



Office of
Environment
& Heritage

Submissions report on the
Draft NSW Biodiversity Offset Policy for Major Projects

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Contents

- 1. Introduction..... 1**
- 2. Consultation Process 2**
- 3. Proposed Changes Resulting from Submissions 3**
- 4. Analysis of Stakeholder Submissions 6**
 - 4.1 Support for the policy6
 - 4.2 The efficacy of biodiversity offsetting6
 - 4.3 Like-for-like offsetting8
 - 4.4 Avoid and minimise11
 - 4.5 Rehabilitation.....15
 - 4.6 Supplementary Measures.....18
 - 4.7 Discounting22
 - 4.8 Monitoring and Compliance24
 - 4.9 Biobanking agreements.....25
 - 4.10 Aquatic biodiversity28
 - 4.11 Consultants29
 - 4.12 Strategic land use considerations30
 - 4.13 Agricultural land and the policy.....32
 - 4.14 Consistency with other offset policies.....32
 - 4.15 Deferral of offset obligations33
 - 4.16 Transitional implementation.....35
 - 4.17 Comments on the FBA36
 - 4.18 Comments on the fund38
- 5. Next Steps 42**
 - 5.1 NSW Biodiversity Offsets Policy for Major Projects42
 - 5.2 Framework for Biodiversity Assessment42
 - 5.3 NSW Biodiversity Offsets Fund.....42
- Appendix A..... 43**
 - Table of further technical FBA amendments43

1. Introduction

The NSW Government has developed a draft biodiversity offsets policy that will apply to planning approvals for major projects in NSW. Major projects are generally projects that have significance to the State for social, economic or environmental reasons and include major highways, hospitals and coal mines.

Biodiversity offsets are measures that provide benefits to biodiversity to compensate for adverse impacts of a development. They help achieve conservation outcomes while providing development proponents with the ability to undertake actions that have unavoidable impacts on biodiversity.

To date, the practice of biodiversity offsetting for major projects in NSW has been undertaken on a case-by-case basis. There has been no standard method for assessing the impacts of major projects on biodiversity. This has led to wide variations in assessments, along with lengthy and costly debates around their adequacy and outcomes. Similarly, biodiversity offsets for major projects are typically negotiated on a case-by-case basis between proponents and government. These can vary widely, leading to uncertainty for proponents and the community, and inconsistent environmental outcomes.

The policy has been developed to deliver a single, consistent approach to biodiversity offsetting for major projects. The policy is underpinned by a consistent methodology for calculating offsets that will ensure all proponents of major projects assess biodiversity impacts and determine offsets in the same way. This single methodology will increase certainty for proponents and the community in relation to a project's offset obligations and provide for rigorously determined environmental outcomes.

A key component of the policy is the commitment to establish a Biodiversity Offsets Fund for Major Projects. This proposed fund will enable proponents of major projects to contribute money for offsets as part of their development approval, instead of locating and purchasing offsets sites themselves. The fund will be used transparently to offset these impacts in a strategic manner.

2. Consultation Process

Public consultation on the draft policy took place between March and May 2014.

The policy, Framework for Biodiversity Assessment (FBA) and supporting information was available on the NSW Government *Have Your Say* website and the Office of Environment and Heritage (OEH) website. A number of factsheets were also developed to further explain particular aspects of the policy.

OEH, on behalf of NSW Government, conducted informal information sessions on the draft policy with key stakeholders during the consultation period. A workshop was held for ecological consultants who will be required to apply the FBA. A tool was also available on the website to assist those wanting to undertake case studies under the draft policy.

Stakeholders were invited to submit comments on the policy, including the FBA and the proposed fund. Stakeholders were encouraged to focus their responses on key elements of the policy and FBA, including issues of workability and appropriateness. A separate fund discussion paper posed a series of questions around developing an appropriate administration and operational framework.

3. Proposed Changes Resulting from Submissions

Following is the list of proposed amendments and next steps arising from consideration of submissions. These next steps will take place during the initial 18 month transitional implementation period for the policy. Each proposal is discussed in further detail in the *Analysis of Stakeholder Submissions* section below.

Proposed changes to the NSW Biodiversity Offsets Policy for Major Projects

Theme	Amendments and next steps
<p>Like-for-like offsets</p>	<p>Proposed amendment: The policy and FBA will be amended to provide further guidance on ‘reasonable steps’ for locating like-for-like offsets.</p> <p>Proposed amendment: The policy and FBA will be amended to provide additional criteria for ‘variation of species’ offsets to ensure alternative species perform a closer functional role in the landscape to the species impacted.</p> <p>Proposed amendment: The FBA will be amended to allow supplementary measures to be considered as an alternative to applying the variation rules for offsets when like-for-like offsets are not available.</p>
<p>Avoid and minimise</p>	<p>Next Steps: In consultation with key stakeholders, develop an FBA schedule that lists impacts on threatened species and ecological communities that require further consideration. In the meantime, further certainty will be provided through the amended thresholds identified in the FBA with additional impacts identified in Secretary’s Environmental Assessment Requirements (SEARs) where possible.</p> <p>Proposed amendment: Include impacts on important wetlands in impacts that require further consideration.</p> <p>Proposed amendment: Further guidance to be included in the FBA on information required by the consent authority for impacts that require further consideration.</p> <p>Proposed amendment: A recommendation will be included in guidance around implementation of this policy, that proponents undertake early consultation with the Department of Planning and Environment (DPE) and OEH prior to submitting an Environmental Impact Statement, to ascertain the adequacy of proposed avoid and minimise strategies.</p>
<p>Rehabilitation</p>	<p>Next steps: Accumulate a robust scientific evidence base to guide revisions to the contribution of rehabilitation to offset requirements.</p> <p>Next steps: Guidance material will be developed on assessing progress towards and achieving the first stage of rehabilitation, which contributes to fulfilling the offset.</p> <p>Proposed amendment: Require that credits from rehabilitation are matched to vegetation class rather than vegetation formation.</p> <p>Proposed amendment: The policy will make clear that mining rehabilitation bonds will include the cost of undertaking rehabilitation under the policy.</p> <p>Next steps: Consider the merits and means of extending mine site rehabilitation to other forms of post-development rehabilitation.</p>

Theme	Amendments and next steps
Supplementary measures	<p>Proposed amendment: Revise the tiers for supplementary measures so that tier 2 is more closely related to the entity impacted and derelict mine site rehabilitation, as a measure in itself, is removed.</p> <p>Proposed amendment: Include a 10% administrative cost in the calculation method for supplementary measures during the transitional implementation period. This will reflect the real cost of locating offsets.</p>
Discounting	<p>Proposed amendment: Remove the discounting principle from the policy.</p>
Monitoring & Compliance	<p>Next steps: Consider introducing a government monitoring and evaluation regime to better understand and assess environmental gains achieved at offset sites.</p> <p>Proposed amendment: A review clause will be inserted in the policy committing to a review in 18 months irrespective of whether legislative implementation is imminent. The review clause will further commit to a comprehensive review of the policy after five years, which may involve including such a clause in legislation.</p>
Biobanking agreements	<p>Proposed amendment: Amend policy wording to clarify that biobanking agreements are the only suitable mechanisms to secure offset sites, with the exception of transfers of lands to national parks and aquatic offsets. Use of biobanking agreements will be phased in so that, during the transitional phase, certain prerequisites will need to be in place before a proponent must use a biobanking agreement.</p> <p>Next steps: Give further consideration to allowing land subject to Voluntary Conservation Agreements, to be converted to biobank sites without penalty through an exemption from the additionality principle.</p>
Aquatic offsets	<p>Proposed amendment: The policy will clarify that saline wetlands vegetation formations will be assessed using the Fisheries NSW Policy and Guidelines and all other (non-saline) wetlands and riparian vegetation will be assessed under the FBA.</p> <p>Next steps: Amendments to the <i>Fisheries Management Act 1994</i> will be considered to appropriately quarantine offsetting funds for their intended purpose under the policy.</p>
Consultants	<p>Next steps: Government will develop a formal FBA accreditation program during the policy transitional period, prior to its final implementation through legislation. Supplementary training will be provided on the FBA as part of the Biobanking Accreditation training program during the transitional implementation period.</p>
Strategic land use considerations	<p>Next steps: As part of the fund development, consider future engagement with strategic land use and mapping processes and the role of Local Government and Local Land Services in identifying priority investment areas.</p> <p>Next steps: Progress development of State and regional biodiversity link plans in consultation with stakeholders.</p>
Agricultural land and the policy	<p>Next Steps: That government monitor the uptake of offset sites on Biophysical Strategic Agricultural Land (BSAL) to assess impacts on agricultural production.</p>
Deferral of offset obligations	<p>Proposed amendment: Exempt offsetting of impacts that require further consideration from being deferred under a voluntary planning agreement – with an exception during the transitional implementation period for those impacts where it can be demonstrated that the risk of not finding an appropriate offset is low.</p>

Theme	Amendments and next steps
Transitional implementation	<p>Next steps: Prepare additional guidance for stakeholders around operational arrangements during the transitional implementation period.</p> <p>Proposed amendment: Insert text into the policy to provide clarity around the flexible application of the policy during the transition period.</p>
Framework for Biodiversity Assessment	<p>Specific technical changes made to the FBA are listed in the table at Appendix A.</p>
The fund	<p>Next steps: A strategic plan will need to underpin the fund and rules developed for its operation – including decision frameworks for strategic sourcing of offsets while maintaining an appropriate level of like-for-like.</p> <p>Next steps: Research models for fund managers from both public and private spheres.</p> <p>Next steps: Develop fund manager key functions with a focus on receiving, management and expenditure of funds.</p> <p>Next steps: Develop program manager key functions and strategic aims.</p> <p>Next steps: Research options for sourcing offsets, in consultation with landowners and relevant local entities. Consider legal and market implications and develop clear rules around this process for the fund program manager.</p> <p>Next steps: Research offset calculators used in other jurisdictions and undertake a best practice analysis of functioning offset markets and their calculation methods.</p> <p>Next steps: Examine fund manager governance issues and develop a strategic operational framework in consultation with stakeholders, including farming and landowner stakeholders, environment groups, industry and financial experts.</p> <p>Next steps: Examine program manager governance issues and develop a strategic operational framework in consultation with stakeholders, including farming and landowner stakeholders, environment groups, industry and financial experts.</p>

4. Analysis of Stakeholder Submissions

A total of 72 stakeholder submissions were received in response to the consultation process. These are available [here](#). Stakeholder representative interests and backgrounds can be broadly categorised as environmental, industry, scientific, regulatory/local government, agricultural and individual/other.

