

Effectiveness of the Biodiversity Offsets Scheme



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In accordance with section 38E of the *Government Sector Audit Act* 1983, I present a report titled 'Effectiveness of the Biodiversity Offsets Scheme'.

lan Goodwin Deputy Auditor-General 30 August 2022





The Audit Office of New South Wales pay our respect and recognise Aboriginal people as the traditional custodians of the land in NSW.

We recognise that Aboriginal people, as custodians, have a spiritual, social and cultural connection with their lands and waters, and have made and continue to make a rich, unique and lasting contribution to the State. We are committed to continue learning about Aboriginal and Torres Strait Islander peoples' history and culture.

We honour and thank the traditional owners of the land on which our office is located, the Gadigal people of the Eora nation, and the traditional owners of the lands on which our staff live and work. We pay our respects to their Elders past and present, and to the next generation of leaders.



contents

Effectiveness of the Biodiversity Offsets Scheme

Section one – Effectiveness of the Biodiversity Offsets Scheme			
Executive summary	1		
Introduction	12		
Status of the credit market	18		
Scheme goals, strategy and safeguards	27		
Minimising and offsetting biodiversity loss	36		
Establishing biodiversity stewardship sites	41		
Biodiversity outcomes	46		
Section two – Appendices			
Appendix one – Response from agencies	55		
Appendix two – Like-for-like, variation and ancillary rules	61		
Appendix three – Detail on progress of the IIAP	64		
Appendix four – About the audit	66		
Appendix fiver – Performance auditing	68		

Section one

Effectiveness of the Biodiversity Offsets Scheme

Executive summary

The NSW Government's Biodiversity Outlook Report 2020 estimates that, without effective management, only 50% of species and 59% of ecological communities that are listed as threatened in New South Wales will still exist in 100 years. The NSW State of the Environment 2021 report identifies habitat destruction and native vegetation clearing as presenting the single greatest threat to biodiversity in the State.

According to the Organisation for Economic Co-operation and Development (OECD), biodiversity offsets are 'measurable conservation outcomes that result from actions designed to compensate for significant, residual biodiversity loss from development projects'. The OECD states that a feature of such schemes is that biodiversity offsets are intended to be implemented as the 'final step of a mitigation hierarchy' whereby reasonable first steps are taken to avoid and minimise the negative impacts.

The NSW Biodiversity Offsets Scheme was established in 2017 under the *Biodiversity Conservation Act 2016* (the Act). The purpose of the Act is to, 'maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development'.

The Department of Planning and Environment (DPE) designed and manages this Scheme. Under the Act, a feature of the Scheme is a 'market-based conservation mechanism through which the impacts to biodiversity can be offset.' The Scheme enables landholders to establish in-perpetuity Biodiversity Stewardship Agreements (BSAs) on sites to generate biodiversity credits, which can be sold to offset the negative impact of development on biodiversity. BSA sites are intended to be managed over the long-term to generate the biodiversity gains required to offset the impact.

The Biodiversity Conservation Trust (BCT) monitors and supports landholders to manage BSA sites under the Scheme. This includes making payments to landholders from funds held in the Biodiversity Stewardship Payments Fund for undertaking the required biodiversity management actions.

This Scheme was preceded by several other offsetting schemes in New South Wales, including the BioBanking scheme that started in 2008. DPE has arrangements to transition sites, credits, and offset obligations from this and other previous schemes.

The current biodiversity credit market in New South Wales consists of 1394 different types of ecosystem credits, which are approved to be traded in 364 different offset trading groups, and 867 different species credits. Trading rules, set out in the Biodiversity Conservation Regulation 2017 (the Regulation), prioritise offsetting the obligations of a development with like-for-like ecosystem or species credits.

The Scheme is implemented through the planning system in New South Wales. Proposed development that involves the clearing of native vegetation, and meets certain thresholds, is required to undertake a Biodiversity Development Assessment Report. These reports determine an offset obligation, in biodiversity credits, to compensate for the biodiversity loss proposed. These reports are considered by consent authorities (such as a council, for local development, or by the Minister for Planning for major projects). An offset obligation is then included in the conditions of development approval.

