their offset requirements.

The use of biobanking agreements for offsets will put a market value on bushland sections of farming properties, allowing farmers to diversify their income stream and making it easier for proponents to find offset sites. It will also help to promote a move away from proponents buying land themselves for offsets.

- ***promoting measures that achieve better environmental outcomes***

The policy encourages broad, strategic and enduring environmental gains by:

- using the hierarchy of 'avoid, minimise, offset'. Proponents are required to avoid and minimise impacts on biodiversity on a development site before proceeding to use offsets.
- promoting biobanking agreements as the main way for securing offsets. Biobanking agreements provide security and certainty for offsets, as they ensure adequate funding for offset site management and have clear monitoring and reporting requirements. Such requirements give the community confidence that agreed management actions will be undertaken and conservation outcomes achieved.
- encouraging offsets on land that is strategically important for biodiversity in NSW, such as land adjacent to rivers, streams and wetlands; important mapped biodiversity corridors; and sites critical for securing threatened species. Establishing offset sites in these areas may generate additional biodiversity credits, which can be sold by landowners.
- creating the NSW Biodiversity Offsets Fund for Major Projects (the fund), which, once established, will allow for the strategic purchase and consolidation of biodiversity offsets. The discussion paper

providing more information about the fund is available at [www.environment.nsw.gov.au/biodivoffsets/1481biofund.htm](http://www.environment.nsw.gov.au/biodivoffsets/1481biofund.htm).

### Objective 3: To provide a practical and achievable offset scheme for proponents

This objective will be achieved through:

- ***increasing flexibility for achieving offset requirements***

The policy provides greater flexibility for proponents to meet their offset requirements by providing various offset options while ensuring that the best and most credible offsets are provided. Flexible options to meet offset requirements include:

- **supplementary measures** – proponents can provide funds for supplementary measures when offsets are not available. These measures benefit biodiversity but do not specifically involve protecting and managing a site.
- **mine site rehabilitation** – ecological rehabilitation of mine sites will be recognised in calculation of offsets where there are good prospects of biodiversity being restored.
- **broadening the like-for-like requirement** – recognising that exactly the same biodiversity is not always available for an offset, the policy broadens the 'like-for-like' requirement so offsets do not always need to be strictly matched to the biodiversity impacted on, but can be targeted to relevant higher conservation priorities.

- ***discounting in exceptional circumstances***

The policy allows the consent authority to reduce offset requirements in certain limited circumstances, where a project's offset requirements may make the project unviable, and the project can demonstrate significant overall social or economic benefits.

## Scope and application

The policy will apply to state significant development and state significant infrastructure under the NSW planning system, collectively referred to as 'major projects'. This will include decisions made by the Minister for Planning and Infrastructure and those delegated to the Planning Assessment Commission or senior officers of the Department of Planning and Infrastructure.

The policy will apply to most impacts on biodiversity likely to be caused by major projects. There are, however, some impacts on biodiversity that are not addressed under the policy, as they have not yet been incorporated into the assessment methodology in the FBA. These impacts will need to be assessed and considered on a case-by-case basis under existing systems, with advice from relevant government officers where necessary. Impacts that are out of scope include those on:

- marine mammals
- wandering sea birds
- species endemic to Lord Howe Island.

## Policy principles

The policy is underpinned by seven key principles.

### **Principle 1: Before offsets are considered, impacts must first be avoided and unavoidable impacts minimised through mitigation measures. Only then should offsets be considered for the remaining impacts.**

Biodiversity offsets sit within a hierarchy of 'avoid, minimise, offset'. This means that the first priority is to avoid any unnecessary impacts of a proposed development on biodiversity. Where impacts cannot be avoided, a reasonable attempt should be made to make the impact less severe (minimise it). Where all feasible measures have been taken to avoid or minimise the impacts, offsets should be used to compensate for the remaining impacts.

The FBA provides specific instructions for avoiding and minimising impacts on biodiversity. If necessary, proponents will be required to clearly explain why certain impacts cannot be avoided or minimised any further.

Some impacts are more complicated or severe, such as those that are likely to cause extinction of a species from an area or significant reductions in vegetation bordering streams and rivers. These will require additional consideration by the consent authority before the option of offsetting is used.

### **Principle 2: Offset requirements should be based on a reliable and transparent assessment of losses and gains.**

The policy introduces the FBA, which sets out transparent and repeatable methods for ecological consultants to follow to assess impacts on biodiversity on a development site and likely gains in biodiversity on an offset site.

The FBA will be applied by accredited ecological consultants. During transitional implementation of the policy, prior to any legislative change, 'accredited ecological consultants' will mean those accredited under the NSW BioBanking Scheme (section 142B(1)(c) of the *Threatened Species Conservation Act 1995*).

### **Principle 3: Offsets must be targeted to the biodiversity values being lost or to higher conservation priorities.**

Offsets must have a relationship to the biodiversity values being lost. Under the policy, offsets can be targeted to a higher conservation priority, but will still need to have a relationship to the biodiversity being lost. For example:

- **vegetation** – the policy broadens the requirement for offsets to be 'like-for-like', meaning offsets can include similar vegetation types in the locality that are more highly cleared than the vegetation being impacted on.
- **threatened species** – in certain circumstances, a species can be offset on a basis that is not strictly like-for-like, provided it is not critically endangered or listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. In these circumstances, a species can be offset with a similar species in the



locality that is under the same or a greater level of threat, but this will need to be approved by the consent authority

- **aquatic biodiversity** – offsets can include similar aquatic habitat in the catchment that is more threatened than the habitat being impacted on.

Broadening the scope of entities that can fulfil the offset requirements provides greater flexibility for proponents and recognises that exactly the same biodiversity is not always available for an offset. The policy recognises that protecting and improving biodiversity that is of similar value but under a greater level of threat can also provide beneficial outcomes for NSW.