For ease of analysis, comments in submissions were allocated key themes. The vast majority of comments related to the intent and content of the policy. Comments on the FBA were primarily technical, relating to the science and assumptions underpinning the assessment process. There were six submissions responding directly to the fund discussion paper and many more submissions commented on the fund as a concept.

An overview of stakeholder comments against each key theme is provided in the shaded areas below. Government comments along with proposed amendments or next steps are given in response to each theme.

4.1 Support for the policy

There was broad support for the policy intent to provide clear, efficient and certain guidance for stakeholders. Many stakeholders welcomed the development of a standard method to assess impacts of major projects on biodiversity and to determine appropriate offsets. There was also widespread support for transparency and accountability at all stages of the design and implementation process.

Many stakeholders welcomed the stewardship approach to offsetting that allows farmers and landowners to diversify their income by providing biodiversity offsets on their land. A number of submissions also supported the policy's commitment to the 'avoid, minimise, offset' hierarchy, as well as the principle that offsets must be additional to other legal obligations for conservation.

While some stakeholders explicitly supported the establishment of a fund, many gave conditional support, subject to a number of caveats regarding its purpose and functions.

4.2 The efficacy of biodiversity offsetting

Submissions

Many submissions raised the concern that offsetting was not an appropriate mechanism to address impacts on biodiversity. Some submissions suggested that the policy did not account for the principles of ecologically sustainable development, which is seen as an important component of any environment policy. Several submissions noted that the policy lacks clear aims regarding protection of biodiversity.

A number of submissions questioned whether there was enough scientific evidence to support the legitimacy of using offsets to protect biodiversity. Some submissions further stated that the policy should only be finalised following a comprehensive and independent review into the effectiveness of offsets.

Response

Offsetting to compensate for impacts to biodiversity is a developing practice recognised under the Convention on Biological Diversity¹ as an important component of environmental impact assessment and is internationally accepted as part of the mitigation hierarchy – avoid, minimise, offset.²

Offsets take time to mature and for biodiversity gains from new management regimes to be realised. This means offset policies must be based on best practice, they need to include monitoring requirements and be flexible enough to incorporate new information.

The policy incorporates international best practice standards, including those identified by the Business and Biodiversity Offsets Programme³ and in the *Independent report on biodiversity offsets* commissioned by the International Union for Conservation of Nature and International Council on Mining and Metals.⁴ These include the offsetting principles that have been identified, such as limits to offsetting (through impacts for further consideration), additionality, equivalency (offsets must be targeted to the biodiversity values being lost or to higher conservation priorities) and permanence.⁵

Ecologically sustainable development is to be achieved through the effective integration of economic and environmental considerations in decision-making processes.⁶ It requires environmental issues associated with a proposed project to be taken into consideration in the decision making process, ensuring that there is a proper examination of matters that significantly affect the environment. Measures adopted should be cost-effective and not disproportionate to the significance of the environmental problems being addressed. Government considers that this policy meets the requirements of ecologically sustainable development.

¹ The Conference of the Parties to the Convention on Biological Diversity, 'Impact assessment: Voluntary Guidelines on Biodiversity-Inclusive Impact assessment', *COP 8 decisions*, Decision VIII/28, <http://www.cbd.int/decision/cop/?id=11042>

² ICMM IUCN 2012, 'Independent report on biodiversity offsets,' prepared by The Biodiversity Consultancy, www.icmm.com/biodiversity-offset

³ Business and Biodiversity Offsets Programme (BBOP) 2012, 'Standard on Biodiversity Offsets', BBOP, Washington, D.C., <http://bbop.forest-trends.org/guidelines/Standard.pdf>

⁴ ICMM IUCN 2012, 'Independent report on biodiversity offsets', prepared by The Biodiversity Consultancy, www.icmm.com/biodiversity-offset

⁵ ICMM IUCN 2012, 'Independent report on biodiversity offsets', prepared by The Biodiversity Consultancy, www.icmm.com/biodiversity-offset

⁶ Commonwealth of Australia 1992, 'International Agreement on the Environment', AGPS, Canberra, <http://www.environment.gov.au/node/13008>

4.3 Like-for-like offsetting

Submissions

Some submissions expressed concern about the policy's proposed broadening of like-for-like requirements – that is, how similar ecological communities and species in the offset need to be to the communities and species impacted. Many of these stakeholders saw strict like-for-like requirements as integral to the credibility and integrity of an offset scheme and proposed the removal of like-for-like flexibility from the policy.

The NSW Environmental Defenders Office (NSW EDO) was concerned that the broadening of like-for-like would result in species offsets that have only 'a tenuous link to the actual species or population being impacted'. The NSW EDO contended that this would 'simply facilitate and endorse the net loss of certain threatened species and communities'. Lake Macquarie Council suggested that strictly like-for-like offsets should be insisted upon until they become unavailable.

In contrast, submissions from proponents of major projects were supportive of the broadening of like-for-like requirements, noting that it can be difficult to find like-for-like offsets due to a lack of offset site availability.

The NSW Minerals Council broadly supported the inclusion of some flexibility in the policy, but thought that 'the Policy and FBA place too low a priority on flexible offsetting measures to realise their benefits to the environment and to the agricultural sector'. The Council also called for the policy to provide clear and unambiguous guidance on what will constitute 'all reasonable steps' to secure a like-for-like offset, contending that the cost of securing a like-for-like offset should be a factor in this consideration.

It is noted that broadening of like-for-like requirements applies both to offsets and supplementary measures under the policy. Submissions relating to like-for-like supplementary measures are addressed in the 'Supplementary measures' section below.

Response

Defining like-for-like

Under the policy, the default position is that impacts are offset in a like-for-like manner. Given that it can be argued that no two patches of vegetation are exactly the same, the policy provides a clear definition of what is considered like-for-like.

The policy requires:

- Impacts on vegetation to be offset with vegetation that is in the same locality as the impact and is:
 - the same plant community type (vegetation in NSW is divided into around 1500 plant community types),⁷ or

⁷ For more information, see OEH webpage on 'Vegetation Information System: Classification' at <http://www.environment.nsw.gov.au/research/Visclassification.htm>

- a plant community type in the same vegetation class (vegetation in NSW is divided into 99 vegetation classes)⁸ that has undergone a similar or greater amount of clearing since European inhabitation.
- Impacts on threatened species (that are not associated with a particular plant community type) must be offset with the same threatened species, not constrained by locality.

Further details around these requirements are contained in the FBA.

Arriving at this definition involved consideration of holistic environmental outcomes. A definition of like-for-like must ensure the vegetation and species used in an offset are similar enough to those impacted, so that the environmental functions in the landscape are not lost in the long term. It also must ensure that at risk species and ecological communities are not driven to extinction.

However, the more broadly like-for-like can be defined while meeting these environmental objectives, the greater the pool of potential landowners able to provide an offset for a particular project and receive stewardship payments in return. Government is conscious of not unreasonably restricting the market for offsets under this policy and therefore believes it has the balance correct in its definition of like-for-like.

Allowing variations to like-for-like

The policy recognises that there still may be circumstances in which land with vegetation meeting the above definition of like-for-like may not be available. This lack of availability may not be because there is a scarcity of that type of vegetation. It may simply be that there are no landowners with that vegetation on their land willing to participate in an offset, or that most of that vegetation is already under conservation arrangements. In these circumstances, the policy allows variation of the default definition of like-for-like – but only in accordance with specific rules.

In order to manage the risk of decline of entities that are scarce, the policy does not allow such variation to be applied to critically endangered species and communities. These must be offset in accordance with the definition of like-for-like. The variation rules also do not apply to those threatened species and ecological communities that are considered nationally significant – that is, those entities that are listed under the *Federal Environmental Protection and Biodiversity Conservation Act 1999*.

A variation of the like-for-like definition requires approval of the consent authority and can only occur after a proponent has demonstrated that all reasonable steps have been taken to secure a like-for-like offset. It is noted that the draft FBA did not define what constitutes ‘reasonable steps’ and that this could become an area of contention

⁸ For more information, see OEH webpage on ‘Vegetation Information System: Classification’ at <http://www.environment.nsw.gov.au/research/Visclassification.htm>

between a proponent and the consent authority. The FBA will therefore be amended to better define 'reasonable steps'.

It is proposed that reasonable steps be defined to include, in addition to consideration of any feasible sites known to the proponent:

- checking the biobanking public register and having an expression of interest for credits on it for at least six months
- liaising with an OEH office (or Fisheries NSW office for aquatic biodiversity) and relevant local councils to obtain a list of potential sites that meet the requirements for offsetting
- considering properties for sale in the required area
- 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
 - the cost of an offset site itself should not be a factor unless it can be demonstrated the landowner is charging significantly above market rates.

Proposed amendment: The policy and FBA will be amended to provide further guidance on 'reasonable steps' for locating like-for-like offsets

Where a proponent can adequately demonstrate that they have been unable to locate a suitable like-for-like offset, the variation rules in the draft FBA allow:

- impacts on vegetation to be offset with vegetation from the same vegetation formation (vegetation in NSW is divided into 16 formations),⁹ that has undergone an equal or greater amount of clearing since European inhabitation
- impacts on species (that are not associated with a plant community type) to be offset with species:
 - in the same order for fauna or family for flora
 - in the same locality, and
 - that is under the same or greater level of threat (eg if the species impacted is listed as vulnerable, the species in the offset needs to be listed as vulnerable, endangered or critically endangered under the *Threatened Species Conservation Act (TSC Act) 1995*).

For aquatic biodiversity, offsets must have a relationship to the biodiversity values being lost. Offset sites can include the same habitat or a similar habitat in the same catchment that is more threatened than the habitat impacted.

The aim of these rules was to ensure alternative offsets are still reasonably similar to the entities being impacted.

⁹ For more information, see OEH webpage on 'Vegetation Information System: Classification' at <http://www.environment.nsw.gov.au/research/Visclassification.htm>

As outlined in some submissions, however, identifying species in the same order or family may not be the best way to capture species that perform a similar environmental function in the landscape. To better capture this, the variation rules for impacts on species will be amended in the FBA to provide the following additional criteria:

- for fauna species, the alternative species must have the same habitat requirements as the species impacted
- for flora species, the alternative species must have the same life-form (i.e. tree, shrub, orchid etc) as the species impacted.

