Submission on Biodiversity Conservation Reforms

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NSW MINERALS COUNCIL

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Executive Summary

The NSW mining industry has been at the forefront of offsetting in Australia, with some of the earliest offsets being located in NSW's Hunter Valley. The industry has been constructively involved in the evolution and sophistication of biodiversity assessment and offsetting and has long been supportive of attempts by the NSW Government to develop objective tools for the assessment of biodiversity impacts and offsets.

NSWMC members are pleased to see positive elements of the reforms that address issues that NSWMC has raised over a number of years with OEH. These include the creation of a fund which allows developers to make a payment to meet any offset obligation, the removal of local government rates in Biodiversity Stewardship sites, and the acknowledgement that there are areas of the state where detailed assessment of the impacts of clearing is not necessary.

The Biodiversity Conservation Reform process is in response to the findings of the Independent review of Biodiversity that reported in 2014. It is fair to say that a considerable focus of the Review recommendations was on the clearing of land that is currently regulated by the *Native Vegetation Act 2003* (NVA), which has been an source of understandable frustration to the agricultural industry, and an impediment to responsible agricultural practices in NSW.

While this focus is understandable, there has been a lack of focus and resources directed by the Government to the development assessment and offsetting components of the reform. In particular it is disappointing that the Biodiversity Assessment Method (BAM) and products relating to the Biodiversity Conservation Fund (BCF) are not completed and cannot be fully reviewed at this stage. In expressing this disappointment, no criticism is directed at the Office of Environment and Heritage (OEH), which has had limited resources to undertake a very significant reform process. Nor do we question the legitimacy of the reforms in relation to clearing outside the development approval process.

We are concerned that the Government does not appear to have as one of its considerations the economic impacts of the proposed reforms. The mining industry expects that the reforms should be focussed on achieving good economic and environmental outcomes. Given that many of the products are incomplete, the Government has not been able to test the impact of the reforms. This is very concerning. The Government must ensure that the reforms:

1. Provide an process for assessment and offsetting of impacts that is transparent, based on objective criteria and science, not the subjective and opaque views of experts
2. Provide a streamlined assessment process
3. Consider economic as well as environmental impacts.

For many years NSWMC has made submissions on behalf of our members with regard to the security mechanisms for mine owned offsets, and in particular how the Biobanking Agreement is an inappropriate as a form of security for these projects. Despite this, and despite the fact that the mining industry is probably the largest owner of offsets in NSW, no attempts have been made to address the industry's concerns about Biobanking Agreements. The Government's proposed Biodiversity Stewardship Agreement (BSA) appears to be facsimile of the Biobanking Agreement, repeating all of the industry's concerns about the additional costs for industry. The Government needs to commit to developing alternatives with the mining industry, including the option of deferral of the payment of the Total Fund Deposit (TFD).

Very limited information is provided with regard to the proposed Biodiversity Conservation Fund (BCF) and the calculator that is being developed to convert a credit to a cash amount that will be paid to BCF. The NSW mining industry has long been a supporter of the concept of a fund that developers can pay into met their offset obligations. A sustainable fund is a win-win for business and the environment. However, on the limited information available at this time we are concerned that the BCF will be a very expensive option that may not be commercially viable. If this were to occur the BCF would not be successful, and the supply side of the credit market will remain small, leaving mining companies to source and manage their own offsets. Given the amount of time, money and effort that is being put into the development of the BCF, it is vital that it has a chance to be viable.

The Government needs to ensure that the sustainability of the BCF considers not only risk to the fund, but also whether the model proposed is commercially viable and will be attractive to industry participants. The Government needs to provide a detailed report on the background work that has been undertaken to develop the offsets pricing model and the calculator and ensure that there is a robust economic assessment of its workability and viability.

NSWMC's submission with regard to the BAM has been limited by the inability to access a completed BAM calculator and to use this to test the outcomes for real mining projects. The ongoing process of consultation with regard to the BAM needs to include additional opportunities to provide feedback, including after a completed BAM calculator has been provided.

The additional cost burden of preparing a biodiversity assessment under the BAM is considerable. Without the final BAM and calculator this is difficult to assess exactly, but we estimate that a further 10-25 percent of effort will be required to apply the BAM and produce a Biodiversity Development Assessment Report (BDAR). This is on top of the additional effort that was imposed on industry through the Framework for Biodiversity Assessment (FBA).

The Biodiversity Conservation Bill (BC Bill) does not yet contain the transitional provisions. It is vital that the Government consults on these provisions before the BC Bill is finalised. In addition, given that the BAM and BAM calculator will be new and introduce many new concepts that are now contained in the FBA, there should be a period of administrative application of the BAM and its tools and this needs to be provided for in the BC Bill. When the Government introduced the Major Projects Offset Policy (MPOP) and FBA in 2014, a transitional period of 18 months was provided, after which the plan was to implement the MPOP and FBA through legislation. The MPOP has not been full translated into the legislation, and the BAM differs significantly from the FBA and has completely new products underlying it. As a result the same reasoning that lead the Government to provide a transitional period for the implementation of the MPOP and FBA applies to the scheme set out in the legalisation and the BAM.

Finally the reform process is largely silent on whether the new process will be acceptable to the Australian Government and the progress of a Bilateral Approval Agreement. This was a major driver of the need to finalise the MPOP. From an industry perspective, significant gains in streamlining assessment can be made through ensuring that only one process of assessment and offsetting needs to be undertaken.

While the Government has ambitions to present the Biodiversity Conservation Bill into the Parliament in October 2016, the reform package as a whole will require a great deal more work before it is ready to be applied. Since 2010 with the introduction of Biobanking, there has been constant churn of different methods and approaches to assessment and offsetting biodiversity impacts. It is vital that this process provides a stable, consistent approach from the Government. To do this the BAM and

other elements of the offsets scheme need to be robust and thoroughly tested before being implemented.

NSWMC and our members are confident that we can work with the Government to ensure that the process for assessment and offsetting the impacts of development can be made transparent, streamlined and appropriately consider both environmental and economic impacts. We look forward to further engagement on the reforms over the next 12 months.

About the NSW Minerals Council

The NSW Minerals Council represents the State's $21 billion minerals industry.

NSWMC provides a single, united voice on behalf of our 85 members, ranging from junior exploration companies to international mining companies, as well as associated service providers.

Mining has and will continue to be a key economic driver for NSW. NSWMC works closely with government, industry groups, stakeholders and the community to foster a strong and sustainable minerals industry in NSW.

1. About this submission

1.1 Form of the submission

This body of this submission aims to address the priority issues with regard to the Biodiversity Conservation Reforms. Detailed/technical comments are dealt with in the appendices as follows:

- ***Appendix A*** sets out technical comments and recommendations with regard to the Biodiversity Assessment Method (BAM).
- ***Appendix B*** sets out detailed comments and recommendations with regard to the Biodiversity Conservation Bill (BC Bill).

1.2 Limitations of this submission

This submission is limited as elements of the Biodiversity Conservation Reforms package are either not yet available or are incomplete. These limitations identified are discussed where relevant in the submission. Documents/products that are incomplete or unavailable are summarised below:

- *The Regulations.* These are not available. A number of key areas of the reform will be addressed by the Regulations and it is not possible to assess the package in totality without these.
- *The BAM*. NSWMC understands that the BAM is incomplete and likely to undergo further refinement before it is finalised. It is noted that the regulations when made will require the exhibition of the BAM. This is likely to take place sometime in 2017. Elements of the BAM that are incomplete prevent NSWMC from being able undertaking testing to fully understand the implications for mining projects. There are a number of products that underpin the BAM that are not complete – these are listed in section 3.2 below.
- *The BAM tool*. The Government has released a tool for testing, but this is incomplete. It is not possible undertake case studies to understand the implications of the BAM for mining projects without a final tool.
- *Offset Multipliers*. The offset multipliers will replace Tg scores. The Tg scores were a significant driver for the credits required to offset species. While information provided in a briefing to NSWMC indicated that the offset multipliers would be a better approach to dealing with the response to gain of species, this information is not available in the Biodiversity Conservation Reform package. NSWMC understand that OEH has not advanced the process of setting the offset multipliers.
- *The Offset Pricing Model and credit calculator*. Only limited summary information about the model has been released. It is not possible to analyse the offset pricing model, the prices and the potential cost of using the Biodiversity Conservation Trust to offset a mining project without a great deal more detail. The Government should release:
    - A detailed report on the offset pricing model including inputs, which can be interrogated.
    - A working offsets payment calculator that will allow case studies to be undertaken to understand the feasibility of the BCT compared to mine owned offsets.
- The Threshold Values Map. This is identified in the BAM as “a proposed map that identifies where sensitive species or other sensitive environmental values are located. Development on land identified by the threshold values map must use the BAM to assess biodiversity”. The Map is not available.
- *The Native Vegetation Regulatory Maps.* These map areas where clearing is exempt or can be undertaking in compliance with codes.

Without these products/completed products, it is very difficult to assess the package in totality and to undertake case studies to identify whether assessment and offsetting under the reforms will be appropriate and how it will compare to the status quo. This is equally the case for the Government. It should be noted that the package with respect to development assessment has not and cannot tested fully by the Government at the time of this submission.

The Biodiversity Conservation Reform website states that the BAM should be exhibited in its final version in early 2017. Feedback from the BAM consultation session run by OEH staff indicates that the BAM and all of its products will not be completed until September 2017. Importantly the Biodiversity Conservation Act (BC Act) should not commence until all of the products, including the BAM (and any products that underlie it) have undergone testing and are finalised.

Recommendations:

- The Government needs to provide clarity about the further stages of development of the Biodiversity Conservation Reform package and consult on the following products:
    - The draft regulations.
    - Further iterations of the BAM and products that underpin it.
    - Further iterations of the BAM Tool.
    - The process for setting and updating the offset multipliers and the initial offset multipliers.
    - The offsets pricing model and calculator, and in particular the underlying process of setting credit prices.
    - The Threshold values Map.
    - The Native Vegetation Regulatory Map.
- The BC Act should not commence until all of the products that support it have been tested and are final.

2. Positive elements of the Biodiversity Conservation Reforms

The NSW minerals industry would like to acknowledge a number of positive elements of the Biodiversity Conservation Reforms:

- The broader offset and variation rules under the BAM as compared to the Framework for Biodiversity Assessment (FBA).
- The exemption of lands subject to Biodiversity Stewardship Agreements (BSAs) from local land rates.
- Biodiversity certification is now open to owners of land (not just planning authorities) which would allow mining companies to undertake an upfront assessment of biodiversity across a large area of land that may include a number of mines (each a separate planning application).
- The proposal for the regulations to include a public register of biodiversity credits is positive for industry in the interests of transparency and also to assist in credit trading.
- The creation of the new offset multipliers in the BAM, which will replace the Tg scores (this is qualified positive as the process for setting the multipliers and the multipliers are not yet available for review).
- The creation of a Biodiversity Conservation Fund (BCF), which will allow a developer to meet an offset obligation by making a payment into the Fund (this is a qualified positive and will be dependent on the commercial viability of the offset credit prices).

While a number of these developments are qualified, NSWMC is optimistic that there is scope for amendment of the current package to provide appropriate outcomes for the environment and business.

3. Development and biodiversity

3.1 Requirement to apply the BAM and provide a biodiversity assessment report

The thresholds for the use of the BAM and requirement for a Biodiversity Assessment Report (BDAR) are unclear. Different rules appear to be set out in the Submission Guide and BC Bill. There is a lack of clarity about the application of the BAM in relation to State significant development (SSD). The Government needs to ensure that there is consistency across the different industries that may need to clear land, and across the different categories of development.

Proposed BAM thresholds

NSWMC understands that the BAM is only intended to apply to those projects that exceed certain 'thresholds' relating to the area of vegetation clearing, the test of 'significance' (similar to the current seven part test), the sensitivity of the species mapped on the subject land (according to a Thresholds Values Map, which is yet to be created) and compliance with local land services allowances as set out in relevant codes.

Clause 7.9 of the BC Bill currently provides that any application for SSD or SSI (State significant infrastructure) approval must be accompanied by a biodiversity development assessment report unless *'the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any* ***impact on biodiversity values to which the biodiversity offsets scheme applies'.*** However, the concept of '*biodiversity values to which the biodiversity offsets scheme applies'* is not defined in the BC Bill and as such, it is not clear as to the circumstances when a SSD or SSI application will or will not be subject to the BAM.

It is assumed that the 'biodiversity offsets scheme threshold' as discussed in Clause 7.4 of the BC Bill is intended to also represent the BAM thresholds as referred to in the BAM and ESD Submission Guide. As such, Clause 7.9 of the BC Bill should be clarified (consistent with Clause 7.6(3)) to specify how the BAM threshold will apply to SSD and SSI.

It is unclear whether the BAM applies to all SSD applications or only those applications that exceed the relevant thresholds. More importantly, it is also unclear what tool is to be used by proponents to assess biodiversity impacts in circumstances where the BAM thresholds are not met. The BC Bill needs to be amended to make it abundantly clear as to the process which must be followed in circumstances where the BAM thresholds are not met, otherwise the reality will be that the BAM will be applied by a consent authority to all development, irrespective of whether the thresholds are met.

Further, currently in NSW the majority of major projects are being reviewed and determined by the Planning Assessment Commission (PAC) under delegation by the Minister, being an independent body, which is not subject to the direction of the Department of Planning and Environment (DPE) (or any other Government Department). Guidance should be prepared for the PAC to assist in their understanding of the BC Act, the BAM and the offsetting scheme in the context of applications, which are to be determined by the PAC.

The thresholds set out in the BAM should be strictly applied and there should be a clear statement that the BAM is not to be applied if a project does not meet one of the prescribed thresholds. The BAM should not apply to subsidence related impacts, as these impacts do not involve the clearing of land and many such predicted impacts never in fact eventuate.

Mining and the Native Vegetation Regulatory Map

Where areas have been assessed upfront by government, and a decision has been made that the land does not contain biodiversity values that require protection, then that decision should flow through to all forms of development on that land.

The reforms have identified land that is exempt from the requirement to have any type of clearing approval. This is land that has been mapped under the new *Native Vegetation Regulatory Map* as Category 1 land. In the event that a SSD project applies to land that is mapped Category 1, a BAM should not be required in relation to clearing for mining on that land. No form of assessment of impacts on biodiversity should be required, it should be assumed that in mapping the area as exempt the Government has determined that the land does not contain biodiversity values that are required to be assessed and offset. This would not in any way reduce other forms of environmental impact assessment that would need to be carried out in relation to a proposed mining project on that land.

The current proposals allow landholders to request a review of land and provide additional local information to ensure land has been correctly categorized in the Native Vegetation Regulatory Map. This is appropriate given that:

- Incorrect mapping will impact on the value of the title held by the landholder.
- The landholder is likely to have undertaken ground truthing, which is superior to the methods that have been used to create the map.