Further guidance on the like-for-like requirements is contained in the FBA and, for aquatic biodiversity, *Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management* (Fisheries NSW policy and guidelines), visit [www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0009/468927/Policy-and-guidelines-for-fish-habitat.pdf](http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0009/468927/Policy-and-guidelines-for-fish-habitat.pdf).

#### **Principle 4: Offsets must be additional to other legal requirements.**

The policy applies the general principle that improvements to biodiversity made through undertaking management actions on an offset site must be in addition to other legal obligations for conservation that are attached to the land. This is to ensure that the offset provides an actual addition to biodiversity rather than something that was going to occur anyway.

For example, land may already have been set aside for management of biodiversity as part of a property vegetation plan (PVP) developed under the *Native Vegetation Act 2003* (visit [www.legislation.nsw.gov.au/maintop/view/inforce/act+103+2003+cd+0+N](http://www.legislation.nsw.gov.au/maintop/view/inforce/act+103+2003+cd+0+N)) to obtain financial incentives for management of natural resources. The management actions required for the PVP cannot count towards the offset. Any additional management actions on that piece of land can, however, be counted.

#### **Public land**

This principle is relevant for Crown and other public land that have existing legal requirements for environmental management. These requirements are recognised under the FBA by reducing the number of biodiversity credits that can be generated under a biobanking agreement. A discount of 5-7.5% is applied to overall credits for each management action already legally required on the land.

#### **Carbon credits**

Land management requirements for the purpose of creating carbon credits are not considered to be legal requirements for biodiversity management under this policy. This means that the same site can potentially generate both biodiversity credits and carbon credits through the same management actions.

#### **Principle 5: Offsets must be enduring, enforceable and auditable.**

The aim of an offset site is to improve biodiversity to compensate for its loss on a development site. As the impact on biodiversity on the development site is usually enduring, the gain to biodiversity achieved

through protection and management of an offset site must also be enduring. To provide confidence that the offset site will provide an enduring gain to biodiversity, management actions must be enforceable and auditable.

The criteria below provide further details of appropriate mechanisms for securing offsets:

- a. the principal objective of ongoing site management is biodiversity conservation
- b. management actions are undertaken in accordance with a plan of management
- c. there is reasonable likelihood that sufficient resources will be available to implement the plan of management over time
- d. there are appropriate accountability mechanisms in place to secure the outcomes, and these mechanisms cannot be altered without alternative and comparable offsetting arrangements being put in place
- e. the arrangements are in perpetuity, and conservation obligations are transparently transferred and disclosed to any new owners of the land through appropriate administrative procedures.

A biobanking agreement is the only mechanism tested in NSW that meets these criteria. Biobanking agreements provide the security and certainty that is necessary to ensure offsets achieve intended biodiversity gains. They ensure there is continuous funding available for management of the offset site and have clear monitoring and reporting requirements.

Under the policy, other mechanisms to secure offset sites may be developed provided they meet the above criteria. Such mechanisms will allow for improvements to be made to biobanking agreements, if necessary, or for other modified mechanisms to be developed.

Due to the special circumstances that exist for aquatic biodiversity offsets, which are largely located on public land, in-perpetuity offsetting mechanisms will not be considered necessary in all circumstances. Aquatic biodiversity offsets will therefore not always be required to meet criterion 'e' above (see *Fact sheet: Aquatic biodiversity* – visit [www.environment.nsw.gov.au/biodivoffsets/1499aquaticbio.htm](http://www.environment.nsw.gov.au/biodivoffsets/1499aquaticbio.htm)).

## **Principle 6: Supplementary measures can be used in lieu of offsets.**

If appropriate offset sites cannot be found, proponents can provide funds for supplementary measures. All reasonable attempts must be made to locate appropriate offset sites before supplementary measures can be undertaken, as offset sites covered by biobanking agreements achieve a more clearly measurable conservation gain.

Supplementary measures are measures, other than protection and management of land as an offset site, that are known to improve biodiversity values. They may include:

- actions outlined in threatened species recovery programs
- actions that contribute to threat abatement programs
- biodiversity research and survey programs
- rehabilitating degraded aquatic habitat.

The amount of money to be contributed to supplementary measures will be calculated so it is approximately equivalent to the cost of an offset site. Ensuring the amount a proponent is required to contribute to supplementary measures is commensurate with the cost of establishing an offset site will prevent an artificial bias towards supplementary measures over offsets (see Appendix 1 for further details of the rules for supplementary measures).

**Principle 7: Offsets can be discounted where significant social and economic benefits accrue to NSW as a consequence of the proposal.**

This policy explicitly allows offset requirements to be reduced when they cause a project to be unviable and the project has a significant overall social or economic benefit.

The rigorous method for determining offsets provided under the FBA aims for offset requirements that will result in an overall 'no net loss' to biodiversity. It is acknowledged that, in certain rare circumstances, an offset requirement may make a project that is of significant social and economic importance unviable.

This principle recognises that decisions on whether to approve major projects under the *Environmental Planning and Assessment Act 1979* (EP&A Act) involve a consent authority also considering the social and economic aspects of a proposal. If overall social and economic benefits are significant, it might be reasonable for a consent authority to modify the offset requirement if it would otherwise prevent the project from proceeding. The overall social or economic benefits would have to be large enough to justify the additional environmental impact caused by reducing the offset requirement.

A decision by a consent authority to discount an offset will be made only in very specific circumstances in accordance with clear criteria. These criteria will be developed during transitional implementation of the policy in order to provide further certainty to proponents.

## **Aquatic biodiversity**

The FBA will apply predominantly to terrestrial biodiversity.

Impacts on water environments are more complex as they often require consideration of additional factors including water flow, connectivity of aquatic habitats, water pollution, downstream impacts, impacts on other aquatic users and geomorphology of the area.

Current practices for assessing and offsetting aquatic impacts have recently been updated. For this reason, the policy and FBA will refer to the Fisheries NSW policy and guidelines for guidance on addressing aquatic impacts.