This will help ensure that any variation of the definition of like-for-like is more likely to achieve the broader environmental objective of retaining the same environmental functions in the landscape.

Proposed amendment: The policy and FBA will be amended to provide additional criteria for ‘variation of species’ offsets to ensure alternative species perform a closer functional role in the landscape to the species impacted.

It is further acknowledged that it may, on some occasions, be more beneficial to undertake a supplementary measure that is directly related to the species or ecological community impacted, rather than using the variation rules to offset the impact with another species or ecological community. The policy has therefore been amended to provide that the consent authority can allow a proponent to use like-for-like supplementary measures (tier 1) when like-for-like offsets are not available, rather than offsetting with another species or ecological community under the variation rules.

Proposed amendment: The FBA will be amended to allow supplementary measures to be considered as an alternative to applying the variation rules for offsets when like-for-like offsets are not available.

4.4 Avoid and minimise

Submissions

Many submissions discussed the mitigation hierarchy of avoid, minimise, offset, and similar themes.

Among these submissions, there was general support for the mitigation hierarchy. Most respondents who discussed this, however, suggested that the avoid requirement should be supported by ‘red flags’ – i.e. clearly defined prohibited impacts. While some submissions were pleased by the prominence of the hierarchy, others reinforced the need for the decision maker to be diligent in its considerations, to ensure that the hierarchy is strictly enforced in practice.

The NSW EDO suggested that better support and enforcement of the hierarchy would be achieved by including it in legislation. Great Lakes Council, and others, cautioned that developers are increasingly ignoring the avoid and minimise stages by jumping straight to offsets. There were recommendations that the required steps to avoid and minimise be better communicated to proponents.

The lack of red flags was noted as a shortcoming in a number of submissions. The Nature Conservation Council was critical of the fact that the policy does not explicitly state that 'in some instances [...] offsetting is not appropriate'. The Nature Conservation Trust supports a mitigation hierarchy but expressed concern that the lack of red flags could undermine environmental outcomes and public confidence in the policy. Other submissions contended the policy's lack of red flags implies that anything can be offset. Bush Heritage Australia suggested that the inclusion of red flags, rather than 'impacts that require further consideration', would actually provide both environmental and economic benefits, as red flags would enable proponents to know up front what impacts must be avoided.

The NSW Minerals Council requested more guidance on defining impacts that require further consideration, suggesting the current definition may be too broad and unclear in parts. It requested greater clarification on how impacts for further consideration will be assessed; and provided further suggestions for defining thresholds.

Response

Use of 'impacts that require further consideration' instead of red flags

It is recognised that the best upfront certainty would come from the application of red flags (or impacts that are strictly prohibited). However, it is difficult to realise such a position in practice – particularly for major projects, which are often of significant social or economic importance to the State. In practice, whether a project impact should not be allowed depends on context. For example, a project may have significant social importance, such as a hospital, and there may be no other appropriate site available. Or an impact that may, on the face of it, be considered severe could actually be reasonably dealt with if appropriate measures were put in place. For example, an impact on the riparian zone of a river could be reduced if measures were put in place to prevent erosion and maintain connectivity in that area.

For this reason, instead of red flags, the policy identifies impacts that may be considered severe enough to prevent a project going ahead. These are 'impacts that require further consideration'. The prima facie position for these impacts is that a project should not proceed if these impacts are likely. The policy then provides for the step of further consideration by the consent authority to determine if there may be other factors that could allow the project to proceed and what modifications, additional actions or offsets may be required in respect of that impact.

Further refining and clarifying 'impacts that require further consideration'

There is a need for greater clarification around the triggering criteria for impacts that require further consideration.

Species and ecological communities

Impacts that are likely to significantly reduce the viability of a threatened species or ecological community are difficult to clearly define in advance of a development application being made. For this reason, Government intends to undertake a clear

process to work on further refining these definitions. In the meantime, rather than hold off on application of the policy until these impacts are precisely defined (as this may take some time), interim measures are proposed.

It is proposed that the FBA will retain the current criteria that trigger this threshold if the impacted entity is critically endangered. This will be clarified to include listings under either the *Environment Protection and Biodiversity Conservation (EPBC) Act* or the *Threatened Species Conservation (TSC) Act*.

The draft FBA had an additional trigger – that the impact would require further consideration if there were not enough of the entity in the subregion remaining after the impact to satisfy an offset. The difficulty for proponents to have certainty around this trigger is recognised, as sometimes there is not enough information on the abundance of a species or ecological community in the subregion and it may not be feasible to do an assessment, given access to land issues.

Instead, it is proposed that the following trigger be included in the FBA:

- where the assessment confirms that a threatened species or ecological community is present on the proposed development site, and:
 - the threatened species has not previously been recorded in the subregion, or
 - is predicted to only occur in that IBRA subregion.

It is recognised that these are quite blunt thresholds that may in some cases capture too many impacts (e.g. a critically endangered entity with broad distribution, as described by the NSW Minerals Council), or may not capture all severe impacts that should undergo further consideration.

To provide additional certainty around these impacts, a schedule of impacts on threatened species and ecological communities in each subregion that require further consideration will be developed. It is also proposed that work on the schedule will include further guidance around how certain critically endangered entities with broad distributions will trigger the threshold. This could include guidance on important areas within a critically endangered species' distribution that will trigger the threshold, rather than the entire distribution of their habitat. This schedule will be developed during the transitional implementation phase of the policy and further consultation will be undertaken with key stakeholders in its development.

This development process may take some time. For this reason, it is proposed that, in the interim, known impacts that will require further consideration be identified in Secretary's Environmental Assessment Requirements (SEARs) to provide additional certainty.

Therefore, for the transition period, this means an impact on a threatened species or ecological community will require further consideration if:

- it is listed as critically endangered under the TSC Act or EPBC Act

- if it has not previously been recorded in the subregion or is only known to occur in that subregion, or
- the impact is specifically identified in SEARs for further consideration.

During the transitional period, the schedule of impacts that require further consideration will be developed and is likely to largely replace the need for these impacts to be identified in SEARs.

Proposed amendment: In consultation with key stakeholders, develop a schedule to the FBA that lists impacts on threatened species and ecological communities that require further consideration. In the meantime, further certainty will be provided through the amended thresholds identified in the FBA with additional impacts identified in SEARs where possible.

Wetlands

It is also proposed that impacts on wetlands listed under the *State Environmental Planning Policy No 14 – Coastal Wetlands* and in the Directory of Important Wetlands in Australia become an impact that requires further consideration. Wetlands have special importance to biodiversity and the landscape, so their inclusion will ensure better coverage of all impacts likely to require further consideration.

Proposed amendment: Include impacts on important wetlands in impacts that require further consideration.

Further guidance

The FBA will be amended to provide further guidance to proponents on what additional information will be required to help the consent authority consider the impacts that require further consideration.

Proposed amendment: Further guidance to be included in the FBA on information required by the consent authority for impacts that require further consideration.

Furthermore, in order to increase certainty for proponents regarding the suitability of their proposed avoid and minimise measures, they will be strongly encouraged to consult early with DPE and OEHL to gain a preliminary indication of the adequacy of their proposed actions. Earlier consultation will help proponents avoid later delays.

Proposed amendment: A recommendation will be included in guidance around implementation of this policy, that proponents undertake early consultation with DPE and OEHL prior to submitting an Environmental Impact Statement, to ascertain the adequacy of proposed avoid and minimise strategies.

4.5 Rehabilitation

Submissions

Some respondents expressed concerns around mine site rehabilitation as a means of fulfilling an offset requirement. For most of these submissions, the concern was around the lack of evidence that mine site rehabilitation can be successful in establishing functional ecosystems and habitat. There were also suggestions that mining companies should be undertaking rehabilitation in addition to fully offsetting the impact.

There was also support for inclusion of mine site rehabilitation in the policy and the model for calculating its contribution to offsets. The NSW Minerals Council sees it as ‘a very important part of achieving improved conservation outcomes from development, and ... achieving those outcomes while reducing the area of agricultural land locked up in offsets’. The Council further stated that rehabilitation is a ‘strong incentive to mining operations to undertake this type of rehabilitation, which is significantly more resource intensive than returning rehabilitated areas to pasture’. Snowy Mountains Engineering Corporation Australia (SMEC) stated that ‘this model for rehabilitation should be commended for recognising within its process the extremely difficult and long-term nature of attempting to re-establish viable plant (and animal) communities’.

The NSW Scientific Committee submission stated that there is ‘substantial evidence that the best biodiversity conservation outcomes are achieved by the reservation and protection of intact communities and that rehabilitated sites rarely approach the biodiversity values of intact, or even degraded nature communities’. The Committee suggested that if mine rehabilitation were to be included, the policy should clarify what environmental outcomes are required to be achieved and define what ‘good prospects’ for mine rehabilitation entails.

The Nature Conservation Council questioned the track record of the NSW Government to adequately monitor and regulate rehabilitation of mine sites across NSW. They recommended that mine site rehabilitation should be a standard condition of development consent, not a biodiversity offset.

A number of submissions highlighted the time lag in commencing rehabilitation of mine site post-development, as well as the length of time required to fully re-establish a functioning ecosystem. The NSW Scientific Committee indicated that these timeframes could be decades to centuries; rehabilitation would therefore be difficult to monitor and regulate. However, the NSW Minerals Council argued that the methodology proposed for calculating credits from rehabilitation is ‘too conservative and does not allow proponents to achieve the maximum benefit upfront from gains that can be made’.

A small number of submissions sought clarity around what sort of ecological communities can be re-established through rehabilitation.

Another concern raised in several submissions was that mine site rehabilitation as an offset contradicted the additionality principle (Principle 4: Offsets must be additional to other legal requirements). These respondents considered that mine rehabilitation was

an existing legal responsibility of mine owners and, as such, rehabilitation management actions could not be considered to be providing an actual addition to biodiversity.

Several respondents proposed that rehabilitation should be expanded to encompass other land in need of rehabilitation. Cement Concrete & Aggregates Australia nominated quarry extraction sites as ideal candidates for progressive rehabilitation of biodiversity values.

There were also requests for clarity around the security to be lodged in relation to rehabilitation.

Response

Clarification that mine site rehabilitation is not in conflict with the ‘additionality’ principle

The additionality principle requires that there is no pre-existing legal requirement to undertake management actions to improve biodiversity at the offset site.