In addition to establishing a market for trading between developers, with offset obligations, and landholders, who sell credits from their BSA sites, the Scheme allows developers to pay into the Biodiversity Conservation Fund and transfer their obligations to the BCT. This allows the developer to proceed with their project. The BCT must then meet these acquired obligations by buying the required credits, or by undertaking other approved activities set out in the Regulation. The BCT has more options than developers on how and when it acquits its obligations.

This audit examined whether DPE and the BCT have effectively designed and implemented the Biodiversity Offsets Scheme to compensate for the loss of biodiversity due to development.

Conclusion

The Department of Planning and Environment (DPE) has not effectively designed core elements of the NSW Biodiversity Offsets Scheme. DPE did not establish a clear strategy to develop the biodiversity credit market or determine whether the Scheme's operation and outcomes are consistent with the purposes of the *Biodiversity Conservation Act 2016*.

The effectiveness of the Scheme's implementation by DPE and the Biodiversity Conservation Trust (BCT) has been limited. A market-based approach to biodiversity offsetting is central to the Scheme's operation but credit supply is lacking and poorly matched to growing demand: this includes a potential undersupply of in-demand credits for numerous endangered species. Key concerns around the Scheme's integrity, transparency, and sustainability are also yet to be fully resolved. As such, there is a risk that biodiversity gains made through the Scheme will not be sufficient to offset losses resulting from the impacts of development, and that DPE will not be able to assess the Scheme's overall effectiveness.

DPE developed the Scheme following a 2014 review of the State's biodiversity legislation and building on previous offsetting arrangements in New South Wales. At the time the Scheme commenced in 2017, DPE lacked a strategic plan to guide its implementation, set clear outcomes and performance measures, and respond effectively to risks. DPE did establish a detailed scientific method for assessing biodiversity impacts under the Scheme and a system for accrediting assessors to undertake this technical work. These are important foundations for the robustness of the Scheme.

The Scheme has been in place for five years, but the biodiversity credit market is not well developed. Most credit types have never been traded. Also, according to DPE data, around 90% of demand cannot be matched to credit supply – and there is likely to be a substantial credit undersupply for at least seven endangered flora species, three endangered fauna species, and eight threatened ecological communities. Credit demand is projected to grow – especially in relation to the NSW Government's \$112.7 billion four-year infrastructure pipeline.

As with any market, potential participants need information about demand and price in order to understand risks and opportunities. But information about the biodiversity credit market, published by DPE and the BCT, does not provide an adequate picture of credit supply, demand and price to support market participation. This can create uncertainty for landholders who may be weighing the costs and benefits of establishing Biodiversity Stewardship Agreement (BSA) sites, and for development proponents who need to know whether they can purchase sufficient credits and at what price. Development proponents who lack market information are being incentivised to meet their offset obligations by paying into the Biodiversity Conservation Fund, which is managed by the BCT. This option provides developers with more certainty that enables them to progress their projects, but does not result in the development being offset until the BCT later acquits the obligation.

The BCT has multiple roles in the Scheme. These include setting-up and administering BSAs which generate credits, acquiring offset obligations from developers who pay into the Biodiversity Conservation Fund, and purchasing credits to meet its acquired obligations. There have been inadequate safeguards to mitigate the potential for conflicts between these roles. As the BCT directs its efforts towards facilitating BSA sites and purchasing credits to meet its obligations, there is a risk that government is insufficiently focused on supporting overall credit supply.

DPE has begun developing a credit supply strategy. Its absence, and a lack of clarity around responsibility for credit supply under the Scheme, has contributed to the significant risk of insufficient and poorly matched credits to meet the growing demand. The BCT's acquired obligations from developers have been increasing year-on-year, and are likely to continue to grow.

There is a risk that the BCT will not have sufficient funds to acquit its growing obligations with like-for-like credits, which could result in sub-optimal biodiversity outcomes. The Scheme rules allow the BCT to acquit its obligations with measures other than like-for-like credits. DPE has not provided clear guidance to the BCT on when or how to do so, or how this would fulfil the 'no net loss' of biodiversity standard.