Some impacts may be partly dealt with under the FBA and partly under the Fisheries NSW policy and guidelines. For example, for a project that will affect a wetland, the FBA can deal with any impacts on terrestrial ecological communities in the wetland, whereas any impacts on fish passage into or out of the wetland will need to be dealt with under the Fisheries NSW policy and guidelines.

Avoidance and minimisation of impacts on aquatic habitats and their associated biodiversity may require further consideration by the consent

authority which will need to weigh these impacts against the social and economic benefits of a project.

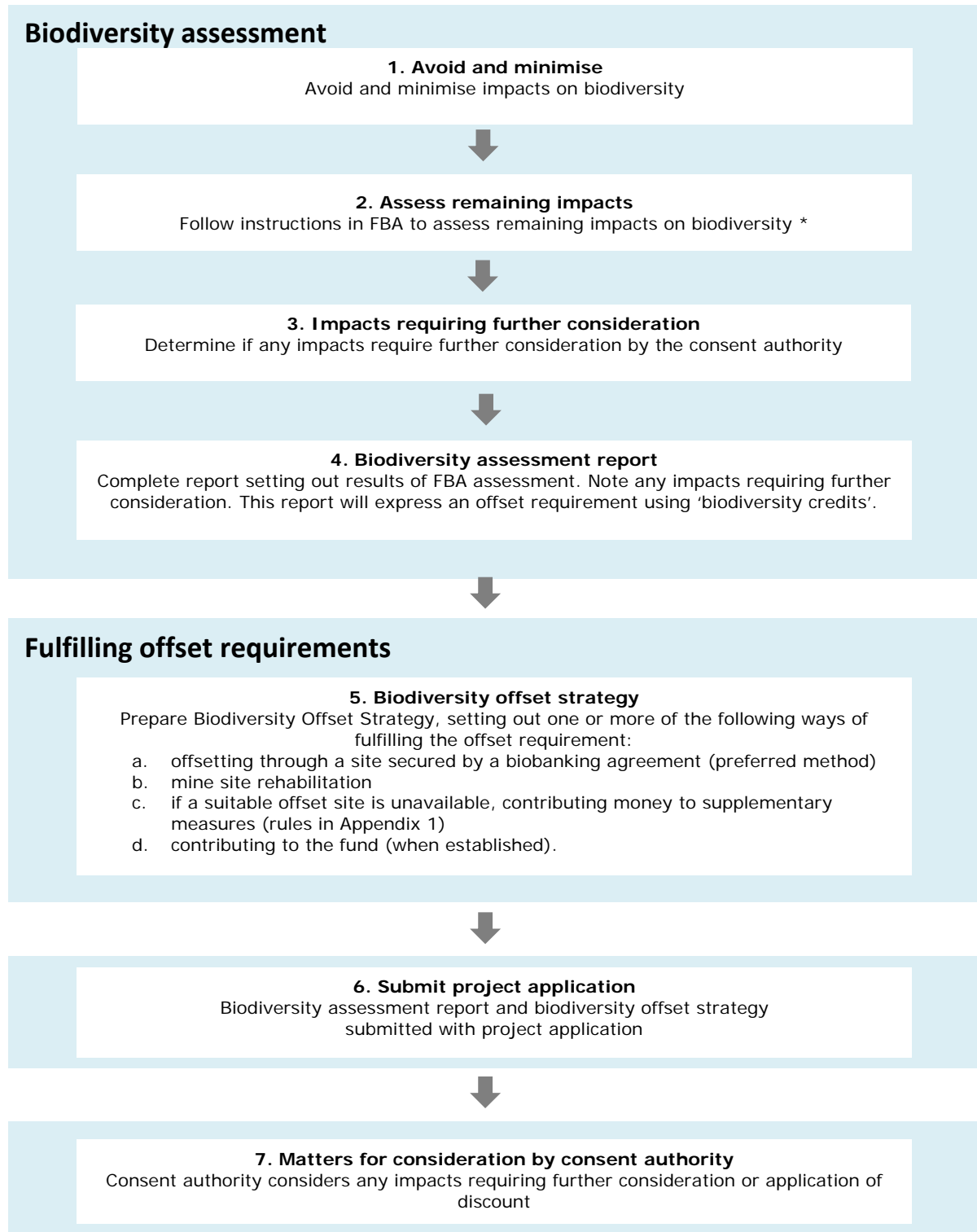
With regard to aquatic biodiversity offset requirements, the Fisheries NSW policy and guidelines will classify the habitat types being offset. It will then apply a ratio and dollar value to determine the total dollar value of the offset required to be implemented by the proponent via on-ground protection or rehabilitation works, or placed into the aquatic biodiversity fund. The proponent will have the opportunity to reduce this cost through direct negotiation with Fisheries NSW, subject to meeting the minimum overall offset ratio requirements.

An outline of the aquatic biodiversity assessment and offset process can be found in *Fact sheet: Aquatic biodiversity*.

## How the policy will work

The proponent will engage an accredited ecological consultant to apply the FBA. The assessment process is summarised below and described in more detail on the following pages.

**Figure 1: Biodiversity assessment and biodiversity offset strategy**



\*Note: For likely impacts to aquatic biodiversity, also refer to the Fisheries NSW policy and guidelines

## Biodiversity assessment

### 1. Avoiding and minimising impacts

Project proposals should consider avoiding and minimising impacts on biodiversity before offsetting them (see Principle 1). The FBA and Fisheries NSW policy and guidelines provide instructions for avoiding and minimising impacts on biodiversity. Avoidance may involve locating a project in an area that contains biodiversity in low condition instead of in an area of high biodiversity value. Minimisation measures may include using construction techniques that minimise damage to native vegetation or timing clearing to occur when migratory species are absent from a site.