The holders of mining authorities will also have the value of their rights impacted by incorrect mapping, and are likely to have undertaken field survey and mapping of the vegetation on the relevant land. Each year mining companies in NSW invest significantly in vegetation mapping and field survey, and in some areas have more accurate mapping than the Government. For instance in the Hunter Valley the mapping held by mining, or updates commissioned by mining are far superior to the OEH Greater Hunter Vegetation Map, which is on average only 30% accurate. OEH should seek input from stakeholders, including the mining industry, on the mapping before it is finalised.

The right to request an internal review of the *Native Vegetation Regulatory Map (clause 60 K of the Local Land Services Act Amendment Bill 2016 (LLS Act Amendment Bill)* should be extended to the holders of mining authorities. The right to appeal against re-categorisation decisions, provided by clause 60L of the LLS Act Amendment Bill, should likewise be extended to holders of mining authorities.

3.2 The Biodiversity Assessment Methodology

NSWMC understands that the available version of the BAM is far from completion. In fact the advice provided to a recent consultation session on the BAM indicated that a completed, working BAM would not be ready before September 2017.

The main issues identified at this point in relation to the BAM are dealt with below, while additional detailed technical comments and recommendations are provided in ***Appendix A***. Where relevant the questions posed in the BAM have been addressed.

Products that underpin of support the BAM

The following are products/elements that underpin or support the application of the BAM are not available for review as they are not yet developed/finalised:

- Developing criteria to be used, and the process to be employed, in the mapping of BAM threshold criteria.
- Criteria to be developed around the approach for the development of ‘certified more appropriate local data’.
- Creating and then expanding the new benchmarks database, including Plant Community Type (PCT) specific benchmarks.
- Mapping of corridors, migratory species flyways, areas of geological significance.
- Development of criteria and allocation of flora species to individual counts or area of habitat categories.
- Development of criteria for, and the process of populating, BAM Appendix 4 Schedule of Serious and Irreversible Impacts.
- Development of criteria around the approach to determining offset multipliers.

- Provision of criteria on the source and validity of the 'estimated annual probability of decline' for each of the vegetation integrity attributes.

Dealing with perverse outcomes

While for SSD, the outcomes of the BDAR are not binding it is unlikely that the consent authority will depart from the assessment. The NSW mining industry's experience is that that methods for the assessment of impacts on biodiversity are inevitably complex and can produce perverse, unintended results. The MPOP specifically provided that the initial application of that policy and the FBA would be administrative in order to deal with any perverse outcomes. It is important for projects in the planning system that any issues are able to be resolved and advice provided to the consent authority.

NSWMC proposes that difficulties with applying the BAM, including unintended results, should be dealt with by:

- Providing an initial period where the biodiversity offsets scheme and the BAM are applied administratively.
- The establishment of a permanent independent panel through a provision of the BC Bill, or the regulations, that provides for expert review of any aspect of the BAM or BAM tool/calculator, which may be driving perverse results in the context of a particular development application. Experts could be drawn from an independent panel. The advice would not be binding on the consent authority but should be a matter that is required to be considered.

Offset rules and variation rules – ecosystems

The NSW mining industry is broadly supportive of the offset rules and variation rules set out in the BAM. In particular it is noted that concerns NSWMC has expressed with regard to the NSW listed communities *Central Hunter Grey Box – Ironbark Woodland EEC* and *Central Hunter Ironbark – Spotted Gum – Grey Box Forest EEC*, not being able to offset one another, have been resolved.

Relevant Questions posed in the Draft BAM

(p 63) - The like for like offset rules allow credits to be matched with any PCT associated with the same threatened ecological community. This rule allows vegetation representing the same threatened ecological community to be used as a like for like offset, regardless of other vegetation classifications provided by vegetation class or formation. OEH is seeking feedback on whether this is appropriate.

The like of like offset rules are appropriate and an improvement on the rules of the Framework for Biodiversity Assessment (FBA) The flexibility provided moves away from the somewhat arbitrary class trading rules established under the FBA, such as using different PCTs in the same class provided they were of a higher percent cleared or up to 10% less cleared provided they were 70% or more cleared. The approach described for the BAM is more scientifically robust as it makes use of threat statuses determined through the rigorous process of the NSW Scientific Committee. Although Table 14 specifies percent cleared levels for those ecological communities that are not listed, the categories used generally align with threat level categories used by the NSW and Commonwealth Scientific Committees.

(*p. 64) - Do you think the variation rules for plant communities (i.e. ecosystem credits) should allow the offset site to be found anywhere in NSW, or should they restrict the offset site to be located in the same region as the impact, for example in the same IBRA region or IBRA subregion?*

NSWMC are supportive of the variation rule to allow the offset site to be found anywhere in NSW. This will increase the likelihood of being able to locate appropriate offsets. For large scale projects like mining, which may go across IBRA subregions, this is an artificial restriction and can prevent an offset being located that might otherwise be an appropriate match.

Offset rule and variation rules – species

The species offset rules and variation rules are generally supported. The capacity to identify species for which a biodiversity conservation action may also be used with, or in preference to, the retirement of species credits is a sensible addition to the offset rules for species.

Greater clarity should be provided in relation to the link between alternative species and PCTs. The current wording, in relation to both alternative fauna and flora species, is ambiguous: '*the PCT containing threatened species habitat at an offset site is a PCT, which according to the Threatened Species Profile Database (TPSD), is also associated with the fauna species impacted at the development site'* (BAM, 10.5.7, p. 65).

Rules that allow for the variation of to the like for like rules for ecosystem and species

The BAM states that the rules that allow for the use of the variation rules will be provided in the Regulations. The rules provided in the MPOP require proponents to undertake all reasonable steps to locate a like for like offset before applying the variation rules. All reasonable steps are defined in the MPOP as including the following:

- 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.

The MPOP definition of 'all reasonable steps' is overly onerous on industry. The list is inclusive and not exhaustive. As a result it is not clear whether proponents are required to undertake all of these actions. One of the reasonable steps is to seek a suitable offset site by liaising with OEH and the relevant local council to obtain a list of potential sites that meet the requirements for offsetting. Local councils are unlikely to have the resources to identify potential offset sites.

Instead OEH should develop, maintain and promote an Offsets Property Register. The register would be similar to the Biobanking Register. Landholders who are interested in selling their properties as an offset would register their property with OEH (subject to meeting minimum requirements). The minimum requirements for entry on the register should be set in consultation with industry. The minimum requirements should address size, condition, and other parameters relevant to achieving a broad conservation outcome for a particular vegetation community/threatened species. OEH should drive the registration of private properties by identifying potential offset properties and approaching owners to register.

The Offsets Register must be maintained by OEH. To satisfy the requirements of 'all reasonable steps', the proponent must not be required to approach landholders who are not registered on the Biobanking Register or the Offset Property Register, but to register an expression of interest and approach those landholders who respond.

Instead of requiring 'all reasonable steps' to have been taken, the Regulations should provide that in order for the like for like rules can be applied where:

- The proponent has checked the Biobanking register and placed an expression of interest on it, and within a prescribed time the proponent has not received a reasonable response. A reasonable response is one where the cost of the credits is reasonable, and this would be decided by reference to the average purchase price of the relevant credit. (It should be noted that this is not an ideal way of identifying a reasonable cost of a credit given the small size of the market) and

- The proponent has Placed an expression of interest on a register on the Offset Property Register and within a prescribed period of time:
    - The proponent has not been able to meet the offsetting requirements through favourable responses to the expression of interest, or
    - Where there has been interest expressed, the purchase of the property or properties to meet the full offsetting requirement has not been possible because the cost is unreasonable. Evidence of unreasonable cost should be provided by the proponent by way of an independent land valuation.

Mine site rehabilitation

It is understood that OEH has not had the capacity to fully test a range of scenarios based on the current BAM. It is therefore possible that there will be refinement to the current approach on ecological rehabilitation once rigorous testing can be undertaken.

In particular we understand that OEH has not decided whether there will be additional rules in the BAM with regard to how credits for mine site rehabilitation are generated, that differ from the rules for ecological restoration provided in section 12 of the BAM, *Calculating gain in biodiversity values at the biodiversity stewardship site.*

The absence of a completed BAM tool/calculator prevents NSWMC from providing full comments on the BAM as it relates to mine site rehabilitation in this submission. When the tool/calculator is available NSWMC will provide further feedback to the Government. The demonstration tool is incomplete and is not fit for undertaking any form of testing of the credit generation capacity of rehabilitation.

The BAM states that rehabilitation can only generate credits for a major project where the 'major project is a mining project approved under the *NSW Mining Act 1992 (BAM section 12.14.1.2(a))*'. It is uncertain as to whether a modification to a major project that incorporated additional rehabilitation to that already part of the project approval, would constitute a mining project and therefore be able to generate credits from rehabilitation of previously mined land. Modifications of major projects (either SSD approvals or Part 3A approvals) that have rehabilitation commitments must be able to generate credits from rehabilitation in accordance with the BAM.

Section 12.14 of the BAM is very similar to section 12.2 of the FBA, but provides additional requirements with regard to relinquishment criteria in relation to fauna habitat and flora species. These additional requirements may serve largely to expand on the information that is required under the FBA:

- In relation to fauna species, the FBA simply provides that the completion/relinquishment criteria must demonstrate that the vegetation or other habitat features on the rehabilitation site are capable of providing habitat for the fauna species for which species credits have been generated. The BAM goes on to specify the evidence that the proponent needs to address that would support the establishment of a fauna species in the site (section 12.14.1.6).
- In relation to flora, the FBA simply states that the flora species for which the species credits are proposed to be created is present on the site. The BAM goes further and requires the completion/relinquishment criteria to provide evidence of the ability to sustain a population of the flora species on the rehabilitation site (section 12.14.1.7).

The additional information sought in sections 12.14.1.6 and 12.14.1.7 is significantly more detailed than what would usually be required in an impact assessment document pertaining to ecological restoration/rehabilitation commitments. It is the normal case that such detail would be deferred to the post-approval plans, and even then would be unlikely to be as detailed. OEH needs to ensure that its officers have a consistent approach to the level of evidence that is required to demonstrate that the completion criteria that are required to be set by the BAM have been met. OEH should carefully monitor that the level of detailed information being sought is actually required to ensure good rehabilitation outcomes.

Section 12.14 of the BAM requires an increase in the information required as part of BDAR in relation to the mine rehabilitation that is proposed to generate biodiversity credits. Much of this is to ensure that the species or PCT proposed for ecological rehabilitation is appropriate and is likely to be able to have its habitat successfully restored. Section 12.14.1.3 states that the rehabilitation objectives are for 'the creation of recognisable and self-sustaining PCTs...' however the terms 'recognisable' and 'self-sustaining' are not defined. Section 12.14.1.5 states that the BOS [this should read 'BDAR'] must set out criteria to 'demonstrate that vegetation on the rehabilitation site is a recognisable PCT or strongly trending towards becoming a recognisable PCT'. OEH needs to provide further guidance on what will constitute 'recognisable and self-sustaining'.

Section 12.14.1.10 appears to refer to the possibility of using mine rehabilitation as future Stewardship sites, once the completion/relinquishment criteria have been met for the original development. Discussions with OEH have confirmed that this is the intention of the BAM. The wording is, however, ambiguous, and includes a circular reference back to section 12.14, of which it forms a part. In addition, there is no detail on how credits would be calculated.

Mine rehabilitation is not defined and should include all opportunities to restore, enhance or rehabilitated mined land or mining related impacts.

It is understood that any credits previously used to lower offset requirements for a mining project would be disregarded, and the proponent could calculate 'new' additional credits as part of a the assessment of the site under a BSA. Effectively, the site can be placed under a BSA and new credits can be created that are unencumbered against the original development. However, the wording in this section of the BAM needs refinement to ensure that this is clear.

3.3 Serious and irreversible impacts

The BAM requires the assessor to identify serious and irreversible impacts. The information to assess what will constitute a serious and irreversible impact is not available.

The serious and irreversible impacts category depends on a listing of CEEC area and condition threshold, and a listing of thresholds for species credit species, in accordance with Appendix 4 of the draft BAM, which is currently unavailable, and the criteria for which are to be set out in the regulation. Tier 2 depends, for native vegetation, on whether or not the vegetation integrity score is above or below 17.

A substantial range of information is required to be provided by the Assessor in relation to potential serious or irreversible impacts on ecological communities and threatened species. These are documented in sections 9.2.3 and 9.2.4 in the draft BAM.

Without Appendix 4 of the BAM and the regulations, NSWMC is unable to assess whether the impacts that will be identified as 'serious and irreversible' warrant this treatment.

3.4 Offset multipliers

The BAM states that to determine the offset requirements for impacts of development an assessor must obtain the offset multiplier from the TPSD. The offset multiplier for each ecological community or threatened species will be displayed in the TSPD. It is 'based on the threat status class of an entity and the sensitivity class of an entity'.

The process for determining the offset multiplier is not yet publicly documented. The process needs to be publicly documented and exhibited for comment. This process should include both the initial setting of the offset multiplier and the process for modifying the offset multipliers. The process needs to include the following components:

- A transparent public process where comment is sought.
- A process of notification of changes to users of the BAM, by notifying accredited assessors.
- Rules for when changes to the offset multipliers need to be taken in to account in the assessment.

Changes to offset multipliers during the life of a project will change the nature of the offset required. In the event that the assessor has undertaken the assessment and a change is subsequently made to an offset multiplier it should be at the discretion of the assessor as to whether the assessment is re-run to take into account the changes.

3.5 Translocation of threatened flora and fauna species

The use of translocated threatened species is not explicitly allowed or disallowed in the draft BAM in relation to credit generation. This is the same for the BC Bill, although there is mention of translocation in relation to Biodiversity Conservation Actions.

There have been, and are likely to be in future, a small number of conservation-benefit situations where the translocation of threatened flora and/or fauna species is readily justified, where they are relocated to a secure Biodiversity Stewardship Site. This should be recognised and allowed for in the BAM and if required in the Regulations.

3.6 Impacts on swamps

The situation with regard to impacts on swamps is very unclear. The draft *Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species* (Swamp Offset Policy) has not been finalised. The draft policy was exhibited in May 2015, more than 12 months ago. Attempts by NSWMC and industry since January 2016 to understand the status of the policy have been unsuccessful. It is unacceptable that this policy has not been finalised in more than 12 months. Despite this the policy is referred to in the BAM. The draft Swamp Offset Policy refers to the FBA.