The broad legal standard for mine site rehabilitation is land that is returned to a safe and stable environment, as specified in the definition of rehabilitation in the Mining Act 1992. This does not necessarily require re-establishment of ecological communities. In practice, planting exotic grass on a site post-mining satisfies this legal requirement. Any requirements in addition to this are determined by the Division of Resources and Energy, NSW Trade & Investment when considering the conditions of a mining lease.

The rehabilitation requirements under this policy are determined at the time of the mine’s development consent, which is granted prior to the granting of a mining lease. There is no pre-existing legal requirement at this point for ecological rehabilitation of the mine site. Rehabilitation requirements that form part of a development consent are then reflected as conditions of the mining lease when this is later granted. In this way, mining lease conditions provide the means to enforce the rehabilitation requirement.

Measuring rehabilitation under the policy

The FBA provides an objective way to measure the success of rehabilitation. It provides a method to measure which components of an ecological community are on site (such as trees with hollows and over-storey canopy cover) and their condition, so it is clear which components of the relevant ecological community have been returned.

The maximum credits that can be obtained by a proponent through mine site rehabilitation are based on the credits that can be generated at a highly degraded offset site. This is less than half the credits generated at a typical offset site. The ability to generate fewer credits for rehabilitation reflects the relative uncertainty of rehabilitation and the longer timeframe to achieve relevant biodiversity gains.

There is no discount in credits generated to account for time lag between the impact occurring and rehabilitation commencing. This factor has not been included due to the difficulty in predicting, at the time of development consent, what the time lag will be

before rehabilitation commences – it can be as little as three years or much longer. The benefit to the environment through including a multiplier or discount to account for time lag is likely to be minimal against the benefits that can potentially be achieved through successful rehabilitation.

At this stage, there will be no increases to the maximum credits generated through rehabilitation. This is due to the current lack of peer reviewed scientific literature on the successful post-mining rehabilitation of self-sustaining native woody plant communities. The FBA takes an appropriate precautionary approach to calculation of biodiversity credits achieved through ecological rehabilitation.

It is acknowledged that some mine sites may achieve rehabilitation success beyond what is currently proposed to be considered upfront, as part of an offset (Stage 1). Recognition of these achievements is currently permitted at Stage 2 of rehabilitation under the policy, when a company can generate further credits by placing a biobanking agreement on the site. These credits can be sold or used for future projects.

The amount of evidence around sites that achieve greater successes through rehabilitation is not yet sufficient to alter the current method for calculating credits. Government would, however, welcome the opportunity to work with stakeholders to gather scientific evidence from a range of mine rehabilitation sites to guide future revision of the methodology.

Next steps: Accumulate a robust scientific evidence base to guide revisions to the contribution of rehabilitation to offset requirements.

Further guidance around end point of rehabilitation

Further guidance is required around the end point of the initial stage of rehabilitation (Stage 1) which generates upfront credits. Guidance to assess progress towards, and achieving, a ‘self-sustaining and recognisable plant community type’ will be developed during the transition period in consultation with key stakeholders.

Guidance in the FBA around mine site rehabilitation has also been further clarified. For example, only logs brought onto the site from the development footprint or from an approved development area can be used to generate credits and these need to be properly secured.

Next steps: Guidance material will be developed on assessing progress towards and achieving the first stage of rehabilitation, which contributes to fulfilling the offset.

The policy has been amended to make it clear that the type of vegetation that can be returned at a site through rehabilitation must be within the same class as the original vegetation type. This ensures that vegetation returned to the land post-mining is similar to that which was there originally. This ensures landscapes are not significantly changed – but provides mining companies with enough flexibility to choose vegetation types they are confident have the best chance of being established.

Proposed amendment: Require that credits from rehabilitation are matched to vegetation class rather than vegetation formation.

4.5.1 Bond to secure rehabilitation

It is intended that only one bond will be required under the *Mining Act 1992* for mine rehabilitation. The method for calculation of the bond will be reviewed to ensure it adequately calculates the cost of ecological rehabilitation or otherwise achieving the biodiversity gain attributed to rehabilitation in the offset.

Proposed amendment: The policy will make clear that mining rehabilitation bonds will include the cost of rehabilitation under the policy.

4.5.2 Extending rehabilitation to other post-development sites

The type of mining operations to which the rehabilitation provisions in this policy apply has been clarified. They are currently those that relate to minerals, as defined under the *Mining Act 1992*, and require a mining lease. The reason for limiting rehabilitation to these mining operations is that the rehabilitation provisions rely on the enforcement and governance provisions around rehabilitation that are provided for under mining leases.

The proposal to extend the component of this offsets policy to other post-development rehabilitation, such as quarry sites, is thought to have some merit. Inclusion of other types of development will depend on whether it is possible to replicate the strict governance arrangements that exist around mine site rehabilitation, including use of mining leases and bonds. This is to ensure there is certainty that relevant biodiversity gains promised through rehabilitation are achieved. It is therefore proposed that the potential inclusion of rehabilitation of other development sites is further considered during the transitional implementation period, including whether similar governance arrangements can be established.

Note that revegetation of linear infrastructure is considered a mitigation measure, rather than rehabilitation under this category. This is due to differences in timeframe and extent of disturbance of soil.

Next steps: Consider the merits and means of extending mine site rehabilitation to other forms of post-development rehabilitation.

4.6 Supplementary Measures

Submissions

Some submissions expressed concerns around the inclusion of supplementary measures in the policy. Supplementary measures were typically considered to be inadequate substitutes for establishment of offset sites, which work to directly protect endangered plants and animals. Some stakeholders considered supplementary measures will lead to a net loss of biodiversity.

Several submissions strongly supported the inclusion of supplementary measures. The NSW Minerals Council backed their use, writing that they ‘play an important role in improving conservation outcomes across NSW... [and in providing] flexible options to allow for the greatest benefit to the environment to be achieved’. Cement Concrete & Aggregates Australia approved of the increased flexibility allowed under supplementary measures but was concerned about the ‘onerous requirements’ to access them. Shoalhaven City Council was pleased that supplementary measures were included and that the policy required delivery by a suitably qualified organisation.

A few respondents recommended a cap to prevent projects being entirely offset using supplementary measures. The Nature Conservation Trust raised concerns about ‘the potential for the NSW Government to use indirect offsets to secure [funding for] public good [works] that would otherwise be publicly funded’. The Trust also stated that the community ‘is likely to raise concerns that proponents can simply buy development without the need to offset any direct impacts’.

The NSW Minerals Council suggested the policy should more closely reflect similar Federal Government rules, which provide for an automatic 10% of a proponent’s offsetting liability to be discharged via supplementary measures. The Council also suggested that tier 1 measures include the option of providing ‘funding to Government ... to undertake the work needed to update mapping and the deficient databases underpinning the FBA’.

Some specific suggestions regarding the proposed interim method for calculating supplementary measures include:

- proposed use of the economic principle of diminishing marginal returns
- the need to consider the difference between ecosystem credits (generally less expensive) and species credits (generally more expensive)
- converting credits to a number of hectares and then to cash by applying a management cost and land value per hectare.

The NSW EDO recommended removal of tiers 2 to 4 so that supplementary measures be only used to help protect the species and ecological communities impacted by the development. Some stakeholders questioned the relevance of directing tier 2 supplementary measures to species in the same order or family. It was recommended that consideration be given to the role a species plays in the ecosystem, or actions that can benefit multiple species.

The inclusion of derelict mine sites in supplementary measures was opposed by some submissions. The NSW Scientific Committee acknowledged the need for these sites to be remediated, but stated that ‘linking their remediation to loss of threatened species and communities is illogical’. The NSW EDO described directing funding to derelict mine as ‘an unwise use of financial resources, as such a measure could easily absorb all funds provided for supplementary measures for very little and uncertain conservation gain’.

There were also calls for the policy to more clearly define *reasonable steps* taken by a proponent to secure a direct offset before moving to supplementary measures.

Response

Like-for-like supplementary measures

The Government notes there is some concern around the use of supplementary measures, particularly the concerns around those actions proposed in tiers 2, 3 and 4. While tier 1 supplementary measures are like-for-like, tiers 2, 3 and 4 involved broadening the application of supplementary measures to:

- species in the same order for animals or family for plants, or aquatic habitats that are more threatened within the same catchment (tier 2)
- actions to benefit threatened species or rehabilitation of derelict mine sites
 - in the subregion (tier 3)
 - in the State (tier 4).

The inclusion of supplementary measures in the policy presents a significant opportunity for community groups to receive additional support for conservation projects, such as those approved under the Saving Our Species program. Examples of such projects include efforts to help conserve the southern brown bandicoot in the Bega Valley region and the southern swamp orchid in the Yamba area. These projects can involve management of pests and weeds and population monitoring to ensure the long term viability of the targeted species.

It is expected there will usually be like-for-like supplementary measures available. This could be assisted through increased connections established with non-government organisations undertaking this work, particularly through the Saving Our Species program.

With regard to the proposed tiers, it is recognised that some stakeholder concerns are linked to broader concerns over broadening the definition of like-for-like. Stakeholder concerns that rehabilitation of derelict mine sites may absorb funds, for little biodiversity gain, are also understood. The tiers for supplementary measures will be retained, as they provide an important pathway to fulfil an offset requirement and ensure there will always be measures available. However, in order to address stakeholder concerns and improve biodiversity outcomes, the following changes are proposed:

- an amendment to tier 2 so it is in line with the revised variation rules (outlined in the 'Like-for-like' section above) for offsets under the FBA, to ensure the alternative entity is more closely related to the impacted entity (aquatic offsets will remain the same)
- revision of tiers 3 and 4 to require actions that directly benefit threatened species, populations or ecological communities – and that contributions to derelict mine site rehabilitation as a supplementary measure in itself is removed.

This means the revised supplementary measures tiers will be as follows:

- tier 1: actions directed to the species, population or ecological community impacted
- tier 2: actions directed to a related entity in accordance with the FBA offset variation rules or to a more threatened aquatic habitat in the same catchment
- tier 3: actions directed to a threatened species, population or ecological community in the same subregion/catchment as the impact or to key aquatic habitats within the same catchment
- tier 4: actions directed to a threatened species, population or ecological community, not restricted by subregion/catchment.

Note that the relevant changes do not exclude the funding of derelict mine rehabilitation as a supplementary measure, rather they ensure that this work will need to directly benefit a relevant threatened species, population or ecological community (following the tiers) and adhere to the rules for supplementary measures. These rules require that actions provide value for money and are undertaken by a suitably qualified organisation.