Proponents, through their ecological consultants, will need to explain why impacts cannot be avoided or minimised further. The consent authority will assess the rigour of these explanations.

### 2. Assessing remaining impacts

The FBA provides transparent and repeatable instructions for assessing impacts on biodiversity that will be caused by the development and cannot be avoided or minimised. These include instructions for:

- mapping the different types of vegetation that occur on the development site
- assessing the quality of the vegetation before and after the proposed impact
- determining the landscape context of the development impact, including whether any biodiversity corridors will be affected
- determining the impact on any individual threatened species or populations.

More information on assessment under the FBA can be found in *Fact sheet: How the Framework Biodiversity Assessment assesses loss and gain* (visit [www.environment.nsw.gov.au/biodivoffsets/1498fbafs.htm](http://www.environment.nsw.gov.au/biodivoffsets/1498fbafs.htm))

### 3. Impacts requiring further consideration

While most offset requirements can be determined by a proponent before they submit a development application, the policy acknowledges that some impacts will require further consideration by a consent authority.

These impacts are more complicated or severe and often cannot be adequately offset. They therefore need to be explicitly considered in the consent authority's decision on whether to approve the project.

These impacts will require further consideration by the consent authority and, if necessary, advice from the relevant agencies, such as the Office of Environment and Heritage (OEH) or Fisheries NSW.

Impacts that require further consideration include:

- those that are likely to cause the extinction of a species, population or ecological community from an IBRA subregion/catchment, including if it will significantly reduce its viability (IBRA subregions are a way of classifying different types of landscapes based on physical attributes, climate, characteristic plants and animals and other features – there are around 100 IBRA subregions in NSW.)

- those on areas declared as 'critical habitat' under the *Threatened Species Conservation Act 1995*
- those that will substantially reduce the width of vegetation bordering significant rivers and streams
- those that will prevent species movement/fish passage along identified biodiversity corridors.

The consent authority may make any of the following recommendations regarding such impacts:

- the project cannot proceed with that particular impact in place
- the project will need to be modified to reduce the impact before it can proceed
- the project can proceed with additional offsets, supplementary measures or other actions to be undertaken regarding offsetting that impact.

#### **4. Finalise biodiversity assessment report**

The results of the assessment will be documented in a biodiversity assessment report which will be submitted to the Department of Planning and Infrastructure as part of the application for project approval.

The biodiversity assessment report sets out the results of the biodiversity impact assessment, including:

- ways in which impacts on the development site's biodiversity values will be avoided or minimised at each stage
- reasons why impacts cannot be further avoided or minimised
- any impacts that require further consideration by the consent authority
- the project's offset requirement in terms of a specific number and type of 'biodiversity credits' for terrestrial biodiversity, or ratio and dollars for aquatic biodiversity.

Biodiversity credits represent the biodiversity that is likely to be lost due to a development in terms of threatened ecological communities, species and populations, and their habitat.

While the report will set out all impacts on biodiversity, only impacts on threatened ecological communities, species, populations, and their habitat will need to be offset. Impacts on biodiversity that is in very poor condition will not need to be offset. (Note: These rules do not apply for aquatic biodiversity – see *Fact sheet: Aquatic biodiversity*.)

#### **Fulfilling offset requirements**

Once the biodiversity assessment report has been developed, the ecological consultant applying the FBA will prepare a biodiversity offset strategy which will set out the proposal for meeting the project's offset requirement.

#### **5. Biodiversity offset strategy**

Proponents will generally have to secure offsets before development commences. If they wish to secure the offset after development commences, they must enter into a planning agreement prior to the

granting of project approval requiring the offset requirement to be carried out. This will involve the proponent providing security to ensure the offset requirement is fulfilled. This ensures both the security of offset arrangements and some flexibility for proponents.

Proponents can meet their offset requirements through one or a combination of the following possible offset options, which they will detail in the biodiversity offset strategy:

#### **a. Offsetting through a site secured by a biobanking agreement**

An offset site is a site dedicated to protecting and improving biodiversity, to counterbalance loss of biodiversity on a development site.

A biobanking agreement is the preferred mechanism for securing an offset site for terrestrial offsets. It involves an undertaking by a landowner that they will manage an area of biodiversity on their land (biobank site) to improve it. The landowner can then receive monetary payments from proponents looking to fulfil their offset requirements.

The improvement in biodiversity through management actions on the landowner's biobank site is calculated in biodiversity credits. Biobanking agreements specify the number and type of biodiversity credits generated through the landowner's management actions. The proponent purchases the number and type of biodiversity credits required to compensate for the loss of biodiversity on the development site and then 'retires' those credits. Retiring credits involves removing them from the market so they cannot be traded against another impact on biodiversity.

Proponents will also have the option of establishing a biobank site on their own land to fulfil their offset requirement.

Biobanking agreements can be used to establish an offset site on land that is later transferred to the national parks estate, provided the proposed reservation is accepted by OEH as being in accordance with its strategic objectives. This will ensure that any land transferred to the reserve system has appropriate and ongoing funding for management.

For more details on landowners establishing offset sites, see *Fact sheet: Managing an offset site – Information for landowners* at [www.environment.nsw.gov.au/biodivoffsets/1497infoland.htm](http://www.environment.nsw.gov.au/biodivoffsets/1497infoland.htm).

Note that aquatic offset sites are secured via mechanisms outlined in the Fisheries NSW policy and guidelines and summarised in *Fact sheet: Aquatic biodiversity*.

#### **b. Rehabilitation of mine sites**

Biodiversity credits can also be generated through rehabilitation of a mine site. Rehabilitation involves restoring biodiversity values on mine sites after mining activities have ceased.

Proponents will have two options for calculating the contribution of rehabilitation to their offset requirement. Both options recognise that full ecological restoration of a site may not be possible. They also recognise that biodiversity gain achieved through rehabilitation often occurs much more slowly than biodiversity gain at an offset site.