The draft Swamp Offset Policy is unacceptable. NSWMC provided a lengthy submission on the draft policy in 2015. The submission can be found here:
http://www.nswmining.com.au/menu/media/publications/2015-submissions

In summary the policy is unacceptable as it:

- Attempts to apply frameworks for the assessment of impacts of clearing to an impact that is not clearing.
- Attempts to assess impact and offsets for impact that may never eventuate.
- Assumes that any impact that exceeds a 'negligible' impact on hydrology results in a complete loss of ecological value - a worst case scenario equivalent to clearing and excavating the swamp. There have been thousands of swamps that have been undermined with no detectable impacts. When impacts have been identified, except in the rare and limited extent of swamp scouring, they have been limited to changes in vegetation composition rather than complete loss of ecological value.
- Doesn't provide any acknowledgment of the capacity of rehabilitation or remediation to reduce impacts on swamps (and rehabilitation can decrease credit requirements for open cut mines).
- Requires the applicant to demonstrate how it will legally secure the proposed offsets, which is akin to securing offsets where there may be no impact. The policy states that suitable means of demonstrating this include ownership of the land or a long-term option to purchase, or provision of an adequate security bond or deposit.

The policy provides a mechanism for establishing the need for an offset based on one environmental value, groundwater, yet the tools to measure the offset liability are vegetation based. It is unacceptable to set a standard for one vegetation community that is different to every other vegetation community in the state.

The process of assessing impacts on biodiversity set out in the BAM is not appropriate for assessing the impacts of subsidence, including impacts on swamps as the BAM assumes clearing and complete loss of the function of the ecosystem impacted. This is not the case for subsidence impacts, which may have very minimal impact, and at worst will not amount to clearing, but rather some loss of, or change to, vegetation. Reference to impacts on swamps are contained in a section of the BAM that deals with the requirements to assess and mitigate, but not offset, a range of impacts that are not clearing.

Impacts to swamps cannot be effectively offset. Instead the Government should focus of avoidance of these impacts and remediation of any impacts where they occur. Attempts to apply the draft Swamps Offset Policy have been fraught with difficulty.

The Government should be explicit that impacts of subsidence are not impacts that are required to be offset. This includes:

- Withdrawing the draft Swamp Offset Policy.
- Explicitly stating in the BC Bill that impacts of subsidence and upsidence are not impacts to which the biodiversity offset scheme and the BAM apply
- Remove reference to offsetting impacts from subsidence and upsidence from the BAM.

Recommendations:

- Cl.7.9 of the BC Bill should be amended to set out prescribed thresholds for the application of the BAM to SSD and SSI and apply these strictly. The BC Bill should explicitly state what if any assessment is required in the event that the BAM is not to be applied.
- SSD mining applications that impact on land mapped as Category 1 land under the Native Vegetation Regulatory Map, should not require the BAM to be applied in relation to the Category 1 land.
- OEH should seek input from stakeholders that hold vegetation mapping, including the mining industry, before finalising the *Native Vegetation Regulatory Map*.
- The right to request a review if the *Native Vegetation Regulatory Map* should be extended to holders of mining authorities.
- Insert provisions into the BC Bill or regulations that provide for proponents to seek a independent expert review of any aspect of the BAM or related products where they are producing perverse results and provide a report to the consent authority.
- The BAM Threshold needs to be clarified and expressed consistently in the Biodiversity Conservation Reform package products.
- More clarity should be provided in the BAM about the link between an alternative species and PCTs.
- The regulations should provide that the variation rules can be applied and where the proponent has:
    - Checked the Biobanking register and placing an expression of interest on it, and within a time prescribed by the regulations there is no response; and
    - Placed an expression of interest on the Offset Property Register (see below) and within a time prescribed in the regulations has not been able to meet the offsetting requirements through favourable responses to the expression of interest, or where there has been an expression of interest the cost has been is unreasonable. Evidence of unreasonable cost should be provided by the proponent by way of an independent land valuation.
- OEH should develop, maintain and promote an Offsets Property register to allow landholders to register their interest in selling their properties as offsets. Registration should be subject to minimum criteria to be established in consultation with industry.
- OEH should amend the definition of mining projects under the BAM, subsection *12.14 Assessing the ecological rehabilitation of previously mined land,* to include all mining projects including modifications (under Part 4 and transitional Part 3A modifications under section 75W)
- OEH should define mine rehabilitation to include all opportunities to restore, enhance or rehabilitate mined land or mining related impacts directly or indirectly on biodiversity.
- OEH needs to ensure that officers apply the same (appropriate) standard to assessment of the completion/relinquishment criteria for rehabilitation set out in the BDAR.
- OEH needs to revise the wording of Section 12.14.1.10 of the BAM in relation to future Stewardship Agreements for mine rehabilitation that has met completion/relinquishment criteria to ensure that it is clear that any additional credits generated over and above what was required to offset the impacts of the development are unencumbered.
- OEH must develop a process for populating Appendix 4 Schedule of Serious and Irreversible Impacts is transparent and enables public review.
- OEH should include in the BAM (or the regulations) provision for the generation of credits using the BAM calculator for the translocation of threatened flora or fauna species into Biodiversity Stewardship sites.
- In relation to the offset multipliers, OEH should provide:
    - A transparent public process for setting and changing an offset multiplier where comment is sought.
    - A process of notification of changes to the offset multipliers to users of the BAM, by notifying accredited assessors.
    - That where a change to an offset multiplier has been undertaken during an assessment it is at the discretion of the assessor as to whether to apply the change.
- The Government should explicitly state that impacts of subsidence and upsidence are not impacts of clearing, and:

- Withdraw the draft Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species
- Explicitly state in the BC Bill that impacts of subsidence and upsidence are not impacts to which the biodiversity offset scheme and the BAM apply
- Remove reference to offsetting impacts from subsidence and upsidence from the BAM.

4. Offsetting

4.1 Impacts that are required to be offset

The BC Bill states in Division 4, clause 6.12, that the BDAR must set out the number and type of credits required to offset the residual impacts of a development or clearing. The term "residual impacts" is not defined in the legislation. Only significant residual impacts should be required to be offset. This is consistent with the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) *Environmental Offsets Policy*, October 2012 that requires only residual impacts (on matters of national environmental significance) that are 'significant' to be offset as part of the assessment under the EPBC Act.

4.2 Biodiversity Stewardship Agreements

Circumstances where a BSA can be entered into

The BC Bill provides that land subject to a mining lease cannot be the subject of a BSA without the consent of the authority holder. This is appropriate, but should be extended so that land that is subject to any mining or prospecting authority, or a mining purpose (where a mining lease may not be held), cannot be subject to a BSA without the consent of the authority holder or the person carrying out the activity. This would prevent the establishment of Biodiversity Stewardship sites, which then need to be cancelled when a mining development approval and mining lease are subsequently approved for the site.

Payment of funds for future management actions and other costs of a BSA

This issue is discussed at length in section 5 of this submission.

4.3 Biodiversity Conservation Actions

Little information is available about biodiversity conservation actions. Biodiversity conservation actions take the place of supplementary measures, provided for under the MPOP and FBA. The BC Bill refers to biodiversity conservation actions only in a consultation note that advises that the actions will apply in certain circumstances in relation to some threatened species and ecological communities.

The BAM contains a consultation note that states that biodiversity conservation actions sit at the bottom the hierarchy of options to satisfy an offset obligation. The consultation note is the only information provided under the section of the BAM in relation to biodiversity conservation actions.

NSWMC assumes that further information with regard to biodiversity conservation actions will be provided in the Regulations and further iterations of the BAM. In developing the framework for biodiversity conservation actions the Government should:

- Not restrict the percentage of an offset obligation that can be met by biodiversity conservation actions. Any restriction would be arbitrary and may not reflect the best outcome for biodiversity. The consent authority should be able to decide what is the appropriate make up of offset measures.
- The rule for the use of a biodiversity conservation action should be the same as for the use of the variation rules (see part 3.2 above and the recommendations below).

As outlined in section 3.2 above, for some species and communities, biodiversity conservation actions may also be used with, or in preference to the retirement of species credits. In these circumstances there will not be any requirement to attempt to retire credits before using the biodiversity conservation action. The Government should consult on the criteria for determining to which species and communities this exception applies.

Where a biodiversity conservation action is to be used instead of a like for like for varied offset, the value of the action will be determined by applying the offsets payment calculator. This calculator is being developed to determine the cost of credits for the purpose of proponents converting an obligation to retire credits into a cash amount that is paid to the Biodiversity Conservation Fund, which

then takes the responsibility of meeting the offset obligation. The inputs to the calculator, which are discussed below, include a risk loading and administration costs. These will not be relevant to biodiversity conservation actions and a separate method of calculation should be developed.

Recommendations:

- Amend the BC Bill to require only the 'significant' residual impacts on biodiversity values of a proposed development to create an obligation to retire biodiversity credits.
- Amend the BC Bill to provide that a Biodiversity Stewardship Agreement cannot be granted over land that is subject to any mining or prospecting authority, or a mining purpose (where a mining lease may not be held), without the consent of the authority holder or the person carrying out the activity.
- The Government should not apply an arbitrary percentage restriction to the use of a biodiversity conservation action to meet an offset obligation.
- The Regulations should provide that biodiversity conservation actions can be used to meet the offset obligation where the proponent has:
    - Checked the Biobanking register (or any replacement) and placing an expression of interest on it, and within a time prescribed by the regulations a land based offset cannot be secured; and
    - Placed an expression of interest on the Offset Property Register (see below) and within a time prescribed in the regulations has not been able to meet the offsetting requirements through favourable responses to the expression of interest, or where there has been an expression of interest the cost has been is unreasonable. Evidence of unreasonable cost should be provided by the proponent by way of an independent land valuation.
- The Government should create an Offsets Property Register that would allow landholders to identify an interest in selling their properties.
- The Government should consult on the species and communities that can be offset partially or fully by biodiversity conservation actions.
- The Government should develop a separate method of calculation of the value of any proposed biodiversity conservation action.

4.4 Biodiversity Conservation Fund and offsets pricing model

Sustainability of the Biodiversity Conservation Fund (BCF) must consider commercial viability

NSWMC and our members have long been supportive of a state based fund into which developers are able to pay an amount representing the offset obligation of the development. There are considerable advantages for both the environment and business in this approach. It has the potential to be a truly win-win outcome of the reforms. This approach would allow the centralisation of the sourcing of offsets, which would provide for more strategic offsetting. It would provide developers with a way of securing appropriate offsets without having to manage offset lands, which is not the core business of developers.

NSWMC is very concerned that the Government appears to accept that payment to the BCF will be a more expensive option than securing credits on the market or securing an offset directly. While it is expected that there will be an additional cost, this should be comparable to the additional costs incurred by proponents to secure an offset by other means. Accordingly any premium should not be more than the costs of sourcing and setting up an offset.

It should be noted that since the 2010 commencement of the Biobanking Scheme there have only been 218 credits traded. To put this in context, one recently approved mining development is required to retire a total of 57,786 credits. Since the commencement of Biobanking, only 13 species credits have been traded. The same recently approved mining development requires the retirement of 18,929 species credits for the Regent Honeyeater alone. Accordingly the market for credits remains very small, and completely inadequate to meet the needs of the mining industry.

The supply side of the market is unlikely to grow without a significant effort by government to broker agreements and provide support to landholders. NSWMC has made representations about this issue consistently since the commencement of the Biobanking. The BCF would have the capacity to undertake actions in order to improve the supply side of the market. Without a viable BCF the market is unlikely to be able to supply the number and type of credits required by the mining industry, which will mean that mine owned offsets become the only reliable option to secure the credits required to fulfill an offset obligation.

The BCF and related products should be developed to be sustainable. Sustainability of the BCF should include:

- Ensuring that the Biodiversity Conservation Trust (BCT) is able to meet its responsibilities
- Ensuring that payment to the BCF is commercially viable, including testing the competiveness of any premium that applies to payment to the BCF.

The key to success of the BCF will be whether it provides a commercially viable alternative to the developer to sourcing, securing and managing offsets, or purchasing credits from a third party. At this time NSWMC is unable to properly assess the BCF as the details of the offsets pricing model and offsets payment calculator are not available. The Submission Guide provides some basic information about the offsets pricing model. OEH is undertaking separate consultation on the offsets calculator.

The comments below are based on the very limited information available from the Submission Guide.

Offset pricing model

Below are comments that are made on the limited information available to NSWMC at the time of making this submission. NSWMC reserves the right to comment further (or amend these comments) on the appropriateness of the model proposed to price species credits when more information becomes available:

- General comments on the formulas - The Government proposes different models to arrive at prices for ecosystem credits and species credits. Both models rely on formulas that have not been provided. The Submission Guide provides only a high level description of each model. While the release of the calculator is expected to add some clarity to the mechanics of the calculations, the underlying logic will need better definition in order for industry to assess the viability of payment into the BCF as an option to meet its offset obligations.

- Levels at which prices are to be set - The fundamental premise that pricing can be assigned to hundreds of species or ecosystem types is unsustainable and needs to be reconsidered. We are unaware of a precedent for this level of specificity in credit pricing. Precedents set for BioBanking in other countries use a higher taxonomic level of flora or fauna to assign credits and credit pricing.

Market certainty is achieved with critical mass and repeated transactions, and the distinction between hundreds of individual species or ecosystem types to assign prices is fraught with complication. In addition the approach proposed by OEH will be resource intensive. NSWMC has concerns that the Government will not provide sufficient resources to maintain the system effectively.

The approach that OEH has adopted in other settings of having one price for species and one price for ecosystems is far more desirable. Given this is on the other end of the spectrum from the current position, a variation of this approach might be to have one species price that is adjusted for the three levels of scarcity, and likewise one ecosystem price that is adjusted.

- Detailed comments on the model for pricing for ecosystem credits:
    - *Individual trades model formula* – The individual trade model generates a price from actual trade history. It does not appear from the language that the price will simply be an average of past trades, but derived from an analysis of both the sale prices for ecosystem credits and the number of credits sold. An explanation of the statistical

analysis used, how the coefficients were derived, and whether they will evolve over time, will be important to understanding the justification for this approach and whether it is likely to provide a sustainable pricing model.

- *Threshold for individual trades model* – the individual trades model only includes ecosystem credits once there have been five trades. Viewing the trade register, individual prices can vary greatly across five trades, often for the same type of credit in the same area.

- *Group trades model formula* – the Submission Guide states that the model uses a statistical model to calculate the price of each ecosystem credit type that considered past sale prices, the number of trades and information on each PCT. The model and coefficients (and their derivations, where applicable) should be released.

- *Assumption of the increase of prices over time (combined model)* – the Submission Guide states that *"Price increases as the number of credits traded grows"*, and then asks whether this assumption is correct. We need to understand how this assumption is built into the combined model. We do not think that it should be deliberately designed to effect this assumption. We note that at this time there is a very small supply of credits. For the BCF to be successful its creation must drive the creation of a larger supply of credits, and that at least for some credits there will be a drop in price in the short to medium term as credits come on to the market and there is some price competition.