The amendments to the tiers will ensure that all supplementary measures will lead to clear benefits to biodiversity.

Government does not support an automatic 10% proponent contribution to supplementary measures. In most cases, offset sites provide a more measurable gain to biodiversity and are therefore preferred over supplementary measures.

Proposed amendment: Revise the tiers for supplementary measures so that tier 2 is more closely related to the entity impacted and derelict mine site rehabilitation, as a measure in itself, is removed.

Interim calculation method

The interim method for calculating supplementary measures is not perfect. The policy intent is that this method was developed as a simple way to ensure that the cost of supplementary measures was equivalent to the cost of directly offsetting so that there was no proponent bias towards supplementary measures during the transitional period. After the transitional period and once the proposed fund is developed, the calculation method for monetary deposits into supplementary measures will be the method used to calculate contributions to the fund.

There is merit in proposed calculation alternatives, such as the Australian National University's use of the economic principle of diminishing marginal returns, and the NSW Minerals Council proposal of per hectare management cost and land value. However, these proposals are more complex and will not be fully developed in time for transitional implementation of the policy. Rather than withhold the use of supplementary measures, it is proposed the interim method is used at least until a calculator for the proposed fund is developed.

It is acknowledged, however, that calculating supplementary measures based only on the purchase cost of an offset is somewhat flawed. It fails to consider the additional time and money involved in arranging the purchase of or setting up an offset. Furthermore, when the proposed fund is established, the method for calculating monetary deposits will include a component to cover the administrative costs of the fund arranging the purchase of or setting up offsets. In order to ensure there is not an unfair bias towards supplementary measures during the transitional implementation period, it is proposed that the administrative cost of finding and purchasing offsets is reflected in the calculation of supplementary measures throughout the transitional period. This will be approximated at an additional 10% of the cost of an offset. This will ensure supplementary measures are not the cheaper option and increased consistency with future fund calculations.

Proposed amendment: Include a 10% administrative cost in the calculation method for supplementary measures during the transitional implementation period. This will reflect the real cost of locating offsets.

4.7 Discounting

Submissions

Almost half of submissions commented upon the discounting provision within the policy, with the vast majority opposed.

Most opposition was focussed around the potential for discounting to lead to adverse environmental outcomes through a development not being fully offset. The NSW EDO stated that discounting ‘potentially allows environmental concerns to be overridden by socio-economic considerations’. The Australian Marine Sciences Association noted the importance of social and economic considerations, but argued that the ‘current discount clause threatens the efficacy of the entire policy’.

Some stakeholders expressed concern around the discretion involved in discounting, stating this could lead to political or personal considerations gaining precedence over environmental concerns. The Institute of Environmental Studies at University of NSW (UNSW) wrote that discounting will introduce ambiguity into the policy. The Nature Conservation Council stated ‘the proposal to allow discounting will create uncertainty for proponents, is likely to lead to inequitable outcomes and will encourage proponents to seek case-by-case exemptions, rather than applying a consistent and predictable methodology to determine whether a proposal will be permitted and the offset conditions to be required’.

Some respondents requested greater clarity around the discounting criteria, and how and when applications would be considered. Friends of Grasslands argued that discounting for ‘public good’ could be defended, but only for social reasons, not economic, as this ‘opens the door to commercial interests arguing a case for developments to proceed despite their impact on the environment, i.e. without the developer paying the true cost of the project’.

A small number of stakeholders expressed support for discounting. The NSW Minerals Council was 'supportive of the concept of discounting, but believe that it should be extended to cover significant environmental benefits'. Port Waratah Coal Services supports 'other factors, such as social and economic benefits of a project, being considered in weighing up the offsetting requirements of a project'. Cement Concrete & Aggregates Australia also 'strongly agree that it is important to have this policy flexibility in place to ensure any unintended consequences are minimised'.

Cement Concrete & Aggregates Australia went on to state that the role of their members in 'supplying construction materials to local and state-wide essential infrastructure projects such as schools, hospitals, roads and ports, should be a priority in terms of accumulating discounts'. Similarly, NSW Farmers, while acknowledging the policy's focus on major projects, sought for on-farm developments to be considered for discounts, as 'it is equitable to allow small scale clearing at least the opportunity to buy-in to offsets, as the cumulative economic significance of on-farm improvements across regional NSW could be considered 'state significant''. NSW Minerals Council called upon Government to 'place beyond doubt that the economic significance of a mineral resources is a matter to be considered when deciding whether to discount an offset requirement for economic reasons'.

Response

A significant number of submissions argued strongly that discounting is fundamentally at odds with offsetting. The intention of the draft policy was only to apply discounting in very limited circumstances. Given the overwhelming dissent and unease with discounting and the fact that it was only intended to be used extremely rarely, it is proposed that the principle be removed from the policy.

This will further enhance achievement of the aim of this policy to increase upfront certainty around offsetting. This policy allows offsets and their cost to be considered at the very early scoping stage of a project. Proponents therefore have the benefit of knowing at this point if the environmental impacts might make the project unviable.

Proposed amendment: Remove the discounting principle from the policy.

The Urban Development Institute of Australia (UDIA) indicated that it would be interested in testing the methodology using case studies. Testing during the transitional period is welcomed and Government is interested in participating in further discussion around this.

If the methodology is shown to produce a perverse outcome in an offset requirement that does not reflect the actual environmental impact of the project, OEHL will further examine the assumptions and data underpinning the methodology and make appropriate recommendations for change prior to legislative implementation. During the transitional period the consent authority will have the discretion to take these issues into account.

4.8 Monitoring and Compliance

About a quarter of submissions commented upon the need for a comprehensive monitoring and compliance regime to underpin the policy. Most of these respondents called for monitoring of offset sites to ensure required actions were being undertaken and gains to biodiversity realised. A number of submissions supported making the results of monitoring and enforcement findings and actions publicly available in order to maximise accountability and transparency.

Two submissions identified a lack of commitment to undertake a general policy review at a specified future date. This was seen to be best-practice policy management to allow for the incorporation of lessons learned from the practical application of the policy.

Response

The use of biobanking agreements as the mechanism for securing an offset site will ensure that offsets are managed in perpetuity, that agreed management practices take place and that action can be taken where this does not occur.

Biobanking agreements are enforceable under s 127N of the TSC Act. Under the Act, the Minister can order a landowner to carry out work at their own expense if an agreement has been breached. In addition, any person may bring proceedings to the Land and Environment Court to remedy or restrain a breach of a biobanking agreement. Where a person has been found to have contravened an agreement, the Minister has the ability to apply to the Land and Environment Court for the land to be transferred to the Minister or a nominee. Government considers that this level of enforcement is adequate to ensure offset sites are managed appropriately according to each biobanking agreement.

However, given the predicted increase in the use of biobanking agreements following the introduction of this policy, it is recognised that there may need to be a redirection of resources to ensure compliance with biobanking agreements. The OEH is currently examining options for this.

Government supports the introduction of a monitoring and evaluation regime to better understand and assess the environmental gains being achieved at offset sites. Gathering of such information would be of significant benefit to the policy, as it will inform modifications that may be required over time in order to ensure the policy achieves intended outcomes.

Next steps: Consider introducing a government monitoring and evaluation regime to better understand and assess environmental gains achieved at offset sites.

Government supports the insertion of a policy review clause consisting of an 18 month minor review and a 5 year comprehensive review of the policy. The policy will be reviewed for fine-tuning at the end of the 18 month transitional implementation period, prior to consideration for implementation via legislation. A comprehensive review on the operation of the policy (including the FBA) will be undertaken within five years of the policy implementation date. When the policy is included in legislation after the 18

month transitional period, as proposed, consideration could also be given to formally including a review clause in legislation.

Proposed amendment: A review clause will be inserted in the policy committing to a review in 18 months irrespective of whether legislative implementation is imminent. The review clause will further commit to a comprehensive review of the policy after five years, which may involve including such a clause in legislation.

4.9 Biobanking agreements

Submissions

Approximately one-quarter of submissions mentioned biobanking agreements or other offset security mechanisms. The majority of these submissions supported or accepted biobanking agreements as an appropriate mechanism to secure offsets and ensure ongoing gains in biodiversity. A number specifically supported their use as a mechanism to benefit landowners via the provision of ongoing stewardship payments. However, other respondents raised concerns or suggestions around their use, including issues around the need for biobank sites to be secured in perpetuity, concerns about adequacy of offset supply and a desire to secure offsets by other means.

UNSW's Institute of Environmental Studies commented that barriers to establishing biobank sites are an issue affecting supply. The Nature Conservation Trust agreed, and proposed that allowing individuals with Voluntary Conservation Agreements to establish biobank sites without punishment or discount in credits generated could help address this. UDIA suggested that a better credit register and use of a broker would address some market issues and facilitate more trade.

There were mixed opinions about directing proponents exclusively towards biobanking agreements. The Minerals Council contended Voluntary Conservation Agreements were a more appropriate method. The Blue Mountains Conservation Society supported biobanking agreements as a relatively attractive approach. Cement concrete & Aggregates Australia, while accepting biobanking agreements as the mechanism for securing offsets, stated that they should not be 'overly onerous'.

The Primary Industries Ministerial Advisory Council expressed concerns that the biobanking agreement market would be dominated by large players (e.g. miners) who would push up the costs and disadvantage farmers or less well-resourced individuals and groups. NSW Farmers raised some specific concerns about biobanking agreements, particularly the perception that they would lead to the 'locking up' of productive agricultural land and create issues with adjoining properties. It suggests analysing outcomes of biobank sites with regards to land values and agricultural productivity, and ensuring that there is environmental benefit.

Response

Clarification on use of biobanking agreements

The policy wording will be amended so that it is clear that only biobanking agreements will be used to secure offsets under this policy. The requirement to use biobanking agreements will, however, only commence once certain building blocks for the establishment of biobanking agreements are in place.

Two specific exceptions may exist for this rule:

- situations in which proponents wish to transfer land to the national parks system (see further explanation below)
- aquatic offsets – the method for assessing impacts on aquatic biodiversity does not quantify this in biodiversity credits, which makes use of biobanking agreements more difficult.

Requiring that land proposed to be reserved under the *National Parks and Wildlife Act 1974* is first secured under a biobanking agreement will mean that the management funding provided to that site from the Biobank Trust Fund will only be able to be directed to that piece of land. This may not be the most efficient way to manage funding for that offset, which will exist within a national park. For this reason, consideration is being given to either amending the relevant biobanking legislation to increase flexibility in this situation or looking to alternative mechanisms that achieve the same outcomes as biobanking agreements but are more suited to management arrangements in the national parks system. A key requirement will be that funding for in-perpetuity management of the site is provided by the proponent so that this cost is not transferred to the public.