The two options are:

- **the two-stage model** – under this option, proponents will receive upfront credits for the initial stage of rehabilitation, beyond which they



will need to set up a biobank site on the land to generate credits that can be sold or used in the future

- **deferred retirement arrangement** – under this option, proponents will purchase all biodiversity credits they need to offset their development upfront, and credits generated through rehabilitation will be refunded over time.

For more details on mine rehabilitation, see *Fact sheet: Mine site rehabilitation* at [www.environment.nsw.gov.au/biodivoffsets/14100minerehab.htm](http://www.environment.nsw.gov.au/biodivoffsets/14100minerehab.htm).

### c. Contributing money to supplementary measures

As outlined under Principle 6, if appropriate offset sites are not feasible, proponents can provide funds for supplementary measures. There are a number of rules governing the determination and use of supplementary measures.

These rules are detailed at Appendix 1.

### d. Establishing a fund

Establishment of an offset fund will provide another option for fulfilling offset requirements. It will mean that, instead of the proponent locating and securing an offset site or supplementary measures themselves, they can pay an amount of money into a fund where the role of finding appropriate offsets will be centralised.

Until the fund is developed, proponents will need to continue to source their own offsets.

A fund for aquatic offsets is already established under the *Fisheries Management Act 1994*. It is intended that the role of this fund will also be slightly expanded so it has the ability to strategically purchase aquatic offsets.

For more information on the proposed NSW Biodiversity Offsets Fund for Major Projects, visit [www.environment.nsw.gov.au/biodivoffsets/1481biofund.htm](http://www.environment.nsw.gov.au/biodivoffsets/1481biofund.htm).

## 6. Submitting the project application

Both the biodiversity assessment report and biodiversity offset strategy will be submitted to the Department of Planning and Infrastructure as part of the application for development consent.

If there are no impacts that require further consideration by the consent authority, and the report and strategy have been completed in accordance with this policy, it is likely that no further consideration will need to be given to the biodiversity impacts of the project unless there are impacts on biodiversity that are out of scope.

## 7. Matters for consideration by consent authority

### Impacts requiring further consideration

Offsets for impacts requiring further consideration will not be able to be finalised in the biodiversity offset strategy prior to submitting the

development application, as the consent authority will need to consider these impacts in their decision-making process.

## Discounting

After the project application has been submitted, the consent authority may consider applying a discount in accordance with Principle 7. This will only be applied in very rare circumstances in accordance with clear criteria that will be developed during transitional implementation of the policy.

## Related policies and other documents

### Acts and policies directly related to this policy

NSW Government 2014, *NSW Biodiversity Offsets Fund for Major Projects: discussion paper*, visit [www.environment.nsw.gov.au/biodivoffsets/1481biofund.htm](http://www.environment.nsw.gov.au/biodivoffsets/1481biofund.htm)

NSW Government 2014, *Draft Framework for Biodiversity Assessment*, visit [www.environment.nsw.gov.au/biodivoffsets/1482fba.htm](http://www.environment.nsw.gov.au/biodivoffsets/1482fba.htm)

NSW Government 2014, *Fact sheet: Managing an offset site – information for landowners*, visit [www.environment.nsw.gov.au/biodivoffsets/1497infoland.htm](http://www.environment.nsw.gov.au/biodivoffsets/1497infoland.htm)

NSW Government 2014, *Fact sheet: How the Framework for Biodiversity Assessment assesses loss and gain*, visit [www.environment.nsw.gov.au/biodivoffsets/1498fbafs.htm](http://www.environment.nsw.gov.au/biodivoffsets/1498fbafs.htm)

NSW Government 2014, *Fact sheet: Aquatic biodiversity*, visit [www.environment.nsw.gov.au/biodivoffsets/1499aquaticbio.htm](http://www.environment.nsw.gov.au/biodivoffsets/1499aquaticbio.htm)

NSW Government 2014, *Fact sheet: Mine site rehabilitation*, visit [www.environment.nsw.gov.au/biodivoffsets/14100minerehab.htm](http://www.environment.nsw.gov.au/biodivoffsets/14100minerehab.htm)

NSW Government 2014, *Fact sheet: Relationship of the policy to the NSW BioBanking Scheme*, visit [www.environment.nsw.gov.au/biodivoffsets/14101polbb.htm](http://www.environment.nsw.gov.au/biodivoffsets/14101polbb.htm)

*Environmental Planning and Assessment Act 1979*, visit [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)

*Fisheries Management Act 1994*, visit [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)

Fisheries NSW 2013, *Policy and guidelines for fish habitat conservation and management*, visit [www.dpi.nsw.gov.au/\\_\\_\\_data/assets/pdf\\_file/0009/468927/Policy-and-guidelines-for-fish-habitat.pdf](http://www.dpi.nsw.gov.au/___data/assets/pdf_file/0009/468927/Policy-and-guidelines-for-fish-habitat.pdf)

*Saving our Species*, visit [www.environment.nsw.gov.au/savingourspecies](http://www.environment.nsw.gov.au/savingourspecies)

### Other relevant Acts and policies

Biobanking policies and procedures, visit [www.environment.nsw.gov.au/biobanking/biobankingframework.htm](http://www.environment.nsw.gov.au/biobanking/biobankingframework.htm)

*Marine Parks Act 1997*, visit [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)

*Native Vegetation Act 2003*, visit [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)

*Threatened Species Conservation Act 1995*, visit [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au)

## Appendix 1: Supplementary measures

### Supplementary measures

Supplementary measures can only be used in lieu of offset sites when offset sites are not feasible and other options are needed. Offset sites are the preferred approach to offsetting biodiversity impacts, as the biodiversity gains can be determined objectively using the FBA or, for aquatic biodiversity, via the Fisheries NSW policy and guidelines.

It is recognised, however, that land with similar biodiversity values to those lost is not always available for use as an offset site. In these circumstances, supplementary measures may be proposed as part of a biodiversity offset strategy.