- *Costs model (land management costs and land costs)* – In this model experts looked at 50 existing Biobank Agreements and estimated the price of land management actions and opportunity cost to the landholder. The Submission Guide does not provide the criteria on which the costs were estimated, averages were not used and discretion of the experts has been used and is not documented.

  The submissions guide asks whether there is "…any additional data that could be used by the Trust to predict the return that landholders will be seeking on the sale of their biodiversity credits". The Government has data on the purchase costs of properties that have been used for offsets (but are not Biobank sites). This should be used (subject to the caveat above about opportunity costs). In addition the bulk of offsets that have been provided under development consents in NSW are not Biobank sites. The Government should use management costs data (where available) from these sites. Use of this non-Biobank site data will provide the Government with data on considerably more individual ecosystems than is available through the Biobanking Scheme.

- *Opportunity costs (costs model)* - A return to landholder is estimated for each region, based on an expert opinion of land value per hectare. Rather than basing land value judgments on opinion, actual sales data should be used. Land transactions that have closed and funded are the only reliable measure of land value. This data should be readily available to the Government.

- *Multiplier (costs model)* – the costs uses the data from 50 Biobank sites to provide a base costs for credits. A multiplier is then applied to the base cost where the ecosystem is an EEC or CEEC. No information is provided as to the multipliers, and there is insufficient information provided to identify what the overall impact will be on the cost of an individual ecosystem credit.

- *Weighting (combined model)* - A weighting between the individual and group trades models and cost model is applied to arrive at the price of each ecosystem credit. The weighting will depend on how many trades there have been for that ecosystem credit.

The submissions guide asks “What weightings should be applied across the individual trades model, group trades model and costs model in the absence of any past trade and as trades occur?” It is very difficult to provide an answer to this question without a much greater level of detail on the inputs to each of the models that contribute to the combined model.

Similarly the Submission Guide asks *“How many trades are needed before the trades model could be weighted at 100%”.* Again, much greater detail of how the model has been developed is required in order to comment.

- Detailed comments on the model for the Pricing of species credits

    - *Individual trades model formula* – The Submission Guide states that the model uses sales data only as there is very limited data (only three credits trades). We assume that the model will continue to be used and updated. In that case what happens when there are more trades? There are only 205 ecosystem trades, but a more complex model using sales price and number of trades has been used. If the BCF is successful there should be a substantial increase in the number of trades. It is not clear if the individual model for species credits is a simple average of the sales data to date, and for the future.

    - *Costs model* – The costs model for species credits is based solely on the categorisation of flora and fauna credits by experts, using criteria that relates density and occupancy to determine scarcity, which in turn sets the price. There is no relationship between the price of a credit under this model and the actual cost of a credit (unlike for ecosystem credits where the costs model considers actual management costs and land costs for credits that have not been traded). The Submission Guide states that “ecological experts estimated a purchase cost of credits in each category”, with no explanation of the information the cost has been based on. It is then stated that the price increases by threat status. The Submission Guide asks whether is reasonable to increase the price of species where it is endangered or critically endangered. While in theory this may appear appropriate, the lack of any understanding of the base cost or the multiplier that will apply makes it difficult to understand whether prices for individual species will be appropriate.

      More information with regard to the process that the experts have followed, particularly how they get from the level scarcity to an actual dollar value.

    - *Weighting in the combined model* – The Submission Guide states that the weighting will depend on how many trades there have been for the particular species, but does not indicate what the relationship between number of trades and weight will be.

- Risk loading - The Submission Guide indicates that variations to the risk loading can be made to the offsets calculator depending on the confidence in the pricing model and the appetite for risk. . It will be difficult to establish a consistent pricing prediction, which can be incorporated into a business model with this level of uncertainty.

  The Submission Guide asks, “Should the Trust be able to set up all aspects of the calculator? Are there components that should be set and updated by the Minister or another party?”. The risk loading should be reviewed and set, not be the Trust, but by a independent panel which has financial experience.

- Updating the calculator – The calculator should be updated annually. All changes should be made in the one update and these should be publicly notified. NSWMC is supportive of the publication of an updates schedule. In addition the calculator should be subject to a public review, in the first instance after one year of operation and thereafter every five years. Inevitably there will be unforeseen consequences of any calculator. The short period of the initial review will allow these issues to be raised and resolved at an early date.

Given the lack of information available about the offset pricing model and calculator at this point, NSWMC reserves the right to make further submissions to Government in this issue. We suggest that the Government consult separately on the development of the BCT and its products and provide a detailed report identifying how the offset pricing model has been developed.

Timing of payments to the BCT

The timing of payments to the BCT is a fundamental consideration that has not been considered by the Government. Mining is undertaken progressively, with clearing being staged. Post-development approval the mine provides a Mining Operations Plan (MOP), to the Department of Industry, Division of Resources and Energy (DRE), which sets out the sequence of mining, clearing and rehabilitation for a period of up to seven years.

It is the mining industry's position that payment into the BCT should coincide with each period of clearing. At the commencement of each MOP, the credits that relate to the clearing proposed in the MOP term should be paid to the BCT and the BCT would then be required to find and secure those credits. This approach does not disadvantage the BCT; it ensures that the clearing, which will be undertaken during the MOP term, is offset. Payments should not be made up front for later stages of clearing, which due to unforeseen circumstances may vary, or in some cases may not occur.

Provision for multiple offset types

Clause 6.3 refers to the ability to pay money into the BCT as an alternative to the retirement of credits. There may be circumstances where a proponent wishes to partially comply with their offset obligation through payment to the BCT and partially through retirement of credits. For example in circumstances where the proponent already owns land that can meet part but not the entire credit requirement.

Recommendations:

- The BCF needs to be sustainable. In developing a sustainable BCF the Government should
  - Ensuring that the BCT is able to meet its responsibilities
  - Ensuring that payment to the BCF is commercially viable, including testing the competiveness of any premium that applies to payment to the BCF.
- Using the experience of other jurisdictions, the Government should set the level at which prices are set at a higher level and reduce the number of individual prices.
- Given the paucity of information with regard to the calculator, the Government must publish a report which provides additional information about the assumptions and formulas underlying the calculator, including:
  - The analysis that is applied to the price of past sales and the number of sales in the individual cost model for ecosystem credits
  - The formula that is used to arrive at the group trades model price for ecosystem credits
  - The criteria used by the experts to estimate the costs of land management and opportunity costs in the costs model for ecosystem credits.
  - The multipliers to be applied to the base cost from EEC and CEECs for the costs model, and the justification for their settings
  - Indicate the relationship between the number of trades and the weight given to the individual trades model and the costs model in the combined species credit model.
- The Government should use non-Biobank offset data on land management costs and land costs in the ecosystems costs model analysis.
- The Government should use real land price data as a proxy for the opportunity cost that is used in the costs model for ecosystem credits, not expert advice.
- The risk loading component of the calculator should be set by an independent panel with financial experience.
- The calculator should be updated annually.
- The calculator should be subject to public review:
  - 12 months from the commencement of the calculator
  - Thereafter every five years.
- The Government should provide that payments into the BCT may be staged to match clearing. Stages of clearing should reflect the MOP), which mines are required to update at least every seven years.
- The legislation should provide that payments to the BCT may be made in partial discharge of the offset obligation.

5. Mine owned offsets

5.1 Background

The form of security proposed in the BC Bill does not take into account the unique circumstances of the mining industry. Currently the NSW mining industry offsets the impacts of projects almost exclusively by directly securing and managing land based offsets. Throughout this submission these offsets are referred to, as ‘mine owned offsets’. Currently the most commonly used method of securing these offsets is by entering into a Voluntary Conservation Agreement (VCA). Prior to the introduction of the MPOP there was no clear policy position with regard to the form legal mechanism for securing an offset in NSW.

Mining companies purchase and manage their own offsets because:

- This practice evolved over a number of years prior to the development of Biobanking.
- There is no market in NSW for the types or scale of credits required by mining projects (the Biobanking credit market is very small).

- Biobanking Agreements were designed for a situation where the developer and the offset owner are at arms length. The agreements do not take into account a situation where the developer and offset site owner are the same entity. It requires the payment of all of the management costs in perpetuity to be paid upfront to the Biobanking Trust Fund (BTF), with annual management costs to be paid to the site owner. This process moves all the costs of managing the offset from ongoing operational costs paid annually, to upfront, capital costs, referred to as the Total Fund Deposit (TFD). While the payment is discounted, the discount rate is very low.

It is likely that mining companies will continue to own and manage offsets for the following reasons:

- Many mines already own land that has been earmarked for offsetting.
- The market for biodiversity credits is small and not expected to change rapidly.
- In the event that the BCF does not provide an option for offsetting that is competitive with securing a direct offset.

Given the nature of the mining industry as both the developer and the owner of the offset and the fact that the development consent for mining is an ongoing concern, there is no need for the additional costs of an arms length offsets arrangement to be imposed on the mining industry.

In addition, requiring a mining proponent to pay the future costs of the management of the land upfront, in fact increases the risk to the proponent. NSWMC reviewed a report by Taylor Fry, prepared for OEH in 2012, which reviewed the discount rate of the Biobanking Scheme. In that report Taylor Fry noted that there were circumstances in which the BTF may not reach a required investment threshold and may declare a "payment holiday" and not pay the Biobank site operator for the management of the site in that year (Taylor Fry, 2012 p.10). In those circumstances the mining company would be out of pocket for the costs of management in that period as it would still need to manage the offset or be in breach of the development consent.

The industry seeks to address the costs of bringing forward the payment of the all of the future cash flows for the management of the site during the life of the mine, which is unnecessary and inappropriate for the situation where the mine owner is also the manager of the offset site.

In addition, we question whether the current method for calculating the in perpetuity payment provides an appropriate return to offset site operators after the 20th year of the operation of the site (see section 5.3 below).

5.2 Alternatives for securing mine owned offsets

As the Biodiversity Stewardship scheme is not yet finalised our analysis is based on the Biobanking Scheme. It is understood that the operation of BSAs will be very similar to Biobanking Agreements. We have proposed solutions that work within the Government's framework for securing offsets, that is the use of a BSA, although some small changes to the legislation will be required.

NSWMC has undertaken an analysis of the use of a Biobanking Agreement to secure an offset site to consider the implications of bringing forward all of the future management cost cash flows relevant to the site, and h how part of the TFD could be deferred.

A base case was considered. This was using a business as usual BioBanking Agreement process to secure the offset. That is the strict application of Biobanking, with the TFD payable at the time of the retirement of the credits. The mine owner of the Biobank site is the Biobank operator. Alternatives were then considered were required to meet the following criteria:

- Reduce the risk that the BTF would not be able to meet the ongoing land management costs to that of the base case.
- Ensure that the BFT is not 'out of pocket' with regard to administration costs during the deferred period.

- Reduce the costs of mine offsets secured by a Biobanking Agreement to a cost comparable to that of an offset, which is not secured by a Biobanking Agreement.
- Reduce the compliance risks to the BTF to that of the base case.

The following scenario would have better outcomes for the mining industry and has been proposed to OEH in other consultations:

- Defer the payment of the TFD for the first 20 years of the mine. 20 years has been chosen as it reflects the end of the life of mine based on a typical 21 year project approval. The alternative approach outlined below also addresses the circumstances where a mine may have a shorter life.
- During the first 20 years, the Biobank operator (the mine) will manage the site in accordance with the agreement (the BSA, although modeled here on the Biobanking Agreement), and be required to comply with the agreement, including the funding of management actions in accordance with the agreement.
- At year 20 (the nominal end of life of mine), the mine would be required to pay the remaining amount of the TFD into the BFT (the post year 20 in perpetuity payment – discussed below).

Reduce the Financial Risk to the BTF

It is important at the outset to note a number of basic assumptions that underlie calculation of the TFD, which are:

1. The discount rate which is applied, 3.5% is a risk free rate.
2. The TFD is calculated in two parts:

    a. First 20 years payment - The site management costs of the Biobank operator including land management costa and other recurring costs (such as insurance costs, monitoring, costs of administering the site) for the first 20 years. This cost is discounted back to a net present value at the start of the operation of the site.
    b. In perpetuity, post year 20 payment - The site management costs of the Biobank operator including land management costs and other recurring costs (such as insurance costs, monitoring, costs of administering the site). It is calculated separately to the first 20 years payment. It is also discounted by 3.5 % and expressed in NPV terms.

These two parts are added together to make the TDF. Importantly the calculation of the post 20 year in perpetuity payment is undertaken separately. That payment is not dependent on the higher early cash flows that are part of the first 20 years payment to generate the income that is required to fund the management of the Biobank site in perpetuity. Accordingly there is no risk to the BFT that it will not be able to meet the post 20 year payments, provided that the in perpetuity is paid either in year one, discounted by 3.5% or if it is paid in year 21 in real dollars at that date.

Ensure that the BTF is not 'out of pocket' with regard to administration costs during the deferred period

Accordingly the only additional financial risk involved is that the BTF may be out of pocket for its administration costs for the first 20 years. This is easily remedied without paying the full TFD in year one (see alternative below).

If payment of the TFD is deferred until year 21, the BTF may have a deficit in terms of its own running and administrative costs. In the case where the TFD is deferred for the first twenty years of the life of the offset, and there is no responsibility for the BTF to make annual payments or invest the funds, the costs of the BTF would be reduced, to almost nil.

The Biobanking Scheme provides for the payment of an annual fee for administration and management. A similar fee is provided for in the BC Bill for BSAs. The BC Bill provides for the Government to recover the costs of the administration in Division 8, cl.6.68(2).

The amount to be paid will be prescribed by the regulations. The BC Bill provides in cl.6.39, for the setting up of Biodiversity Stewardship Operations Account. Contributions under cl.6.38 are to be paid into this account, which is controlled by the Minister for the Environment. Payments that can be made from the account include the remuneration of the fund manager of the Biodiversity Stewardship Payments Fund (BSPF).

Cl. 6.38 and cl.6.39 closely reflect s.127ZZ (Cost recovery) and s.127ZZA (Biodiversity Banking Account) of the *Threatened Species Conservation Act (1995)(*TSC Act). The *Threatened Species Conservation (Biodiversity Banking) Regulation (2008)(*TSC Regulation), prescribes the following fees:

- An annual contribution of 11 fee units ($100), which is adjusted for CPI annually and is currently a fee of $1,299.
- A one off fee on retirement of credits of 100 fee units, a total of $10,000 (regardless of the number of credits retired).

It appears however that OEH does not pay any remuneration to the Environmental Trust for management of the BTF.