Voluntary Conservation Agreements are not the appropriate mechanism for securing offset sites. They were designed for passive voluntary conservation efforts and lack the clearly defined management actions and enforcement provisions that exist around biobanking agreements. They also do not provide a mechanism to provide the landowner with funding for management actions and therefore restrict opportunities for landowners to receive stewardship payments for managing biodiversity on their land.

Phasing in use of biobanking agreements

Given this policy position will require a move from the use of several conservation mechanisms to secure offsets to one, certain building blocks will be put in place to ensure resources are adequately directed to biobanking agreements prior to requiring their use. The following transitional rule will apply to the policy:

Biobanking agreements must be used to secure offsets if any of the following conditions is met:

- There are appropriate credits available on the market for purchase (this links to the 'appropriate steps' for locating offsets outlined above, which requires that an

expression of interest be put on the biobanking credit register for a minimum of six months)

- The fund has been established, or
- A service agreement for establishment of biobanking agreements has been put in place by OEH.

If none of those conditions is met, a proponent may use an alternative mechanism to secure offsets during the transitional period. The alternative mechanism should as closely as possible meet the five criteria for effective offset sites outlined in the policy. Early adopters of biobanking agreements will be encouraged, given the clear benefits they provide in terms of certainty of management funding for current and future landowners.

OEH is currently undertaking an internal systems review to ensure it has capacity to deliver biobanking agreements under this policy. This review will increase efficiencies and address deficiencies where appropriate. It will also establish a service agreement for biobanking agreements, which will clearly set out expected timeframes for their establishment.

Proposed amendment: Amend policy wording to clarify that biobanking agreements are the only suitable mechanisms to secure offset sites, with the exception of transfers of lands to national parks and aquatic offsets. Use of biobanking agreements will be phased in such that, during the transitional phase, certain prerequisites will need to be in place before a proponent must use a biobanking agreement.

In perpetuity issues

A biobanking agreement, including the requirement to undertake management actions, is recorded on the property title and transferred transparently to future owners in perpetuity. Future owners will also receive the benefit of annual payments from the proposed fund to cover the cost of managing the site. Biobanking agreements can be terminated in certain circumstances, including (see Part 7A, Division 2 of the TSC Act :

- by consent of the Minister and the biobank site owner, provided measures are taken to offset the impact of the termination
- to facilitate certain developments, including by public authorities or due to grant of mining authority or petroleum title, providing certain conditions are met, including consent of the Minister and on most occasions offsetting of impacts on biodiversity.

The removal of biobank sites is not something that is promoted by the government. These sites are established for the purpose of protecting biodiversity in perpetuity. However, these provisions reflect the practical realities of changing land use needs along with the difficulty associated with predicting these in the long term. In the rare event of such an agreement being removed from a site, this site will usually be fully offset taking into account the biodiversity present, and the predicted gain that was to be achieved through the initial biobanking agreement.

Availability of biobanking agreements

Many suggestions have been put forward to better facilitate the market for biobanking agreements. It should be noted that proponents are not completely reliant on the market for biodiversity credits to offset under this policy. They will also have the option to set up a biobank site on their own land. It is acknowledged, however, that this practice is less than ideal and is not promoted through this policy, as it is not generally a proponent's core business to own land for conservation purposes.

The proposal by the Nature Conservation Trust to allow biobanking agreements to be established on land currently subject to a Voluntary Conservation Agreement, that has not previously been used as an offset, will be further considered during the transitional implemental period. Careful consideration would need to be given to how such a proposal would interact with principle 4 regarding additionality. There are a number of benefits associated with this proposal, including an increase in availability of offset sites and the ability of those who currently have Voluntary Conservation Agreements on their land to have the opportunity to receive stewardship payments through a biobanking agreement.

This proposal would require legislative change, as there are current restrictions to establishing biobank sites on land subject to conservation agreements. It will, however, be further considered and implemented if feasible.

Next steps: Give further consideration to allowing land subject to Voluntary Conservation Agreements to be converted to biobank sites without penalty through an exemption from the additionality principle.

Government intends to engage with industry during transitional implementation of the policy on ways in which use of biobanking agreements can be improved. The concerns of farmers around biobanking agreements are also noted, and the Government would like to work more closely with NSW Farmers to address these issues, including access to clear information.

4.10 Aquatic biodiversity

Some submissions suggested that the policy and framework inadequately assesses biodiversity losses and gains for marine ecosystems. The Australian Marine Sciences Association (NSW Branch) (AMSA) noted that the FBA is not designed with marine ecosystems in mind, and is not applicable to all marine ecosystems. It also notes issues with the definition and valuation of offsets in a marine context. It recommends the policy provides an explicit framework for assessing losses and gains in marine biodiversity.

The NSW EDO raised concerns about the legal security of aquatic offsets, indirect impacts from development on aquatic environments and maintenance of connectivity. They also note concerns with the quarantining of funds under the Fish Conservation Trust Fund as the *Fisheries Management Act 1994* currently allows funds to be used for other purposes.

It was also noted that there was some confusion with how wetlands are to be addressed either via the FBA or aquatic biodiversity offsetting approach.

Response

The aquatic biodiversity offsetting approach for marine habitats is addressed via the *Fisheries NSW Policy and Guidelines for Fish Habitat Conservation and Management* (2013) and not via the FBA. There is no intention of merging the two approaches at this stage. The FBA cross-references to the Policy and Guidelines for aquatic offsetting.

Security of aquatic offsets will not be undertaken through biobanking agreements, as a method for quantifying aquatic biodiversity using credits is yet to be developed. Instead, aquatic offsets will be incorporated in conditions of approval issued for major projects.

It is recognised that there is some confusion as to whether wetland and saline vegetation are to be assessed under the FBA or the Fisheries NSW Policy and Guidelines. To clarify this, it is proposed these be clearly delineated in the policy so that saline wetland vegetation formations must be assessed according to the Fisheries NSW Policy and Guidelines. This includes plant community types such as saltmarsh and mangroves. All other (non-saline) wetlands and riparian vegetation will be assessed under the FBA.

Proposed amendment: The policy will clarify that saline wetlands vegetation formations will be assessed using the Fisheries NSW Policy and Guidelines and all other (non-saline) wetlands and riparian vegetation will be assessed under the FBA.

Next steps: Amendments to the *Fisheries Management Act 1994* will be considered to appropriately quarantine offsetting funds for their intended purpose under the policy.

4.11 Consultants

Submissions

Many submissions discussed the role of ecological consultants in the assessment process. Some expressed concern over the potential for the independence of the consultant to be compromised through being contractually employed by the proponent.

A number of proposals were put forward to mitigate this perceived risk to consultant independence and integrity, including peer review of assessment results or that assessors be employed by the proposed fund or OEH.

Some clarification was sought in relation to training and accreditation of consultants at the conclusion of the implementation period.

Response

The FBA is a comprehensive, standardised and transparent assessment methodology. The introduction of the FBA will help to ensure that every major project development site and every offset site is assessed in the same way. This will mean that results will be transparent and comparable, which should reduce perceptions of consultant bias. The

consent process also calls for OEH to provide advice to the consent authority, which will include an evaluation of the rigour of evidence provided.

During the transitional period, consultants seeking to apply the FBA are required to be accredited under the NSW Biodiversity Banking and Offsets Scheme (BioBanking Scheme). OEH intends to revise this requirement during the transitional implementation period to require consultants to be specifically trained and accredited to administer the FBA. Prior to the transitional period, supplementary training on the FBA will be provided to accredited consultants.

Next steps: Government will develop a formal FBA accreditation program during the policy transitional period, prior to its final implementation through legislation. Supplementary training will be provided on the FBA as part of the Biobanking Accreditation training program during the transitional implementation period.

4.12 Strategic land use considerations

Submissions

Some submissions discussed the need to consider the policy within a broader context of strategic land use plans and other complementary land use programs. Several respondents called for the policy to more closely align with regional and subregional strategic plan-making. This would allow for better land use planning and provide greater certainty for communities, industry, farmers and other landowners. A number of local government respondents highlighted the need for the policy to work more closely with local governments, which have often undertaken detailed local assessments and planning that could inform developer offset proposals.

A number of submissions contended that existing NSW Government data and mapping around vegetation, existing offset sites, biodiversity corridors, priority investment areas, Biodiversity Investment Opportunities, key habitats and State or regional biodiversity links are inadequate to support the policy aims or offsetting within a regional or landscape context.

Response

Alignment with strategic land use planning

It is acknowledged that significant gains to biodiversity could be achieved through aligning biodiversity offsetting practices with strategic land use planning maps and processes. This issue is being considered within the context of the development of improvements to the NSW planning system. It should be acknowledged, however, that any such alignment of planning policies with offsets will always be constrained by the need for an offset to incorporate like-for-like or similar vegetation to that being impacted at a development site.

It is intended that the proposed fund, when established, will strategically identify and purchase offsets. This will require consideration of existing strategic mapping and engagement in future land use mapping processes. It is possible that a part of this

strategic function of the proposed fund could be assisted by Local Government and Local Land Services to identify priority investment areas. This will be further considered in the fund development process.

Next steps: As part of the proposed fund development, consider future engagement with strategic land use and mapping processes and the role of Local Government and Local Land Services in identifying priority investment areas.

Mapping identified in the FBA

References in the draft FBA to Priority Investment Area maps have been removed. Such a concept may be considered in the future but for now there is insufficient certainty as to how they would look and how they would be delivered.

The draft FBA also identified State or regional biodiversity link plans, which are yet to be developed. The reference to these plans in the FBA will be retained. They are the same as those referred to under the Biodiversity Certification Assessment Methodology (BCAM). While they have not yet been developed under either the FBA or BCAM, they present an opportunity for increasing strategic considerations.

The State or regional biodiversity link plans will identify areas of strategic importance in the landscape for the location of offsets, such as potential linkages in the landscape that would benefit from improvements to biodiversity.

Where an offset site is located in a mapped area, there will be no need for ecological consultants to assess the 'landscape' connectivity components of that site. The site will instead receive the maximum score for landscape connectivity, which will maximise credits generated from that site. Prior to development of the State or regional biodiversity link plans, offset sites may still achieve this maximum score, but this will need to be determined on a case-by-case basis by assessing the landscape components at the site.