Before considering the use of supplementary measures, a proponent must demonstrate that all reasonable steps have been taken to locate appropriate offset sites. These steps must be detailed in the biodiversity offset strategy.

Supplementary measures will usually be used in combination with an offset site. For example, most of a proponent's offset requirement may be fulfilled by purchasing and retiring biodiversity credits generated at an offset site. The remaining biodiversity credits required may be for a particular species, for which an offset site cannot be found. A supplementary measure involving actions to benefit that species could then be proposed in the biodiversity offset strategy to fulfil the remaining offset requirement.

### Calculating supplementary measures

For aquatic biodiversity, supplementary measure contributions will be calculated using the Fisheries NSW policy and guidelines (see also *Fact sheet: Aquatic biodiversity*).

Supplementary measures for land-based offsets are calculated as a financial contribution approximately equivalent to the cost of a proponent purchasing a relevant offset site. In this way there is no financial advantage in undertaking supplementary measures. The number and type of biodiversity credits required to offset the development will inform this calculation. The calculated financial contribution is then used to fund the supplementary measure.

When the fund is developed, it is likely this amount will be determined using the same method that will be used to calculate a proponent's financial contribution to the fund (for terrestrial biodiversity). Until the fund is developed, an interim method for calculating the monetary contribution for supplementary measures will be used, and this is explained below.

## Interim method

The interim method will involve calculating the cost of supplementary measures based on the cost of securing offset sites or purchasing biodiversity credits to offset the rest of the development.

Supplementary measures contributions will be calculated using the following formulas:

$$\begin{array}{l}
 \boxed{\text{Percentage of offset requirement met using offsets}} = \frac{\text{Total number of credits secured}}{\text{Total number of credits required for the development}} \times 100 \\
 \\
 \boxed{\text{Estimated total offset cost}} = \frac{\text{Amount paid for secured credits}}{\text{Percentage of offset requirement met using offsets}} \times 100 \\
 \\
 \boxed{\text{Supplementary measure}} = \boxed{\text{Estimated total offset cost}} - \boxed{\text{Amount paid for secured credits}}
 \end{array}$$

The 'Amount paid for secured credits' should be calculated as follows:

- for **credits purchased on the market**, the amount paid for secured credits is the biodiversity credit purchase price (this includes both the Part A payment made to the Biobank Trust Fund and the Part B payment made to the landholder)
- for **credits generated from a biobank site established by the proponent**, the amount paid for the credits generated on that site should be calculated based on the total fund deposit stated in the biobanking agreement (this represents the cost of in-perpetuity management) and the land value of the site.
  - The land value should be calculated based on the purchase price of the property if it has been purchased in the last five years or based on a land valuation by the Valuer General if it was purchased more than five years ago. If the biobank site does not cover the whole property, the land value of the biobank site can be calculated on a pro rata basis.

## Example

For example, a proponent has a development with an offset requirement of 10,000 credits. The proponent has secured 8,000 credits for \$200,000 and is proposing to meet the remaining 2,000 credits by funding supplementary measures. In this scenario, the cost would be calculated as:

Percentage of offset requirement met using offsets	$\frac{8,000}{10,000} \times 100 = 80\%$
Estimated total offset cost	$\frac{\$200,000}{80} \times 100 = \$250,000$
Supplementary measure	$= \$250,000 - \$200,000 = \$50,000$

In the very unlikely event that a proponent needs to meet the entire offset requirement for a development through supplementary measures, the proponent must negotiate the amount to be spent on supplementary measures with the consent authority with the advice of OEH.

Note that the calculations outlined above are intended as a guide that reflects the Government's policy position that supplementary measures should cost an amount equivalent to securing an offset site (or purchasing biodiversity credits). The final amount a proponent will need to contribute to supplementary measures will be at the discretion of the consent authority and may depend on the individual circumstances of a project or offset requirement. This discretion may involve factoring in if the offset (or biodiversity credits) that will be purchased represents a likely cheaper portion of the entire offset. If this is the case, the proportion of the offset to be fulfilled using supplementary measures will be appropriately weighted in terms of cost to ensure it reflects the true cost of that portion of the offset requirement.

## Rules governing supplementary measures

Proponents must follow a number of rules in the determination and use of supplementary measures. These rules are intended as guidance only. The final decision on the appropriateness of proposed supplementary measures will be made by the consent authority.

## Supplementary measures are a last resort

1. Proponents must first seek to fulfil their obligations through offset sites (biobanking agreements). Proponents must demonstrate to the satisfaction of the consent authority that an offset site is not feasible and that all reasonable steps have been taken to locate a suitable offset. Only then may a proponent proceed to using supplementary measures. Reasonable steps include:
  - checking the biobank register and placing an expression of interest for credits on it
  - liaising with an OEH office (or Fisheries NSW office for aquatic biodiversity) and the relevant local council to obtain a list of potential sites that meet the requirements for offsetting
  - providing evidence of why offset sites are not feasible – suitable evidence may include the unwillingness of a landowner to sell or establish a biobank site or incompatible biodiversity values with the development site; the cost of an offset site itself should not be a factor
  - considering any feasible alternative sites known to the proponent.
2. A proponent may use a combination of offset sites and supplementary measures to fulfil an offset requirement. In fact, it will be a rare case in which a proponent will use supplementary measures to fulfil their entire offset requirement.

## Calculating supplementary measures

3. The amount of money to be put towards a supplementary measure must be calculated using the fund calculator (when it is developed) or, for aquatic biodiversity, the Fisheries NSW policy and guidelines. This is to ensure that any financial contribution used to fund the cost of management at an offset site is equivalent to the cost of implementing a supplementary measure. Prior to the fund calculator being developed, supplementary measures (for terrestrial biodiversity) will be determined by the interim method outlined above.
4. The financial contribution is calculated based on the proportion of the entire offset requirement that needs to be met through supplementary measures. For example, if a proponent has already purchased and retired a certain number of biodiversity credits to fulfil a portion of the offset requirement, only the remaining biodiversity credit requirement will be used to calculate the contribution to supplementary measures.
5. The calculations used to derive the financial contribution for any supplementary measures must be set out in the biodiversity offset strategy and included as part of the application for project approval.