NSWMC's is advised by OEH that the fund manager of the BTF is entitled to a fee of 0.5% of assets. OEH advise that the Fund manager remunerates T-Corp from this fee. This payment has no relation to the actual costs that the Fund manager may incur. In the event that a similar arrangement is made for the remuneration of the fund manager of the Biodiversity Stewardship Payments Fund (BSPF), the fund manager could make a profit on management of the BSPF if mines that own offsets are required to pay the full TFD upon retirement of credits. This is because mine offsets are much larger than the offsets that have traditionally been Biobanked, but the administration costs of the fund manager would not increase proportionally with the size of the TFD.

It is not appropriate for the fund manager to make a profit from the fund management at the expense of the mines being required to pay more for offsetting by advancing the costs of management of the offset in perpetuity to the establishment of the site.

Reduce the compliance risks to the BTF to that of the base case.

The main compliance risks are:

- That the mine won't meet its annual land management actions required under the agreement.
- That the mine may become insolvent leaving the BTF without funds to manage the Biobank site.

These are risks that have been successfully dealt with, without entering into Biobanking Agreements. Companies will be required to undertake the management actions in the same way that any other site operator is required. In addition the planning consent provides an additional means of ensuring compliance. Companies that do not comply will face sanctions and in the event that compliance is not forthcoming, there will be a bond.

Mining projects that include an offset are currently required under the planning consent to have an Conservation Bond. This bond would need to protect the Government/Fund in the event that the company became insolvent before the deferred TFD was paid, or failed to undertake the required management actions during the life of the mine.

Alternative approach

An alternative approach to secure mine owned offsets is set out below. This approach meets all of the criteria listed above, with the exception that it will increase the costs of the mining company, albeit by a less than a strict application of Biobanking/using a BSA.

Alternative approach – Total Find Deposit Deferral – Payment of prescribed annual fee only

This approach is the NSW minerals industry's preferred approach to payment of the costs of management actions required under a BSA.

Under this approach:

1. Payment of the TFD would be deferred for a period of 20 years.
2. In year 21 the in perpetuity portion of the TFD would be paid to the Fund.
3. The mine would pay the prescribed fee for retirement of the credits and annual fees to OEH. OEH would remunerate the Fund manager for the costs of administration from Biodiversity Stewardship Operations Account as provided for in the BC Bill.
4. The mine would provide a conservation bond as part of the development consent that would cover the Government/Fund for the costs of undertaking outstanding management of the site in event of insolvency.

Where the life of mine is less than 20 years, at the end of the life of the mine, the mine owner would need to capitalise any of the remaining years of management costs up to year 20 at the relevant discount rate and pay this to the Fund in addition to the in perpetuity portion of the TFD.

Reduce the costs of mine offsets secured by a BioBanking agreement/BSA to a cost comparable to that of an offset, which is not secured, by a BioBanking Agreement/BSA

Of all the criteria that NSWMC established to identify an appropriate alternative to the strict application of Biobanking, this is the only one that has not been met. The alternative approach described above still imposes additional costs on the mine. Those costs are the fund administration costs, and the in perpetuity payments.

Historically mining projects have used VCAs to secure offsets. No new offsets have been secured since the MPOP mandated the use of Biobanking Agreements. While it is anticipated that there will be a cost of transferring that land and the commitments of the VCA at the end of the life of the mine, it is not capitalised at the date of the commencement of the offset site and it is unlikely that it would be in the order of what is required by the Biobanking Agreement and is anticipated to be required by a BSA.

5.3 Elements of the TFD calculation that are questioned by NSWMC

In perpetuity payment

As noted above the TFD is made up on two parts, the net present value of the first 20 years of management costs and an in perpetuity payment from year 21. The first 20 years of payments are calculated from the site owner's estimation of management costs for each year. The in perpetuity costs are not clear, as they are calculated by a complex formula which is embedded in the Biobanking credit pricing spreadsheet and is not discussed in the public documents with regard to Biobanking (that can be identified by NSWMC). We assume that BSAs will be calculated using the same, or a very similar spreadsheet.

NSWMC's members need to be able to assess the in perpetuity payment, and to understand what actual payments would be made to site owners post year 20, in order to assess whether this is appropriate given that the majority of the active management actions will have been undertaken in the first 20 years and that management post year 20 will be largely passive. Given this information NSWMC will model the impact with regard to actual mining offsets to understand whether the payment (and calculation) is appropriate.

5.4 Legislative amendments to allow for the deferred TFD approach

The BC Bill needs to be amended to allow for the deferred payment arrangements for mine owned offsets. During the consultation period OEH have indicated that the Government is open to considering a different approach, however we do not believe that any detailed consideration of alternatives has been commenced. We propose that the Government should amend the BC Bill so

that the provisions that would be required to give effect to an alternative approach are available in the BC Act.

The BC Bill and Regulations should provide that credits may be retired following creation in accordance with the BSA and the conditions of the relevant planning approval, but the requirement to pay the TFD (that usually falls upon the date of retirement of the credits) is deferred for the life of the mine, that is:

- For a mine that has a 21 year consent, for 20 years with the "in perpetuity payment" (which would need to be defined in the BC Regulation) being deferred and paid in year 21.
- For a mine that has a shorter life, to the end of the life of the mine, with payment at that time of:
    - The capitalised management costs from the end of the life to the 20th year of the management of the offset site (discounted at the relevant rate) and
    - The in perpetuity payment.

Recommendations:

- OEH should provide NSWMC with information regarding the calculation of the in perpetuity portion (post year 20 management costs) of the total fund deposit and an assessment should be made with regard to whether this is appropriate having regard to actual offset site case studies.
- The Regulation power in clause 6.21 of the BC Bill needs to be extended to allow broadly for the Regulations to provide for the deferral of the payment of the TFD (and the Regulations should then provide the detail in relation to the definition of the 'in perpetuity payment' and the deferred payment mechanism).

6. Additional burden and cost on industry

Given that all of the reform package products are not currently available/complete, it is difficult to properly assess the additional burden and cost to industry that will be imposed by the new offsets scheme. It is estimated that a further 10 – 25% of effort will be required to prepare a BDAR under the BAM than to prepare and assessment report using the FBA. This is in addition to an increased level of effort that is already required under the FBA.

Areas of the BAM that are identified to require additional effort are:

- Field survey effort. Overall, it is likely that the field survey effort will be greater than that required under FBA and BBAM 2014. BBAM 2014 itself increased the typical survey effort of the previous BBAM by an esitmated 25-50%. For the plot/transect vegetation integrity data, it is likely that where reasonable floristic survey effort is required the overall field effort will be another 10-20% greater. However, it is likely that in many cases, and over time most cases, the floristic survey effort will be reduced and will diminish over time. Therefore, the final survey effort required for the draft BAM is considered likely to be similar to FBA and BBAM 2014.
- Rehabilitation completion/relinquishment criteria – The requirements in section 12.14 of the BAM for the proponent to provide in the BDAR on the completion/relinquishment criteria with regard to rehabilitation which is used to generate credits, is more onerous than previously. The additional effort that will be required is unclear and will largely depend on the demands of individual OEH officers.
- Assessment and mitigation of indirect impacts – While the offset scheme does not apply to indirect impacts these are required to be assessed and mitigated by the BAM. The documentation required to undertake this part of the BDAR is significant and is not required under the FBA.
- Reporting - Although the requirements specified in Appendix 10 of the draft BAM are similar to those in the FBA methodology, there are numerous components of the draft BAM that require significant work to address them. It is estimated that the additional reporting requirements will constitute around another 30% of time and effort.

The mining industry has long been a supporter of quantitative tools for the assessment of biodiversity in development on the basis that this should bring greater consistency and a reduced the cost and time burden of undertaking assessments and negotiating offsets. These outcomes are yet to be achieved.

7. Transitional arrangements

The transitional arrangements are not set out in the BC Bill. Consultation on the proposed arrangements needs to be undertaken before the BC Bill is introduced into the Parliament.

7.1 Modifications of approvals

The BC Bill does not appear to apply to modifications of approvals granted under the now repealed Part 3A of the *Environmental Planning and Assessment Act (1979)* (EP&A Act). In addition clause 7.18 which deals with modifications states that the section applies only to modifications of development consent that was granted after the commencement of the Act.

The BC Bill should be amended so that Part 6 (relating to biodiversity assessment and offsetting) applies to all applications for modifications of a planning approval (including modifications of planning approvals granted under Part 3A of the EPA Act) made after the date of commencement of the Act irrespective of whether the original planning approval was granted before or after commencement of the Act. Clause 7.18 needs to be amended to apply to modification applications made after the commencement of the Act, regardless of when the original development consent was granted.

Importantly, the caveats should remain that the Part does not apply if the application for modification does not increase the impact on biodiversity values as compared to the approved development (including any previous approved modifications), and further that any biodiversity development assessment report need relate only to the development the subject of the modification application (and not the approved development).

7.2 Application of the Act

The BC Bill should contain transitional provisions that provide that the new Act does not apply to an application for a planning approval or modification of a planning approval that has been lodged but not yet determined as at the date of commencement of the new Act. The Act should only apply to applications for development consent or modifications that are lodged after the commencement of the Act and Regulations. Without such clarity in the Act it is likely to lead to confusion for proponents and consent authorities.

It should be clarified in the BC Bill and the BAM that the Biodiversity offsets scheme does not apply to the conditions of any planning approvals that were either applied for but not yet granted at the date of the commencement of the Act, or granted prior to the commencement of the new Act.

There should be clear savings provisions that ‘save’ any existing planning approvals or approvals under the current biodiversity legislation, so there is no risk of any existing approvals being lost or opened up for re-assessment under the new Act, including during the assessment of any future modification applications.

7.3 Upper Hunter Strategic Assessment

The BC Bill provides for the Upper Hunter Strategic Assessment (UHSA). This provision assumes that the assessment is finalised. There are a number of risks to the finalisation of the UHSA that are outside the control of the NSW Government, including that the Federal Minister for the Environment may not approve the assessment.

The NSW Government and industry participants in the UHSA have invested significant funds and effort in the UHSA. Irrespective of whether the assessment is finalised, the Government needs to provide a mechanism under the savings and transitional provisions by which the main products of the UHSA, including the biodiversity assessment carried out by each of the industry participants can be used in future BDARs and relied upon in future development applications (as opposed to requiring the BAM to be applied to those developments).

Recommendations:

- As the transitional provisions are not available in the BC Bill, the Government needs to commit to provide these provisions for consultation prior to the final BC Bill being introduced to Parliament.
- Apply Part 6 of the BC Bill to modifications of approvals made under Part 3A of the EP&A Act**,** including the exception that an assessment is not necessary if the modification does not increase the impact on biodiversity values as compared with the approved development (including any previous modifications)
- Include transitional provisions that ensure that the new scheme applies only to development applications and applications or modification lodged after the commencement of the new BC Act and Regulations, and the commencement of the BAM.
- The Government should make provision to:
    - Allow for the use of assessment undertaken under the Upper Hunter Strategic Assessment, in any relevant development application, irrespective of whether the UHSA is able to be finalised.
    - Save other relevant products of the UHSA.

8. Listing of species and communities

8.1 Areas of outstanding biodiversity value

The BC Bill requires notification to be given to landholders of the potential listing of an area of outstanding biodiversity. Holders of mining authorities also have a title that will be impacted by a listing of the land as an AOBV and should be given notice of proposed listings.

The BC Bill provides that the period of notice is only 4 weeks. Given the importance of the listing a notice period of at least six weeks should be provided.

8.2 Conservation agreements

Prior to a Biodiversity Stewardship agreement being made, consent must be obtained of the holder of any mining authority over the land to which the agreement relates. Conservation Agreements do not have a similar consent requirement. The provisions relating to conservation agreements (namely clause 5.21) should be updated to be consistent with the provisions relating to biodiversity stewardship agreements.

8.3 Listing process

New listings or changes to the listings can occur at any time. The legislation does not provide any explicit guidance about when listings apply to development applications. The listings that exist at the time of the lodgment of the development application should be the listings against which the project is assessed. Changes to listings after the development application are lodged with the relevant consent authority should not impact the assessment of a proposed development.

Recommendations:

- Holders of mining authorities should be provided with notice of any proposed declaration of an Area of Outstanding Biodiversity Value over an area of land to which the mining authority relates.
- A period of six weeks notice should be given of any proposal to declare an Area of Outstanding Biodiversity Value.
- Prior to the making of a Conservation Agreement consent should be obtained from the holder of any mining authority over the land to which the Agreement relates.
- Changes to threatened species and communities that occur after the lodging of the development application do not apply to the development assessment.

9. References

Taylor Fry, 2012, BioBanking Scheme: Review of discount rate 21 March 2012

10. Appendix A – Technical comments and recommendations on the BAM and BAM demonstration tool

10.1 Condition threshold for assessing impacts on biodiversity

Section 3.6 includes a consultation note that states:

- It is intended that impacts on native vegetation that is in highly degraded condition are not be required to be offset. The BAM proposes that a threshold for highly degraded vegetation is defined by the vegetation integrity score that is determined in Subsection 5.5.5.
- Consistent with the Framework for Biodiversity Assessment, the condition threshold is proposed as a vegetation integrity score of less than 17. The final threshold will be defined in the final BAM following further field trials of the BAM and feedback from the community. This may require setting a different condition threshold for non-woody vegetation such as grasslands and freshwater wetlands.
- The continuation of the FBA condition threshold of 17 is supported in principle. Further information will be required to determine if the possibility of developing a different condition threshold for non-woody vegetation is supported.

NSWMC support the continuation of the condition threshold of, however further information will be necessary to test this approach more rigorously, in particular the setting of different thresholds for non-woody vegetation.

Recommendations:

- Further information will be required to determine whether the possibility of developing a different condition threshold for non-woody vegetation is supported.
- OEH should specify how this condition threshold relates to the paddock tree and small area development modules.

10.2 Vegetation Integrity Assessment

Benchmark data

The new vegetation integrity assessment requires new benchmark data to be established. At this stage, the benchmark data are proposed to be set at vegetation class level, specific for each IBRA region. It is understood, however, that over time the intention is to establish benchmarks for each PCT, regardless of location.

Class level benchmarks are not appropriate and OEH should commit to developing data specific to each PCT. The process for reviewing updating and notifying stakeholders in relation to changes to the benchmarks database should be included as part of the BAM.

Assessing Habitat Suitability for Threatened Species

Ecosystem Credit Species

Sensitivity classes are used to identify the biodiversity concern for the species habitat. In principle, this process appears to be robust and looks to be an appropriate representation of the degree of sensitivity of threatened species to the loss of their habitat. However, the allocation of each species to a sensitivity class has been or will be undertaken by OEH. This should be undertaken through a transparent process.