Under the FBA, the State or regional biodiversity link plans will also help determine impacts that require further consideration. Impacts that have the potential to reduce connectivity in State or regional biodiversity links will require further consideration. Until the maps are developed, however, there will be no trigger for further consideration of impacts on certain linkages.

While the FBA can be operational without State or biodiversity link plans, it is preferable that they are developed as soon as possible. Public consultation on these plans will be undertaken.

Next steps: Progress development of State and regional biodiversity link plans in consultation with stakeholders.

4.13 Agricultural land and the policy

Submissions

NSW Farmers recommended that the policy include a calculation of loss to agricultural land when identifying areas strategically important to biodiversity and suggested increased caution towards approvals for offsets on high value agricultural land. The Primary Industries Ministerial Advisory Council submission went further, recommending that BSAL land be specifically excluded from the policy to ensure the availability of productive land does not decrease through increased establishment of offset sites.

Response

Offset sites on agricultural land

Government acknowledges concerns over the establishment of offset sites on land that may be required for agriculture in the future. It is considered that restricting private landowners from establishing offsets on BSAL land may not be the most appropriate policy response at this stage.

BSAL has been mapped to consider impacts of mining and coal seam gas projects on farming. The interaction that conservation lands have with farming is quite different. Having a biobanking agreement on potential farming land does not negatively impact that land for future farming use. Furthermore, as outlined under the 'Biobanking agreement' section of this report, the ability remains for biobanking agreements to be removed should there be a significant future need for this.

BSAL maps are also not fine-scale. Excluding biobanking agreements from BSAL would therefore exclude entire properties rather than just the areas of the property that have high agricultural value. The landowner is best placed to identify on a property scale which parts are of high agricultural value.

There is therefore no proposal to exclude BSAL from offsetting, as this could significantly reduce the future availability of offset sites and would place an unfair restriction upon BSAL landowners seeking to receive stewardship payments. It is instead proposed that the government will monitor the uptake of offset sites on BSAL to assess impacts to agricultural production.

Next Steps: That the government monitor the uptake of offset sites on BSAL to assess impacts on agricultural production.

4.14 Consistency with other offset policies

Submissions

A number of stakeholders highlighted the value of a consistent regulatory framework across governments to manage environmental impacts. The majority supported the formation of a bilateral agreement between the Federal and NSW Governments to align offsetting policies to reduce unnecessary duplication and cost. However, this was

opposed by the Nature Conservation Council, who stated it would represent a weakening of existing Federal offset standards.

A number of stakeholders, many of them associated with Local Government, recommended that the policy extend to other types of development. It was contended that this would increase certainty and consistency, and would simplify the development system for all stakeholders.

Response

This policy was designed to incorporate Federal environmental standards in a way appropriate to NSW systems. The policy is now proposed to be a key policy underpinning a proposed approvals bilateral agreement with the Federal Government, which was recently put on public exhibition. The finalisation of this bilateral agreement would mean that there will no longer be duplication between Federal and NSW Governments offsetting policies and practices, with proponents needing to apply both to a single project. This will be a real reduction in red tape while maintaining environmental standards.

It is recognised that some inconsistencies remain regarding Federal and NSW threatened species listing, particularly with regard to descriptions of ecological communities. Work will be undertaken with the Federal Government in the immediate future to address this.

With regard to extending the policy to other forms of development, it should be noted that the draft policy was specifically designed around major projects and the legislative framework under which they are determined. It is intended that, in the future, consistency in offsetting policies across all types of development in NSW will be considered. The way offsets apply to other types of development will need to be tailored to the legislative frameworks under which they are determined and the types of proponents likely to undertake these projects. For example, assessment of environmental impacts for these projects will sometimes be undertaken by individuals, rather than larger companies. Such a policy may therefore be quite different to this one. The intent will be, however, that consistencies will be achieved where they can be.

4.15 Deferral of offset obligations

Submissions

Under the policy, where an offset is not secured before a project begins, the proponent can enter into a voluntary planning agreement for provision of the offset and provide appropriate security to ensure this requirement is fulfilled.

Some submissions requested clarification around this process. Several respondents, including the NSW EDO, highlighted the risk inherent in not securing an offset before a development commences. This risk was perceived to be both financial – in the event that a proponent defaults on their debt – and environmental, e.g. where a direct offset may be subsequently found to not exist. One respondent suggested financial penalties if no suitable offset is subsequently located.

It was noted that this would also be an issue for the proposed fund once it is developed. A project may be approved with payment into the fund and then the fund may not be able to find an appropriate offset.

A number of development and local government stakeholders supported deferred offsets as reasonable, contending that it is not always possible to secure an offset site before planning approval is granted.

There were also submissions regarding deferred payment of management costs by proponents who own their own offsets. It was highlighted that there is a risk of future non-payment.

In contrast, there was support from stakeholders including Bush Heritage Australia and the NSW Minerals Council for the development of a process of 'advanced offsets' – that is offsets that are set up in anticipation of future developments.

Response

Managing risk around deferred offset obligations

A deferred offset obligation is secured under a voluntary planning agreement with DPE.

It is acknowledged that offset deferral could lead to a project proceeding on the basis of a direct offset site, which may later not be available. It is recognised that this is a risk, particularly for those entities that are already rare.

Impacts that require further consideration, particularly those related to potential extinction or loss of viability of a species or community, are the kind of impacts for which there is the greatest risk a suitable offset will not be found. For these impacts, it is considered particularly important that an offset is identified and secured prior to the development impact.

In response to this important issue, a requirement will be introduced that offsets be located and secured for impacts classified as an 'impact that requires further consideration' prior to the impact occurring (where that impact will be approved).

It is intended that the category of impacts that require further consideration will be further narrowed during the transitional implementation period. As outlined in the 'Avoid and minimise' section above, the transitional definition of these impacts is likely to be broader than the definition and schedule that will be developed by the end of the transitional period. For this reason, during the transitional period, there will be an exception to the requirement that these offsets be secured prior to the impact occurring. This exception will apply where it can be demonstrated that the prospect of finding an appropriate offset is high. This will be considered by the consent authority when undertaking further consideration around these impacts.

When the proposed fund is established, consideration will also be given to excluding its use for impacts that require further consideration (likely to be more narrowly defined by this stage) to reduce the (relatively significant) risk that such offsets cannot be located.

Proposed amendment: Exempt offsetting of impacts that require further consideration from being deferred under a voluntary planning agreement – with an exception during the transitional implementation period for those impacts where it can be demonstrated that the risk of not finding an appropriate offset is low.

Work is currently being undertaken by OEH to better understand and mitigate the potential risks around proponent-owned and managed offset sites. Issues that are being considered include when the biodiversity credits for the site must be retired and how this can be enforced.

Advanced offsets

Biobanking agreements provide an opportunity to establish ‘advanced offsets’. A biobanking agreement can be placed on land at any time. The landowner then effectively holds onto the credits that are generated until an appropriate opportunity to sell or retire them to offset a development. The proposal by the Nature Conservation Trust that Voluntary Conservation Agreements be converted into biobanking agreements without penalty may also provide an opportunity for the establishment of advanced offsets. If this change is made, land with Voluntary Conservation Agreements could be potential future offset sites.

4.16 Transitional implementation

Submissions

A number of stakeholders sought further guidance on how the policy will operate during the transitional period to provide as much certainty and clarity as possible for proponents and the community.

NSW Minerals Council made a number of recommendations around the operation of the transitional period, including that the policy be applied flexibly where a proponent does not ‘consider compliance with the Policy/FBA or any aspect of the Policy/ FBA to be appropriate in the circumstances (which may for example be because of inaccuracies in the datasets underlying the methodology contained in the FBA)’.

The Council also proposed that proponents be allowed to defer any offset liability incurred during the transitional implementation until such time as the proposed fund is established and operational.

Response

Further guidance around operational arrangements during transitional implementation of the policy will be developed and provided to stakeholders prior to the introduction of the policy.

This will include:

- information on the application of the policy during the transition period
- technical briefing sessions for ecological consultants
- clear processes for resolving any issues arising with the policy or methodology.

Next steps: Prepare additional guidance for stakeholders around operational arrangements during the transitional implementation period.

During the policy's transitional period, application of the policy will be compulsory for major projects. There will, however, be some flexibility in its application to cater for any technical (e.g. relating to calculations in the FBA) or implementation issues arising. To clarify its application during the transitional period, the following information will be inserted in the policy:

During the transitional implementation period, the Department of Planning and Environment will include in all new environmental assessment requirements for major projects (issued pursuant to Part 2 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) a requirement to assess the biodiversity impacts and determine associated offsets arising from a proposal in accordance with the NSW Biodiversity Offsets Policy for Major Projects. However, if application of the policy or its underlying tool, the Framework for Biodiversity Assessment (FBA), results in perverse outcomes that do not reflect the intentions of the policy, the consent authority may vary the application of the policy or FBA to address this.

For the purposes of clause 14(3) of the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries), in the case of any alteration to the application of the policy or FBA that the consent authority intends to approve during the transitional period, the fact that there has been a change will not in itself be considered by the Office of Environment and Heritage as a reason for a certificate not to be issued certifying the adequacy of the measures to mitigate or offset the biodiversity impact of the proposed development.

Any issues that arise with application of the FBA, including its underlying databases, during the policy transitional period will be recorded and addressed in a revised FBA and/or database, which will be implemented at the end of the transitional period. Amendments to the FBA will not be made until this time, prior to legislative implementation. Amendments identified during this period may, however, be taken into consideration by the consent authority in its more flexible application of the policy.

Proposed amendment: Insert text into the policy to provide clarity around the flexible application of the policy during the transition period.

4.17 Comments on the FBA

Submissions

Many submissions addressed the FBA. This section highlights recurring issues and themes, rather than isolated technical amendments.

A number of submissions supported the application of a clear, consistent, science-based methodology to determine biodiversity offsets for major projects. However, many respondents remarked upon the complexity of the methodology. Others reported confusion around its application and its relationship to other existing biodiversity assessment methodologies.

A small number of submissions made extensive remarks around specific technical aspects of the FBA, with recommendations for change. Concerns were raised in relation to the low condition threshold set in the FBA, which do not require the impacts of development to be offset if the site condition score is 17 and does not contain threatened species.