## The hierarchy of supplementary measures

6. A hierarchy of supplementary measures has been established, ranging from Tier 1 (the preferred measure) to Tier 4 (the least preferred measure). Proponents must follow the four-tier decision hierarchy when the use of supplementary measures is proposed as part of a biodiversity offset strategy. See further details on the four tiers below.
7. Before moving through each tier, proponents will need to demonstrate that all reasonable steps have been taken to locate an appropriate

measure at that level. This evidence includes providing information on management actions considered at each level, for example, from the *Saving Our Species* program, from plans of management, and in consultation with OEH or Fisheries NSW.

### Implementing supplementary measures

8. Proponents must enter a planning agreement with the Department of Planning and Infrastructure (DP&I) to implement a supplementary measure. The planning agreement will include requirements for monitoring and reporting, along with security (e.g. bond, bank guarantee or equivalent) to ensure the supplementary measures are completed. The details of the planning agreement will be determined by DP&I with advice from OEH or Fisheries NSW.

### Identifying appropriate supplementary measures

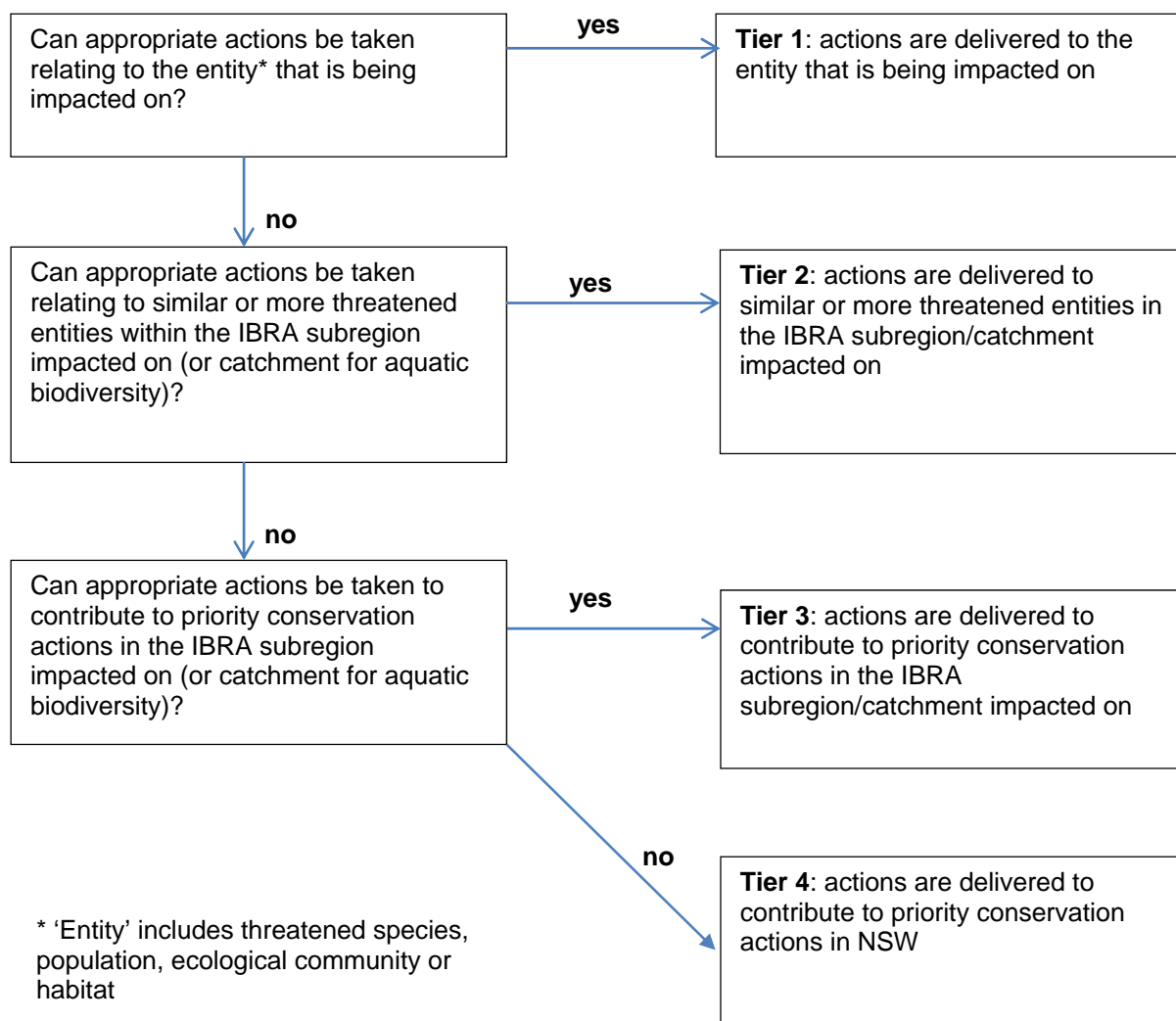
9. Where a matter listed under the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* is significantly impacted by a proposal and requires offsetting, supplementary measures cannot be directed beyond Tier 1.
10. Contribution of money to research, survey and community education programs will be capped at 10% of the total offset (i.e. 10% of the total cost of the offset as determined by the Fund Calculator – or the interim guidelines until the Fund Calculator is developed – or the Fisheries NSW Policy and Guidelines – see *Fact sheet: Aquatic biodiversity*. This is consistent with Australian Government policy. More than 10% may be contributed in exceptional circumstances where it can be justified that research, survey or education is critical for the survival of a threatened species. This will need to be supported by advice from OEH/Fisheries NSW.
11. The proponent should consult with the OEH and/or Fisheries NSW to identify the supplementary measures suitable for a species.
12. The appropriateness of proposed supplementary measures will be determined by the consent authority on a case-by-case basis with advice from the OEH and/or Fisheries NSW.
13. The proponent must justify that the supplementary measure chosen will provide value for money in terms of maximising biodiversity outcomes for the resources contributed.
14. The supplementary measure proposal must be accompanied by scientific evidence that the measure is likely to lead to long-term benefits to biodiversity or that it is in accordance with best practice techniques or guidelines.
15. The supplementary measure must be undertaken in a transparent and timely manner and should preferably commence before, or in conjunction with, the development impact, wherever practicable.
16. There must be suitable arrangements in place for monitoring and reporting on the progress of the measure.
17. Supplementary measures will be delivered by a suitably qualified individual or organisation in a manner approved by the consent authority.