Species Credit Species

The process for identifying species credit species is similar to FBA. Additional steps/requirements have been introduced in Step 1. However, in Step 2, where candidate species are assessed as to their presence, the requirement under the FBA that if the only records of the species are 20 years old, or older, or if the only records have doubtful authenticity, then those species can be disregarded, is not included in the BAM. This was an appropriate requirement and should be included in the BAM

In accordance with the *NSW Guide to Surveying Threatened Plants*, certain flora species credit species can be identified and assessed according to their area of habitat, rather than through a count of the number of individuals. It is understood that this approach will be available mostly for 'ephemeral' species, which include species that are seasonally abundant, short-lived and/or exhibit an order of magnitude change in abundance in response to a periodic disturbance even such as fire, flood or rainfall. The draft BAM also states elsewhere that this could include 'clonal' species (this would include, for example, weeping myall *Acacia pendula*). At this stage, the process for allocating individual flora species to 'individual count' or 'area of habitat' categories is not specified, only that the TSPD will indicate the allocations. This process should be transparent, with reasons provided for the allocation of species and provided stakeholders, including NSWMC prior to adoption by OEH.

A new step (compared with the FBA methodology) is to determine the *level of biodiversity concern*, which is obtained from the TSPD. The Government must ensure that the TSPD is up to date and that changes to the TSPD are notified to accredited assessors.

Undertaking Species Credit Species Surveys

Similar to the FBA, the draft BAM specifies that 'an assessor must only undertake a threatened species survey during the period of time specified in the TSPD'. It is not infrequent that the TSPD specifies survey months that are incorrect or, more often, does not specify months during which a threatened species can be surveyed. In some cases no months of the year are specified. OEH will need to ensure appropriate attention to the TSPD to appropriately reflect survey timing, which can differ for some species in different parts of the state.

Expert Reports

The draft BAM does not specify what an *expert* is, except to say that it must only be prepared by a person who, in the opinion of the Environment Agency Head, possesses specialised knowledge based on training, study or experience to provide an expert opinion in relation to the biodiversity values to which an expert report relates.

This definition is preferable to the definition that is provided in the Definitions of the draft BAM, in that it includes 'training' as a key component. It also replicates key wording relating to an expert from the NSW *Evidence Act 1995*, which permits opinion evidence only as it related to expert witnesses.

While the consultation note under section 6.8.2 states that 'the Environment Agency Head will have the power under the BC Act to approve an expert report' and that 'requirements for this decision will be set out in the regulation' there is no certainty that there will be a system for approving experts. Rather, it is likely that expert reports, but not experts, will be assessed and considered for approval. While this provides less certainty for potential experts working for industry on project assessments, it also enables a greater degree of opportunity in relation to how an ecological consultant might be presented in an expert report. The benefits, or otherwise, of this should be considered.

Recommendations:

- OEH publicise and commit to a transparent program for reviewing, updating, maintaining and notifying stakeholders in relation to public databases including the VIS Classification Database; the Threatened Species Profiles Database; and the NSW Wildlife Atlas.
- OEH also publicise and commit to a transparent program for reviewing, updating, maintaining and notifying stakeholders in relation to the benchmarks database. Preliminary results should be exhibited and comments sought.
- OEH develop, over time, benchmark data specific to each PCT, as class level benchmarks are obviously not accurate. OEH set an appropriate timeframe to do this, for example 2 years.

- OEH must provide a transparent process through which threatened species are assigned to sensitivity classes in accordance with Table 10 in the draft BAM including releasing the criteria around the classifications.
- In relation to determining candidate threatened species for survey, OEH should reinstate the ability for an Assessor to disregard species whose presence is based on 20 year old, or older, records, or which have doubtful authenticity.
- OEH must provide a transparent process through which flora species are allocated to *individual count* or *area of habitat* categories.
- OEH must ensure that that the TSPD is accurate in relation to appropriate survey timing, especially where it is inaccurately limiting, and develop and implement a transparent process of notifying Assessors when changes are made, preferably with advance notice or grandfathering clauses.
- OEH needs to include further guidance on the basic criteria that must be met to qualify as an expert.

10.3 Impact Assessment

Avoiding and minimising impacts on "other" biodiversity values

The draft BAM contains a substantial section (section 8.1) on avoiding and minimising impacts on biodiversity. 8.1.3 provides 'guidelines for avoiding and minimising impacts on other biodiversity values during project planning'. A consultation note at the start of this section (section 8.1.3) states that 'it is the intention to prescribe these impacts in the BC Act'. However, the draft Bill does not provide any guidance on these matters. The relevant part of the draft BC Bill appears to be Section 6.3, which states that

The biodiversity impacts that are to be assessed under the biodiversity offsets scheme are the following impacts on biodiversity values:

a) The impacts of the clearing of native vegetation,
b) The impacts of action [sic] that are prescribed by the regulations.

In section 8.2.3 of the draft BAM, the consultation note indicates that these guidelines will be prescribed under the regulations. They include impact information requirements on the following matters in relation to mine subsidence or upsidence:

a) predict the nature, extent and duration of short and long-term impacts on the habitat and life cycle of species using the natural features of the water dependent plant community
b) justify predictions of impact with appropriate modelling and with reference to relevant literature and other published sources of information
c) predict the cumulative impacts of the project together with existing mining operations mining underneath the same water dependent plant communities
d) based on predictions of impacts on water dependant plant communities and the species they support, calculate the maximum predicted offset liability in accordance with the Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species
e) justify any prediction of 'nil' or 'negligible' environmental consequences.

The above requirements are fairly considerable, and should not include subsection d).

Indirect Impacts

Section 6.1 of the draft Bill indicates that the biodiversity offset scheme does not apply to indirect impacts:

> *The impacts of action that may be prescribed by the regulations for assessment under the biodiversity offsets scheme do not include:*
>
> ...

a) indirect impacts, such as impacts on biodiversity values arising from global warming, or...

However the draft BAM methodology requires that the Assessor document extensive notes on the assessing and mitigating of indirect impacts. While all of these approaches and practices are appropriate, the level of documentation that is required in the report is substantial. Of particular note, the draft BAM requires the Assessor to' identify any measures for which there is a risk of failure' and to 'evaluate the risk and consequence of any residual impacts likely to remain after mitigation measures are applied'.

While many of these matters are referred to in the FBA methodology, the level of reporting required under the draft BAM is far more substantial.

Adaptive Management

Adaptive management strategies are required for 'impacts that are infrequent, cumulative or difficult to measure prior to commencement'. The draft BAM also requires an adaptive management plan for impacts related to subsidence and upsidence. These relate to what is required under the *Policy Framework for Biodiversity Offsets for Upland Swamps and Associated Threatened Species*.
The draft BAM does not have any requirement for the preparation of adaptive management plans.

Recommendations:

- Government should provide draft text on the requirements for assessing impacts on prescribed biodiversity values, which is currently absent from section 6.3 of the draft Bill
- Section 8.2.3 (d) should be removed from the BAM.
- OEH should reconsider the documentation of the assessment and mitigation of indirect impacts with a view to reducing the impact on proponents.

10.4 Offset Rules

Improving Biodiversity Values – the Offset Site

Management Actions

Table 16 in the draft BAM states the management actions that are required for improving vegetation integrity and threatened species habitat at a Biodiversity Stewardship Site. Section 12.3.1.3 states that 'all of these management actions must be implemented to achieve the predicted gain in vegetation integrity...'. It is unclear if some actions, such as *controlled burning*, would be relevant at all sites, and also how the proponent would determine its necessity. The draft BAM requires the preparation of a management plan, which must include a description and location of the management actions and management activities'.

Table 17 in the draft BAM states additional management actions that *may* be required. These can further increase the amount of gain for vegetation integrity, but must be approved by the Environment Agency Head.

OEH officers have indicated that the work required to determine the level of gain that might be afforded, and commitments by the proponent regarding scale, type and maintenance of such actions, has yet to be undertaken. OEH also indicated that there is scope to include an 'other' category for management actions that are relevant but not yet foreseeable.

Annual Rate of Decline

The draft BAM builds upon the averted loss approach prescribed in BBAM 2014. In the case of the draft BAM, modifications have been made to reflect the change from biometric to vegetation integrity data.

The consultation note under section 12.6.2 states

> *The BAM estimates the ecological benefit of management actions over a 20-year timeframe. This management timeframe is chosen as it takes into account the period of time over which there is a high level of confidence that the predicted outcome will be achieved. The 20-year timeframe aligns with that used in the EPBC Act Offsets Policy.*

The consultation note seeks feedback on whether 20 years is appropriate. Key wording in the phrase above includes 'high level of confidence that the predicted outcome will be achieved'. The NSW mining industry believes that a longer period that 20 years is appropriate. The 20 year limitation will restrict the credits that can be generated from a site and will drive proponents towards more pristine sites that will provide higher levels of credits more immediately.

Intrinsic Increase

Section 12.6.2 of the draft BAM requires the Assessor to 'use the intrinsic rate of increase of the growth form group for the vegetation formation of the PCT being assessed'. These are set out in Appendix 7. Some of these were drafted for four formations to support the use of the BAM during the public consultation period via the BAM demonstration tool.

OEH states that the 'intrinsic rate of increase for the remaining formations, as well as a review of the rates in Table 24, will be developed through expert elicitation across a range of restoration professionals with knowledge and experience in ecological restoration'. OEH seeks input to this process, and states that it intends to document the process used to establish this data.

Recommendations:

- The BAM should include further details on the gain that can result from management actions.
- OEH should provide appropriate background on the source and validity of the 'estimated annual probability of decline' for each of the vegetation integrity attributes at Stewardship Sites.
- The BAM should estimate the ecological benefits of management actions over a period of longer than 20 years.
- OEH should publish the documentation of decisions on the intrinsic rate of increase.

10.5 BAM Threshold Criteria and Small Area Development

Section 3.1 and Appendix 2 of the draft BAM specify the approach to be taken on relation to:

a) development that requires the clearing of paddock trees not covered by the code of practice according to the requirements specified in Appendix 1

b) small area developments that are not a major project and require development consent according to the requirements specified in Appendix 2.

Section 3.1.1.5 states that 'the streamlined assessment module for small area development cannot be used to assess the biodiversity values for a major project.'

It is unclear whether a modification to a major project, or a minor mining development that is not classified as a major project, would meet the definition of a 'small area development.' It is considered likely that the small area development approach, and associated 'streamlined assessment module' (described in Appendices 1 and 2) would apply to such mining developments.

In principle, both of these modules are beneficial in that they will streamline the assessment.

Recommendations:

- OEH needs to provide more specific guidance on whether small mining-related developments that either comprise formal modifications to a Major Project approval, or fall outside of Major Project approvals, will be subject to the streamlined assessment modules for paddock trees and small area development.
- OEH needs provide an Appendix on the requirements of a BDAR or BCAR for streamlined assessments. Currently section 3.2.1.1 refers to Appendix 8. However Appendix 8 relates to future value of attributes in relation to Biodiversity Stewardship Sites, while Appendix 9 relates to BDAR and BCAR requirements for Major Projects. It is proposed that Appendix 11 contain this detail, however it is not yet available.

10.6 Draft BAM Demonstration Tool

The draft BAM Demonstration Tool (the Tool) was accessed and used on a number of occasions during the preparation of this report. Of particular note was a special run-through of the tool on 24 May 2016, with John Seidel from OEH, who is an expert in the tool and author of the BAM.
The Tool is generally user-friendly and is likely to be an improvement in terms of functionality over the current tools.

It is understood that the demonstration tool was developed in response to a planned accelerated exhibition program, and was ready in late 2015 for intended exhibition around that time. It was only released in May 2016, and unfortunately a number of elements of the Tool were not available for release as they were not further developed during the intervening period.

The Tool is designed to incorporate, in one location, all of the specific approaches to undertaking biodiversity assessments, that is, the 'Development', 'Offset', 'Biocertification' and 'Streamlined – Small Area Development' modules.

Recommendations:

- The Tool should be designed such that both standard and linear assessments can be undertaken in one approach.
- The Tool should be designed such that where the proposal covers more than one Bioregion, or subregion, that assessments can be undertaken in one approach.
- A thorough, working review of the Tool should be undertaken by OEH once a full working version is available. NSWMC would like to work with OEH to undertake this review using a industry data.
- OEH should ensure that those species that have separate ecosystem credit and species credit components (the latter usually relating to breeding habitat, such as cave-breeding bats and hollow-breeding species) have their credit types clearly and consistently demarcated in the Tool.
- OEH should provide clear rules and guidance material around how the area of habitat for relevant species credit flora species should be measured/calculated.
- OEH should provide clear guidance around how breeding habitat for cave-breeding species and hollow-breeding species should be measured/calculated.
- OEH needs to ensure that, when Tool updates are released, there is an efficient process in place for the Assessor to transfer data from the previous Tool version to the new version. On a long-running (2-3 year) project assessments the Tool could potentially be updated several times.

- Ensure that the final Tool is set up in a user-friendly format, where headings on pages remain fixed as the user scrolls down, and slide bars at the bottom and side remain accessible despite scrolling up and down the screen. Simple functionality like this reduces the risk of error and will ensure more efficient, cost-effective assessments.
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11. Appendix B – Detailed comments and recommendations in relation to the BC Bill and proposed regulations

Issue	Comment/Issue	Recommendation
Part 1 – Preliminary		
Definitions (clause 1.6)	• The BC Bill contains offences of 'harming animals', which includes hunting or pursuing animals. Activities undertaken for biodiversity assessment and monitoring, such as trapping, could be considered an offence under the BC Bill/	• The definition of **harm** should exclude activities undertaken for the purposes of conducting biodiversity assessments (e.g. trapping).
Part 2 – Protection of animals and plants		
Harming animals (Division 1)	• It was not previously an offence under the *National Parks and Wildlife Act 1974* to 'attempt to harm an animal'. Under the BC Bill (clause 2.1) this is proposed to be an offence, but "attempt" is not defined.	• The Government should clarify what is meant by 'attempt' to harm.
Defences (Division 2)	• Clause 2.8 sets out the defences to offences under Division 1, but does not provide a defence where the person did not know that the plant or animal was protected. A defence of this nature is provided in clause 9.10(3) in relation to areas of outstanding Biodiversity Value (**AOBV**)	• There should be two tiers of offence: o To have done so unknowingly which would attract a lesser penalty and be subject to additional separate defences (including for example a 'due diligence' defence) o To have done so knowingly, which would attract a harsher penalty This approach would be similar to the approach taken to offences in relation to harming Aboriginal Cultural Heritage (ACH) items.