Response

To reduce confusion around the FBA and ensure it is as clear as possible, it has been refined to ensure the language is in 'plain English' and its layout is as logical as possible. Furthermore, a section has been added that clearly sets out the decision thresholds of the FBA – including which impacts require offsetting, which impacts do not require offsetting and which impacts require further consideration by the consent authority.

Throughout the transitional period, work will be undertaken to ensure ongoing improvement of databases underpinning the methodology. This will be informed by further testing through application and ongoing stakeholder consultation. In the future, accredited assessors will be notified of updates to the databases.

The finalisation of the review of the BioBanking Scheme is occurring in tandem with the development of this policy to maximise consistency between the two where possible. It is intended that the method for assessing and calculating biodiversity credits generated at offset sites currently presented in the FBA will eventually be provided in the BioBanking Assessment Methodology (BBAM). This chapter of the FBA was drafted based on comments provided during the review of the BBAM.

During the transitional period, work will be undertaken to refine certain sections of the FBA. These sections will operate satisfactorily as they are during the transitional period. Further refinements will, however, improve these sections for use in the future. Sections that will be refined include:

- The assessment and calculation of indirect impacts
 - The draft FBA proposed calculation of a biodiversity credit requirement for indirect impacts. In response to stakeholder comments regarding the uncertainty of the proposed method, indirect impacts will be dealt with through mitigation measures during the transitional implementation period. During this time, further consideration will be given to whether these impacts can be calculated using biodiversity credits.
- Identification of 'impacts for further consideration' (further information on these refinements is outlined under the 'Avoid and minimise' section above).

Additional guidance to support application of the FBA will also be developed during the transitional implementation period in consultation with stakeholders. This will include:

- threatened species survey guidelines, which will provide further guidance on issues such as detection of cryptic species (species that look the same but are different species)
- equivalence tables that identify how plant community types relate to biometric vegetation types
- clarification of rules for calculating additionality as it applies to local government-owned community land and the interpretation of management actions in local government area plans of management
- requirements to avoid and minimise impacts
- landscape value assessment for linear shaped developments (e.g. roads) and multiple fragmentation impact (e.g. due to coal seam gas developments) and how loss in landscape value is scored.

Proposed further technical amendments to the FBA are listed at Appendix A.

4.18 Comments on the fund

Submissions

Many submissions made comment about the proposed NSW Biodiversity Offsets Fund for Major Projects (the fund). The summary below provides a brief overview of respondent opinions against each discussion paper question, along with proposed next steps for the fund development.

Response

What broad functions need to be considered in structuring the fund?

The following were suggested as key fund considerations:

- ensuring the fund has an appropriate strategic plan and direction
- setting appropriate rules and guidance to ensure biodiversity gains are realised, including consideration of rules around like-for-like
- developing cross jurisdictional consistency where possible
- ensuring the fund is attractive to key constituents.

Next steps: A strategic plan will need to underpin the fund and rules developed for its operation - including decision frameworks for strategic sourcing of offsets while maintaining an appropriate level of like-for-like.

What benefits are associated with the fund manager being either a public or private entity?

While more respondents indicated a preference for a public fund manager, others suggested private or expressed no opinion. Those proposing a public manager suggested that this would make the fund more responsive to government's strategic priority and would allow it to be more focussed on environmental outcomes. Those supporting a

private manager thought this would bring greater efficiencies and financial expertise. In general, most respondents agreed that the key attribute of fund management was financial expertise, responsiveness to strategic government direction, and public accountability.

Next steps: Research models for fund managers from both public and private spheres.

Are there any other key functions that need to be performed by the fund manager?

Most submissions suggested that the fund manager should have a narrow set of functions dealing with the receiving, management and expenditure of funds. Some suggested rules and direction surrounding amounts collected and spending timeframes. Few submissions suggested the fund should be responsible for providing interest-free loans to landowners to help with assessments, to be recouped when an offset agreement is finalised. Other submissions expressed a desire that the fund be extended beyond major projects, to include offsets for other development types.

Next steps: Develop fund manager key functions with a focus on receiving, management and expenditure of funds.

Are there any other key functions that need to be performed by the program manager?

Suggestions included:

- marketing/communicating the offset policy to the marketplace
- assessing properties, sourcing offsets and preparing Biobanking agreements
- providing an administration framework for offset site management actions
- undertaking monitoring and evaluation of offset sites
- establishing relationships with landholders and proponents
- utilising existing networks and programs to deliver positive biodiversity outcomes
- being able to verify that the program is delivering value for money
- having a clear set of targeted biodiversity priorities that adhere to the policy principles including ensuring offsets are like for like.

Next steps: Develop program manager key functions and strategic aims.

Do you have other suggestions for how the program manager could source offsets?

Most respondents saw logic in an 'expression of interest' model, and offered suggestions on how this could work, including:

- launching an education and awareness program for landowners to attract initial interest
- identifying and approaching landowners with properties suitable for offsetting
- leveraging local knowledge, including that of local councils, to help promote and secure offsets

- developing a workable multi-step expression of interest process – e.g. advertising, conducting a desktop assessment of options, applying the FBA to shortlisted properties (paid by recoupable loan).

Other respondents suggested more offsets could be sourced by allowing landholders with pre-existing Voluntary Conservation Agreements to access to the scheme, or by establishing a close relationship with National Parks and Wildlife Service to identify land suitable for reserving. Many respondents highlighted the need for strong links between the fund and existing and future regional land mapping processes.

Next steps: Research options for sourcing offsets, in consultation with landowners and relevant local entities. Consider legal and market implications and develop clear rules around this process for the fund program manager.

What are the key considerations for developing a fund calculator that is transparent and fair?

Respondents stressed the need for calculations to consider all costs associated with acquiring and managing offset sites in perpetuity. A number of submissions contended that, as the fund essentially transferred management risk from the proponent to the government, costs should include a risk premium. Other submissions argued for simplicity and certainty, either by setting standard costs prices and revising these periodically, or developing calculations compatible with other jurisdictions.

Next steps: Research offset calculators used in other jurisdictions and undertake a best practice analysis of functioning offset markets and their calculation methods.

What are the key considerations for good governance of the fund manager?

Stakeholders submitted that good governance of the fund manager should:

- ensure there is effective offset monitoring, full transparency to the public, and reviews of appropriateness and effectiveness of spending
- confirm that appropriate offsets exist before allowing proponents to use the fund
- have an independent escalation point (such as an ombudsman or equivalent) to consider any allegations of inappropriate management or actions by the fund
- have industry and proponent representation on a board established to oversee the fund.

Next steps: Examine fund manager governance issues and develop a strategic operational framework in consultation with stakeholders, including farming and landowner stakeholders, environment groups, industry and financial experts.

What are the key considerations for good governance of the program manager?

Key considerations for good governance of the program manager include:

- oversight by an expert board including representatives from government, scientists, and non government organisations

- maintaining a register of established offset areas that is auditable and publicly available
- setting targets and timeframes for delivery of offsets.

Next steps: Examine program manager governance issues and develop a strategic operational framework in consultation with stakeholders, including farming and landowner stakeholders, environment groups, industry and financial experts.

5. Next Steps

5.1 NSW Biodiversity Offsets Policy for Major Projects

Prior to the transitional implementation period, further guidance will be developed for proponents, ecological consultants and other stakeholders around how the policy will be applied throughout this time. The finalised credit calculator will also be provided to stakeholders for trialling.

Throughout the transitional period, further work will be undertaken on certain elements of the policy, such as refinement of definitions and processes around impacts for further consideration. This work will be undertaken in consultation with key stakeholders.

Resources will be allocated within OEH and DPE to enable a rapid response to any perverse outcomes arising from the application of the FBA throughout this period. The consent authority will have some flexibility in applying the FBA to mitigate any unintended outcomes during the transition.

5.2 Framework for Biodiversity Assessment

Work will be undertaken to refine the Framework for Biodiversity Assessment (FBA) through the transitional implementation period as the methodology is tested through application. Refinements will be implemented as part of the review of the FBA at the end of the 18 month transition period. They will not be made on an ongoing basis as this creates uncertainty for proponents and would require modifying and reissuing the credit calculator tool each time there is a change.

5.3 NSW Biodiversity Offsets Fund

Work to establish the proposed fund will take place throughout the transitional implementation period. This work will include development of:

- a governance framework
- fund structure and composition
- strategic aims and objectives
- key functions, including operational and payment rules and guidance
- a fund calculator to determine payments into the fund.

This work will be undertaken in consultation with key stakeholders, including farming and landowner stakeholders, environment groups, industry and financial experts.

Appendix A

Table of further technical FBA amendments

The following further amendments/clarifications/refinements have been made to the FBA in response to stakeholder submissions:
Clarification of the assessment and offset method for hollow-bearing trees.
Clarification of additional credits generated at offset sites due to strategic location.
Clearer guidance around the landscape value assessment for linear shaped developments (e.g. roads) and multiple fragmentation impact (e.g. due to coal seam gas developments) and how loss in landscape value is scored.
Clarification of the native vegetation community survey and assessment requirements to identify Plant Community Types (PCT) and the relationship to a biometric vegetation types. It is intended that all offset schemes will be based on PCT's to avoid confusion.
Clarification that impacts on vulnerable ecological communities are not included in references to ecological communities in the FBA and therefore do not need to be assessed and offset.
Clarification that, where provisions in the FBA rely on the listing status of a species or ecological community, this will include the status under both the TSC Act and the EPBC Act and, where there is inconsistency in the level of threat, the more threatened status will prevail.
Clarification that the method for determining the number of ecosystem credits for impacts on an ecological community or a PCT is based on the species with the highest threatened species offset multiplier as this is the species that is most vulnerable to the loss of habitat.
Clarify the assessment method for applying a development footprint buffer to development that has fragmentation impacts based on perimeter of new patch edge that is created by the development.
Revise the guidelines for varying the increase in site value with additional management actions so that the additional gain is based on measurable biodiversity outcomes.
Provide clearer guidance on the assessment of indirect impacts.
Allow the impact of development on areas of derived native grassland to be explicitly considered in an assessment where it is has a site condition score > 17 to enable an accurate assessment of it habitat value.
Refinements to calculation of low condition foliage cover.
Adding a provision that gives consideration to site assessment during extreme climatic conditions when determining whether the site is in low condition. This is to address circumstances in which vegetation appears to be in low condition due to drought but has the ability to quickly recover with rainfall.
Enabling the calculation of credits generated at offset sites to recognise the large environmental gains that can be achieved through active management of derived native grasslands back to woodland form.