18. The supplementary measure must be additional to other legal offset requirements.

## Supplementary measures tiers

The decision hierarchy for the four tiers of supplementary measures is set out in Figure 2 and described in more detail below.

**Figure 2: Decision hierarchy for the use of supplementary measures**



### Tier 1 – Actions undertaken to benefit the species impacted on by development

Tier 1 supplementary measures are actions that are directed to providing biodiversity outcomes for the threatened species, population, ecological community or habitat that is impacted on by the development. Tier 1 measures are to be, where appropriate:

- targeted to the key management activities that are identified in the NSW Priorities Action Statements (PAS) under the *Threatened Species Conservation Act 1995* (TSC Act) and *Fisheries Management Act 1994*



- actions identified in a relevant Commonwealth/OEH/Fisheries NSW approved recovery plan, threat abatement plan, management plan or listing document.

Supplementary measures proposed to fulfil the offset requirement for a species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, or as critically endangered under the TSC Act, are restricted to Tier 1 supplementary measures.

## **Tier 2 – Actions undertaken to benefit threatened species of higher conservation value**

Tier 2 supplementary measures are actions that provide biodiversity outcomes for a threatened species, population, ecological community or habitat that:

- is a higher conservation priority (according to schedule 1, 1A or 2 of the TSC Act) than the entity that is impacted on by development, and
- are in the same Order (for animals) or Family (for plants), or are associated with the same vegetation class according to the Threatened Species Profiles Database (ecological communities) – visit [www.environment.nsw.gov.au/threatenedSpeciesApp/](http://www.environment.nsw.gov.au/threatenedSpeciesApp/), and
- will be undertaken in the same IBRA subregion (or catchment for aquatic biodiversity) as the area proposed for development – keeping the actions in the same subregion means that communities nearest the development will receive the benefit of conservation activities.

Tier 2 supplementary measures should, wherever possible, be targeted to key management activities identified in the TSC Act or FM Act Priorities Action Statements, or a relevant Commonwealth/OEH/Fisheries NSW approved recovery plan, threat abatement plan, management plan or listing document.

## **Tiers 3 and 4 – priority conservation actions**

Tier 3 and Tier 4 supplementary measures are directed to priority conservation actions. A Tier 3 action must be undertaken in the IBRA subregion in which the development occurs, while a Tier 4 action can occur anywhere in NSW and is not restricted to the IBRA subregion (or catchment for aquatic biodiversity).

Unlike Tiers 1 and 2, which are restricted to the same or higher conservation priority as the biodiversity impacted on, Tiers 3 and 4 supplementary measures may include actions that provide broader benefits to biodiversity and are identified as priority conservation actions in NSW. The aim will be to ensure that the outcomes achieved through these measures are as beneficial to biodiversity as offsets, or more beneficial.

There are currently two priority conservation actions for Tier 3 and Tier 4 supplementary measures:

- a. actions contained in the NSW Threatened Species Priorities Action Statements (PAS) under the FM Act or the TSC Act (for TSC Act species, also see *Saving Our Species* at [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au) – not restricted by species type, and
- b. remediation and ecological restoration of derelict mine sites.

These priority conservation actions are described further below.

### a. NSW Priorities Action Statements

The Priorities Action Statements under the TSC Act and Fisheries Management Act are the NSW Government's main tools for promoting recovery of the more than 1,000 threatened species, populations and communities that live in NSW. They set out actions that are required for recovery of these entities.

For species listed under the TSC Act, the associated *Saving our Species* program applies. The *Saving our Species* conservation projects database (visit [www.environment.nsw.gov.au/savingourspeciesapp](http://www.environment.nsw.gov.au/savingourspeciesapp)) contains a list of management and monitoring actions under conservation projects that have been developed by a panel of scientific experts and have been assessed for cost, benefit and feasibility. Contributing to *Saving Our Species* actions is likely to be an effective and scientifically robust option for delivering supplementary measures.

### b. Derelict mine sites

Derelict mines are former mining sites where no individual or company can be held responsible for their management or rehabilitation. No particular government agency has statutory responsibility for the rehabilitation of derelict mines. Nevertheless, there are a significant number of these sites in NSW.

'Remediation and ecological restoration of derelict mine sites' is considered to be a priority conservation action due to the number of abandoned mines requiring remediation and restoration. Significant gains could be made to biodiversity by investing in the restoration of these sites. Soil remediation is included in this measure because it is required before above-ground restoration can begin. Soil remediation should only be funded as a supplementary measure where ecological restoration is also part of the measure.

Note that rehabilitation of derelict mine sites as a supplementary measure is different to rehabilitation of mine sites that can count towards an offset. For rehabilitation of a mine site to count as an offset, it must involve restoring biodiversity values to the same site on which the impact is occurring after the impact has ceased. The improvement in these biodiversity values is calculated in biodiversity credits in order to fulfil the offset requirement. For more information on mine site rehabilitation that counts towards an offset, see *Fact sheet: Mine site rehabilitation*.