Issue	Comment/Issue	Recommendation
Part 3 – Areas of outstanding biodiversity value		
Part 4 – Threatened species and threatened ecological communities		
Procedure for listing (other than provisional listing) (Division 3)	• Clause 4.20 allows the Scientific Committee to restrict access to the location of a threatened species or community if it is in the public interest. It is not possible for the public to make a submission with regard to a proposed listing without information about the location of the species or community.	Remove the right to withhold information about the location of a threatened community or species provided by clause 4.20 (1)(a) and (2).
Part 5 – Investment Strategy and private land conservation agreements		
Biodiversity Conservation Investment Strategy (Division 1)	• The Minister is to make and publish a Biodiversity Conservation Investment Strategy (**Strategy**) to guide the NSW Government and Biodiversity Conservation Trust in prioritising investment in biodiversity conservation (clause 5.1). The Strategy is to include mapping of all land in NSW where the biodiversity values are protected (clause 5.2). The Strategy is to identify and map priority investment areas (clause 5.3). Priority investment areas may include core areas of large remnant native vegetation, linear areas that represent State and regional biodiversity corridors and areas containing the least protected ecosystems of public and private land (clause 5.3).	• The Regulations need to provide further information is about: ○ How the mapping for the purposes of the Strategy will be undertaken and how it will ultimately be used by the NSW Government; and ○ The process that will be taken to identify priority investment areas, including consultation with landholders and owners.
Biodiversity stewardship agreements (Division 2)	• Clause 5.7.1 provides that s Stewardship site must be owned by the same person. This is not practical as some mining companies, particularly for historical reasons, may acquire adjoining land in different entities and this land may make up the one Stewardship site. • An application to enter into a Stewardship Agreement can be refused if the applicant is not a fit and proper person or for other reasons which are to be set out the regulations	• The following changes should be made with regard to the BC Act as it applies to Stewardship Agreements: ○ A Stewardship Agreement should not be able to entered into over land that is subject to any mining authorisation (the BC Bill provides this exemption only for land subject to a mining lease) ○ Clause 5.5(2) refers to 'eligible land' which is not defined. This term needs to be defined either through

Issue	Comment/Issue	Recommendation
	(clause 5.8). Fit and proper person is not defined in the BC Bill. • Before entering into or varying a Stewardship Agreement, where applicable, consent is required from any and all of the following - owner, tenant, lessee, mortgagee, chargee and NSW Aboriginal Land Council (clauses 5.9 and 5.11). Consent from the tenant or lessee of land should not be required given the often short duration of such an interest compared to the long-term nature of a Stewardship Agreement and that the obligations under the agreement will fall on the owner and not the tenant or lessee. • In addition, where the land is the subject of a mining lease or mineral claim under the *Mining Act 1992* or a production lease under the *Petroleum (Onshore) Act 1991*, the holder of the lease or claim must provide written consent. This should be extended to other mining authorities to give certainty both for the licence holder and the offset site. • A Stewardship Agreement has effect in perpetuity unless terminated by agreement or by the Minister in accordance with the Act (clause 5.10). A Stewardship Agreement cannot be varied or terminated unless measures are taken by the owner of the Stewardship Site to offset any negative impact of the termination on the biodiversity values, by such means as cancellation or retirement of the biodiversity credits or by entering into a new Stewardship Agreement for a new Stewardship Site (clauses 5.10(3) and (4) and clause 5.11 with respect to variations). • Clauses 5.10(2)(b) and 5.11(1)(b) refer to the termination or variation of a biodiversity stewardship agreement without the consent of the owner. It is important that should an agreement be terminated or varied without the consent of the owner, that the owner is not then required to secure another land-based offset site, nor should they be considered to be in breach of any relevant planning approval conditions.	the Act or the Regulations. Currently the *Threatened Species Conservation (Biodiversity Banking) Regulation 2008* specifies certain land that is not to be designated as a biobank site such as land that is inconsistent with biodiversity conservation or will prevent management actions from being carried out or land that is already the subject of conservation arrangements. It is assumed that the reference to 'eligible land' in clause 5.5(2) will be similar to these existing provisions in the TSC Regulations, however this needs to be clarified; ○ The requirement under clause 5.7(1) for the land forming a Stewardship Site to be owned by the same person should be amended to enable the land to be owned by the same person or a related body corporate ○ The fit and proper person test needs to be defined in the Regulations; ○ Remove the requirement to obtain consent of a tenant or lease where entering into a Stewardship agreement with respect to Clauses 5.9(1)(b) and 5.11(2)(a) ○ Clause 5.9(1)(f) should be deleted and clause 5.9(1)(e) should be expanded to all authorisations under the Mining Act or the Petroleum (Onshore) Act; ○ Clauses 5.9(1)(e) and 5.11(2)(d) should be extended to also cover land where mining purposes are being carried out (as that term is defined in the Mining Act) but a mining lease is not in place; ○ Include a statement to the effect that landholders will not be required to secure another land-based offset site, nor should they be considered to be in breach of any relevant planning approval conditions where a Stewardship agreement is terminated without the consent of the owner under Clauses 5.10 and 5.11 ○ Clause 5.11 relating to variations to Stewardship

Issue	Comment/Issue	Recommendation
	• Management actions (i.e. works on the land) as required in accordance with a Stewardship Agreement are exempt development for the purposes of the EPA Act (clause 5.14). However, Clause 5.14(1) provides that the regulations may exclude management actions from the operation of the sub-section, meaning that some management actions required under a biodiversity stewardship agreement may not be able to carried out as exempt development. • Clause 5.19 states that nothing in this Division prevents the granting of a mining or petroleum authority or the carrying out of mining or petroleum activities on a Stewardship Site. However this should apply to all authorisations under the Mining Act. • The note to clause 5.5 provides that the Minister will delegate the power to enter into Stewardship Agreements but it does not specify who will be delegated this power.	Agreements is not clear as to whether a variation may be made that expands the land the subject of the Agreement, and if so, whether the owners etc. of the 'new' land need to consent to the Agreement. clause 5.11 should be amended to clarify this; ○ All management actions should be able to be carried out as exempt development (to avoid the costs and delays associated with obtaining a development consent) and clause 5.14(1) should be deleted. ○ Clause 5.14(2) is not permitted under the EPA Act. This is because section 76(2) of the EPA Act provides that only an environmental planning instrument can provide that development is exempt development. So that the BCA can provide for exempt development, section 76(2) of the EPA Act needs to be amended; ○ Clause 5.18(1) to be expanded to all authorisations under the Mining Act and refer to the authorisation being granted in respect of all or part of the site; and ○ Clause 5.19 should be extended to all authorisations under the Mining Act, rather than being limited to mining authorities.
Proposals by public authorities affecting biodiversity stewardship sites (clauses 5.16 and 5.18)	• It is currently not clear in the Bill what will occur if a Stewardship Agreement is terminated for a public authority to carry out a development or for another company to be granted a mining lease in circumstances where the Stewardship Site has been established pursuant to a development consent condition.	• An amendment to the BC Bill is required to clarify how Clauses 5.16 and 5.18 will operate in the context of a development consent condition which requires the establishment of the Stewardship Site in perpetuity (see comment above relating to clauses 5.11 and 5.12). The amendment to the BC Bill needs to provide that the retirement of credits by the public authority or holder of the mining authority will discharge the proponent's requirement to maintain the Stewardship Site in perpetuity, and that the proponent will be taken to have satisfied its development consent conditions irrespective of any cancellation or variation of a biodiversity stewardship agreement by the

Issue	Comment/Issue	Recommendation
		Minister under the BC Act.
Conservation Agreements (Division 3)	• Before entering into a Conservation Agreement, where applicable, consent is required from any and all of the following - owner, tenant, lessee, mortgagee, chargee and NSW Aboriginal Land Council (clause 5.21). Similar to clause 5.9 with respect to Stewardship Agreements, the consent of the holder of a mining or petroleum authority should be obtained before a Conservation Agreement is entered into under Part 5, Division 3. • The Minister may direct the Trust to termination the Conservation Agreement if a mining or petroleum authority is granted in respect of the land if the Minister is of the opinion that the activity authorised by the authority will adversely affect any management actions or biodiversity values (clause 5.23).	• Amendments should be made to clause 5.21 to include amongst those whose consent should be sought to the granting of a Conservation Agreement, the holder of an authorisation under the Mining Act or Petroleum (Onshore) Act from whom consent should be sought. • While clause 5.23(7) implies that a mining lease can be granted over the site that is the subject of a Conservation Agreement, having the effect that the Conservation Agreement is terminated, it is recommend that an additional clause be inserted similar to clause 5.19 to make it clear that nothing in the Act prevents the grant of an authorisation under the Mining Act.
Wildlife Refuge Agreements (Division 4)	• The Biodiversity Conservation Trust may enter into an agreement relating to land with the owner of the land (all or part of a parcel of land) for the purpose of conserving or studying the biodiversity values of the land (**Wildlife Refuge Agreement**) (clause 5.25). Currently the consent of the holder of any mining authorisation over the land is not sought before the granting of an Wildlife Refuge Agreement. This is despite the Minister having the power to terminate the agreement if a mining authority is granted in relation to the land.	• Amendments should be made to clause 5.26 to include amongst those whose consent should be sought to the granting of a Wildlife Refuge Agreement, the holder of an authorisation under the Mining Act or Petroleum (Onshore) Act from whom consent should be sought.
Part 6 – Biodiversity offsets scheme		
General scheme provisions (Division 1)	• The definition of 'planning approval' in Division 1 does not include transitional Part 3A projects. Therefore the biodiversity offsetting provisions will not apply to a section 75W application for a transitional Part 3A project. In addition, the provisions will not apply to applications to modify	• The definition of "planning approval" should be amended to include all applications for modification of approvals made after the date of the commencement of the BC Act, and to include Part 3A transitional applications.

Issue	Comment/Issue	Recommendation
	approvals that were granted before the commencement of the Act (therefore the majority of modifications applications will not fall under the new provisions). • Clause 6.4 sets out the biodiversity conservation measures that exist to offset or compensate for impacts on biodiversity. The clause does not make reference to the payment o the Biodiversity Conservation Fund.	• Clause 6.4 should make reference to the availability of payment into the Biodiversity Conservation Fund as an alternative to the retirement of credits (in part or in full).
Biodiversity assessment method (Division 2)	• The Minister is to review the BAM after five years following the establishment of the BAM and at least every five years thereafter. This review is to include public consultation and the BAM may be amended following the review (clause 6.9). A initially five year period before the BAM will be reviewed is inadequate given that the Government will have limited resources and time to test the BAM and related products before it in introduced. • The Environment Agency Head is to prepare a scheme for the accreditation of biodiversity assessors, including qualifications and experience requirements, the process for applying for, granting and renewing accreditations (clause 6.10). There are no details provided in the Act or the submission guides as to when this scheme will be announced. Given that biodiversity assessment reports need to be prepared by accredited assessors details of the scheme need to be released as soon as possible. There will be a lag between Act being passed and the scheme being set up and there need to be transitional arrangements set up.	• The BAM should be reviewed within one year after it is introduced to ensure significant problems can be promptly addressed. • The Government should establish an Expert reference panel to provide feedback during the first twelve months and aim to address issues as they arise. • Provide the details of the accredited assessor scheme for consultation as soon as possible and: ○ Put in place for biodiversity assessment reports to be prepared by 'non-accredited' persons or persons accredited under a different scheme for a period of time (up to 18 months). ○ Provide details of any elements of the scheme that relate to qualifications, accreditation conditions, fees and protocols for engagement and the maximum amount that an assessor may charge for the preparation of a report.
Biodiversity assessment reports (Division 3)	• Clause 6.12 relating to biodiversity development assessment reports refers to 'residual impacts' however this term is not defined. It is appropriate that only *significant* residual impacts (to be defined in the Act) are required to be offset through the retirement of credits. This is consistent with the Commonwealth *Environment Protection and Biodiversity*	• The term residual impacts in clause 6.12 needs to be defined in the Act so it is clear as to what 'residual' impacts are required to be offset. Only significant residual impacts should be required to be offset through the retirement of credits. • The legislation should state what biodiversity assessment is

Issue	Comment/Issue	Recommendation
	Conservation Act 1999 (**EPBC** Act) *Environmental Offsets Policy*, October 2012 that requires only residual impacts that are *significant* to be offset as part of the assessment under the EPBC Act. • The BC Bill is not clear as to what biodiversity assessment is required by a proponent for development in the event that the BAM threshold is not met.	required where the BAM threshold is not met.
Creation, transfer etc. of biodiversity credits (Division 4)	• An application to transfer credits must be refused in circumstances where an amount is required to be paid to the Biodiversity Stewardship Payments Fund unless the amount has been paid (clause 6.20). • With respect to clauses 6.23 and 6.24, amendments to the BC Bill are required to clarify that any termination of a Stewardship Agreement or the cancellation of credits due to matters outside the control of the holder of the credits, is not taken to be a breach of a development consent condition. For example, if an agreement is terminated to enable a public authority to carry out development, this should not constitute a breach of a development consent condition which requires an agreement to be entered into in perpetuity. • The cancellation of a credit does not prevent the Minister seeking an award of damages against the owner of a Stewardship Site for a breach of the Stewardship Agreement or taking civil enforcement action in respect of the breach under Division 2 of Part 13 (clause 6.24(7)). This is unreasonable. • If the Environment Agency Head considers that there may be reasons for cancelling a credit, the Environment Agency Head may suspend the credit for a period of up to 2 months pending an investigation into the matter. The Environment Agency Head must give the holder of the credit notice in writing of the suspension (clause 6.25(3)).	Amend clauses 6.23 and 6.24 to clarify that a site owner will not be in breach of the development consent due to matters outside of his or her control. Clause 6.25(3) should be amended to ensure that the holder of the credit is given an opportunity to make submissions in respect of the credit that has been suspended by the Environment Agency Head. • Clause 6.24(7), which allows the Minister to seek damages against the owner of a Stewardship site should be limited in its application, and should not apply where the breach is outside the control of the site owner.
Retirement of	• The deferred credit retirement arrangement under clause 6.28	• Include details of the circumstances in which the

Issue	Comment/Issue	Recommendation
biodiversity credits (Division 5)	provides the mechanism for a mining company to carry out rehabilitation works in lieu of retiring credits. However it is not clear from the Act in what circumstances the rehabilitation of mined land will be available for inclusion as part of an offset package. • We also note that under the MPOP there is a specific framework in place for deferred credits in respect of mining proponents who carry out rehabilitation works in accordance with a mining operation plan. • The definition of the "former holder" of a biodiversity credit includes "a person who acquires the rights of that person to apply for a transfer under this section in respect of the biodiversity credit." (clause 6.288(a)), but is not clear on who that will be. For example, will it be a person that acquires the land or the proponent of a development. Without such clarification, a person that seeks to claim the right in the future may have difficulty satisfying the Environment Agency Head that they hold such a right.	rehabilitation of mined land will be available as an offset in the regulations. • Amend the BC Bill or the Regulations to enable a similar deferred credits arrangement, to that provided in the MPOP, to be available to mining proponents under the new Biodiversity Package. • Amend the definition of the 'former holder' in clause 6.28(8) is amended to make it clear who will be 'a person who acquires the rights of that person to apply for a transfer under this section in respect of the biodiversity credit'.
Payment into Biodiversity Conservation Fund as alternative to retirement of biodiversity credits (Division 6)	• It is not clear in clause 6.30 as to the timing of when a person can make a payment to the Conservation Fund in lieu of satisfying obligations to retire credits. • Importantly it is not clear in the Bill or the submission guides as to how frequently the payment calculations will be updated which makes it difficult for industry to assess whether they should utilise this alternative instead of retiring credits through land-based offsets or the market. • Clause 6.30 refers to the ability to pay money into the fund as an alternative to the retirement of credits. However there may be circumstances where a proponent wishes to partially comply with their offset obligation by way of a payment to the trust under clause 6.30, and partially through the retirement of credits.	• Amend clause 6.30 to allow for payment to be made at any time into the BCT. • Amend the BC Bill to identify how frequently the payment calculator will be updated • Amend Clause 6.30 to allow for a credit retirement arrangement to be satisfied in part through a payment to the Trust. • Amend clause 6.30(2) to refer to 'the obligation under this or any other Act', similar to the reference in clause 6.30(1). • Amend clause 6.33 provide that the Trust must issue a statement confirming the payment into the fund, • An additional Division should be be inserted into Part 6 that allows a proponent to sell land to the Trust in lieu of the

Issue	Comment/Issue	Recommendation
	• Clause 6.30(2) refers to the obligation under 'this Act' to retire biodiversity credits, however the obligation to retire credits may also arise under the EPA Act as a result of a condition of consent requiring such action to be taken. • Clause 6.33 states only that the BCT "may" issue a statement confirming that the required amount has been paid to the Trust. This needs to be amended to require a statement to be given, otherwise there may be circumstances where a person has made a payment to the Conservation Fund but has not proof that its obligations to retire credits have been discharged. • Division 6 allows a proponent to pay money into the Fund (as administered by the Biodiversity Conservation Trust) as an alternative to retirement of biodiversity credits. There may be circumstances where a proponent wishes to sell land to the Trust in lieu of retiring credits or paying money into the Fund. The Trust may then use this land for the purposes of achieving '*strategic biodiversity offset outcomes*' in line with the Objects of the Trust as set out in clause 10.4. Importantly the Trust has the power under clause 10.6 to buy land. It is noted that the Government's intentions with regard to the BCT at this time is that it will not own and manage land, however there should be the capacity for proponents to sell land to the Trust in the future in the event that there is a change to the current policy. Further consultation will be required as to how the value of the land is to be calculated for the purpose of providing an alternative to credit retirement obligations.	retirement of credits where that land contains biodiversity values and will assist in the Trust achieving strategic biodiversity offset outcomes.
Biodiversity Stewardship Payments Fund (Division 7)	• The proposed fund calculator model includes an element for fund administration expenses and risk loading – such expenses should be kept to a minimum to ensure that the cost of contributing to the fund as an alternative to the retirement	• The management of the offset funds should be subject to best practice governance policies and a transparent reporting regime to ensure accountability and that objectives of the Trust are met on time and on budget.

Issue	Comment/Issue	Recommendation
	of offsets is not cost prohibitive for proponents.	

Issue	Comment/Issue	Recommendation
Part 7 – Biodiversity assessment and approvals under Planning Act		
Preliminary (Division 1)	A development or activity is **likely to significantly affect threatened species** (clause 7.2) if it is: (a) likely to significantly affect threatened species or ecological communities, or their habitats; or (a) subject to the biodiversity offsets scheme and it exceeds the biodiversity offsets scheme threshold; or (b) carried out in a declared area of outstanding biodiversity value. The test for determining whether proposed development or activity **likely to significantly affect threatened species** (clause 7.3(1)) is whether the proposed development or activity is likely to have an adverse effect on: (a) the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction; or (b) any declared area of outstanding biodiversity value (either directly or indirectly). The test for determining whether proposed development or activity **likely to significantly affect ecological communities** (clause 7.3(2)) is whether the proposed development or activity is likely to: (a) have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction; or (b) substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction; or (c) have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly). The following will be taken into account when determining whether proposed development or activity **likely to significantly affect the habitat** (clause 7.3(3)) of a threatened species or ecological community:	Further clarification is required as to what will exceed the biodiversity offsets scheme threshold.

Issue	Comment/Issue	Recommendation
	(a) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity; (b) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity; (c) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality; and (d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly). The proposed development will exceed the biodiversity offsets scheme threshold if it is development of an extent or kind that the regulations declare to be development that exceeds the threshold (clause 7.4(1)). Proposed development does not exceed the biodiversity offsets threshold if it involves the clearing of native vegetation on category 1-exempt land under Part 5A of the LSA and does not have any other impacts prescribed by the regulations (clause 7.4(2)). Part 7 prevails where there is any inconsistency with the EPA Act (clause 7.5).	
Biodiversity Assessment Requirements (Division 2)	• Clause 7.2 refers to development that is the subject to the biodiversity offsets scheme – however it is not prescribed anywhere in the Act as to exactly what this development is. • Where an application is made for State significant development under Part 4 of the EPA Act or infrastructure under Part 5.1 of the EPA Act, a biodiversity development assessment report will be required unless the Department of Planning and OEH determine that the development is not likely to have an impact on biodiversity values (clause 7.9). It is unclear as to exactly what the biodiversity values 'to which the biodiversity offset scheme applies' are for the purposes of clause 7.9(2) and what circumstances are likely to lead to a	• Amend the BC Bill to define "development subject to the biodiversity offsets scheme" • Amend clause 7.9(2) to clarify exactly what the biodiversity values 'to which the biodiversity offset scheme applies'. • Amend the BC Bill to clarify what assessment, if any, is required in the event that the BAM thresholds are not met. Guidance should be provided to decision-makers on this issue. • The Government should clarify the need for clause 7.9(3). • The Regulations should provide that the proponent not be required to update their biodiversity assessment reports in

Issue	Comment/Issue	Recommendation
	situation where a biodiversity development assessment report is not required. It is assumed that a biodiversity development assessment report will be required where the BAM applies to a development (based on the triggers in the BAM). • The BCA also provides that the environmental impact statement that accompanies the State significant development application is to include the biodiversity assessment required by the environmental assessment requirements of the Department of Planning under the EPA Act (clause 7.9(3)). It is unclear why clause 7.9(3) has been included in the BCA, particularly since this is already a requirement of the EPA Act. • Clause 7.10 states that regulations may make provision with respect to the effect of changes in the threatened species and ecological communities' lists during the assessment phase. To give proponents certainty and prevent significant costs being thrown away, a proponent not be required to update their biodiversity assessment reports in the event of any changes to listings that post-date the date of lodgement of the EIS (including the biodiversity assessment reports). • It is important to note that biodiversity assessment will not apply to development or activities that are assessed under the proposed Biodiversity Management Plan for strategic assessment in the Upper Hunter that is to be endorsed under Part 10 of the EPBC Act.	the event of any changes to listings that post-date the date of lodgement of the EIS. • The industry should be given an opportunity to review the proposed savings and transitional provisions to be included in Schedule 9 before they are finalised, to ensure that there will be no duplication between the UHSA and the biodiversity assessment requirements under the Act.
Biodiversity Offsets (Division 4)	• A consent authority may impose a condition of consent requiring a mining company to offset impacts on biodiversity values where a biodiversity development assessment report has not been prepared (clause 7.13). This defeats the purpose of having a objective scientific scheme for the assessment of impacts on biodiversity and the imposition of a offsetting credit. • Should an agreement be terminated or varied without the	• Conditions of consent requiring biodiversity offsets should not be imposed unless the impact of the development on biodiversity has been assessed pursuant to the BAM (or the Offsets Policy/FBA for development that pre-dates the commencement of the BCA). • Clause 7.13(1) should be amended to refer to 'residual impacts' only to make it clear that an offset condition is to relate only to residual impacts that remain after actions have

Issue	Comment/Issue	Recommendation
	consent of the owner, under clauses 5.10 or 5.11 of the Act the owner should not then be required to secure another land-based offset site, nor should they be considered to be in breach of any relevant planning approval conditions, and this needs to be expressed stated in Clause 7.13. • A planning agreement may make provision regarding the offset of the impact on biodiversity values (clause 7.14), however Part 7 of the Act does not affect any contribution payable under such an agreement. It is not clear however as to what impact if any, environmental contributions payable under a planning agreement will have on development consent conditions relating to offsets made in accordance with clause 7.13. • Given that clause 7.18(2)(c) provides that a biodiversity report will not be required in circumstances where the person determining the application is satisfied there will be no additional impacts on biodiversity values, there appears to be an exception to clause 7.18(2)(b) which provides that a biodiversity development assessment report is required. • Clause 7.18(2)(e) is confusing –the clause only applies to modifications of consents that were granted after the commencement of the BCA. If the original development had serious and irreversible impacts on biodiversity values it would have been refused, and therefore there would be no consent to modify.	been taken to avoid or minimise impacts. As discussed above, 'residual impact' should be defined under the definitions in Part 7 and offset obligations should be triggered only in respect of *significant* residual impacts (this is relevant also to clause 7.16(3)). • Clause 7.13 should be amended to include a statement that where a Biodiversity Stewardship Agreement is varied or terminated without the consent of the owner, the owner should not then be required to secure another land-based offset site, nor should they be considered to be in breach of any relevant planning approval conditions. • The BAM should provide for a method for which environmental contributions payable under a planning agreement are to be taken into consideration for the purposes of the biodiversity development assessment report, or as a minimum clause 7.13 should be amended to allow for such contributions to be considered for the purposes of the making of offset conditions. • Clause 17 should be amended so that clause 7.17(b) is subject to clause 7.17(c). • Sub-clause 7.18(2)(e) should be deleted or at least be amended to refer to clause 7.17(2) to make it clear that this sub-clause des not apply to applications to modify State significant development.
Preparation of species impact statements (Division 5)	• Clause 7.21 provides for the accreditation of suitably qualified and experienced persons to prepare species impact statements, however there does not appear to be a requirement under the Act for a species impact statement to be prepared by an accredited person. The purpose of the accreditation system in clause 7.21 is unclear. If someone is not accredited will a species impact statement prepared by	• Clause 7.21 needs to be clarified so that it is clear to a proponent as to what will be considered to be satisfactory for the purpose of this Part of the Act.

Issue	Comment/Issue	Recommendation
	that person be rejected by the consent authority?	
Part 8 – Biodiversity certification of land		
Conferral of biodiversity certification of land (Division 2)	• Clause 8.7(1)(b) refers to residua impacts. As discussed above the terms needs to be defined and limited to significant residual impacts. • Part 8 is silent on whether a mining lease can be granted over land that has been certified. This is relevant particularly for potential future underground mining.	• The term 'residual impacts' in clause 8.7(1)(b) needs to be defined and be limited only to 'significant' residual impacts. • The BCA should be amended so that it is clear that a mining lease can be granted over certified land.
Part 9 – Public consultation and public registers		
Public consultation (Division 1)	• Public consultation is required before a public consultation document is made (clause 9.1). A public consultation document includes a biodiversity assessment method and a scheme for the accreditation of assessors. The BC Bill provides that the consultation period is 4 weeks of period prescribed by the regulations. 4 weeks is insufficient time to properly consult on a assessment methodology or an accreditation scheme.	• The Regulations should provide for a period of at least 8 weeks of public consultation on any proposed biodiversity assessment method or scheme for the accreditation of assessors.
Public register (Division 2)	• Clause 9.10(3) of the BC Bill provides that *'if access to information that relates to a declared area of outstanding biodiversity value is restricted, a person has a defence to a prosecution under this Act for damaging the biodiversity values of the area if the person establishes that he or she did not know that it was a declared area.'*	• Further detail of the proposed public register needs to be provided for in the regulations. • The defence for clearing areas of outstanding biodiversity values included in clause 9.10(3) should be included in Part 1 with the rest of the defence provisions.
Part 10 – Biodiversity Conservation Trust		
Establishment, functions and operations of Trust (Division 1)	The Biodiversity Conservation Trust of NSW (**Trust**) is a statutory body representing the Crown. It will not be subject to the control and direction of the Minister for the Environment or any other Minister (clause 10.2). Whilst the Trust will not be controlled by any Minister, the Board will be accountable to the Minister of the Environment. The Minister of the Environment will have the power to appoint members of the board (clause 10.3) and dismiss members of the board (see	• With regard to the Biodiversity Conservation Trust The BC Bill should provide: ○ That the NSW government be given 'step-in' rights to administer the Trust should there be indications of poor performance or issues in its management ○ In the event that the Trust fails, there should be

Issue	Comment/Issue	Recommendation
	schedule 8). There BC Bill should be amended to provide the Minister with step in rights and the power to take on the role of the Trust in the event that it fails.	provision for the NSW government to take on the role of the Trust including in relation to compliance with the biodiversity offsets scheme.
Part 11 – Regulatory compliance mechanisms		
Remediation orders (Division 4)	The OEH may order a person to carry out remediation work. A current or former landholder of any land on which the damage concerned occurred, or any other person the OEH reasonably believes is responsible for the damage concerned may be served with a remediation order (clause 11.17). This provision should require attempts to be made to firstly to serve the person responsible for the damage and only if this is unsuccessful, the current or former landholder. This is an approach that is similar to the *Contaminated Land Management Act*.	Amend clause 11.17 to require that the Environment Agency Head attempt to serve an order on person who caused damage first and only if that is not possible, then a current or former landholder be served with an order.
Part 12 – Investigation powers		
Part 13 – Criminal and civil proceeding		
Part 14 – Miscellaneous		
Schedule 7 – Provisions relating to members and procedure of Threatened Species Scientific Committee		
Schedule 8 – Members and procedure of Board of Biodiversity Conservation Trust		
Schedule 9 – Savings, transitional and other provisions		
General (Part 1)	The Regulations may contain provisions of a savings or transitional nature.	The savings and transitional provisions to be contained in the Regulations will be very important, specifically with regards to how the new offsetting scheme will apply to existing proposed and approved projects. We understand that the Act and Regulations are not expected to commence before early 2017, however it is not clear to us at this stage whether the Act and Regulations will commence at the same time.

Issue	Comment/Issue	Recommendation
Schedule 11 – Amendments to Acts and instruments		
Other amendments to EPA Act	• Clause 5.14 in the BC Bill currently provides that: *(2) For the purposes of section 76 (3) of that Act, a reference to the environmental planning instrument in respect of any such exempt development is taken to be a reference to the biodiversity stewardship agreement.* Clause 5.14(2) is not permitted under the EPA Act. This is because section 76(2) of the EPA Act provides that only an environmental planning instrument can provide that development is exempt development.	• So that the BC Act can provide for exempt development, section 76(2) of the EPA Act needs to be amended.