There are transparency and integrity risks to the Scheme. DPE does not maintain a public register of biodiversity credits with complete information, including credits' transaction histories, consistent with the legislative intent for a single register. DPE also does not have ready access to information to check that developments have been acquitted with the required credits.

Risks to the sustainability of the Scheme and its outcomes remain. DPE and the BCT have not yet implemented a decision-making and intervention framework to ensure adequate initial and ongoing funding for the long-term management of new and existing BSA sites. DPE also did not collect ecological data from sites under previous schemes before they were transitioned, and BCT only introduced ecological monitoring requirements for new BSA sites in March 2021. The lack of monitoring requirements creates a risk that the biodiversity gains, which BSA sites are required to generate to offset biodiversity losses, will not be measured and achieved under the Scheme.

1. Key findings

DPE has not clearly articulated goals and performance measures for the Scheme and how these are expected to contribute to biodiversity outcomes in line with the Act

High level principles and directions for the Scheme are set out in the *Biodiversity Conservation Act* 2016 (the Act), including its consistency with 'ecologically sustainable development'. The terms 'compensate' and 'offset' are also used in the Act, with respect to the Scheme, but DPE has not defined these terms for operational, performance measurement or evaluation purposes.

There are no biodiversity-specific outcome measures for the Scheme, such as measures of its expected contribution to maintaining biodiversity at a State and regional level. DPE has not made a clear statement on what its success would look like in the context of environmental and economic policy priorities, and the progress of major projects.

DPE has advised that the 'no net loss' of biodiversity standard that is used in the Biodiversity Assessment Method is not intended to provide a standard for the Scheme as a whole. This standard means that offset obligations, if acquitted in a like-for-like manner, should ensure that biodiversity loss is not accelerated by development activities.

DPE has provided some guidance to developers and consent authorities, but has not developed measures to assess how the application of flexibility to vary from like-for-like offsetting is consistent with the purpose of the Act. DPE has not provided the BCT with guidance on when or how to use options other than like-for-like, or how this would be assessed against the 'no net loss' of biodiversity standard. As noted below, the BCT's acquired obligations from developers have been increasing year-on-year.

DPE is developing a draft Monitoring, Evaluation, Reporting and Improvement Framework for the Scheme and estimates this will be completed in June 2023.

The market is not well developed, most credit types have never been traded and credit supply has been slow in the context of growing demand

The Scheme commenced in 2017 with an existing supply of credits and offset obligations from previous schemes, but the market is not yet well developed to meet the growing demand.

The biodiversity credit market consists of 1394 different types of ecosystem credits, which are approved to be traded in 364 different offset trading groups, and 867 different species credits. Most of these groups and credits, around 86% of ecosystem offset trading groups and 97% of species credits, have never been traded.

DPE data shows that 972 assessments have been undertaken for proposed developments under the Scheme, from August 2017 to February 2022. This indicates that development may impact around 22,500 hectares of land, and that around 340,000 ecosystem credits and 1.7 million species credits could be required as offsets. Over 90% of the assessed obligations relate major projects (specifically, State Significant Development or State Significant Infrastructure).

The BCT's acquired obligations from developers have been increasing year-on-year. Since the Scheme commenced, around 340 development proponents have made payments into the Biodiversity Conservation Fund, worth around \$90 million (as at 9 May 2022). For these obligations, developers have not purchased credits in the market, nor established their own BSA sites to generate the necessary credits. Over the same period, fewer than 27 development proponents acquitted obligations by purchasing and retiring credits generated under the current Scheme in the market.

There is potential for a substantial shortfall in the current supply of relevant credits, and a significant risk of future shortfalls including for vulnerable and threatened species

Analyses of DPE data on issued credits indicates a significant shortfall in matched ecosystem and species credits. Nine per cent of demand can be matched to supply from DPE's credit supply list by plant community type and bioregion, and four per cent of species credit demand can be matched to supply.

Potential BSA sites, those assessed under Scheme between August 2017 and February 2022, could generate around 360,000 ecosystem credits and almost 1.8 million species credits (noting that 1.6 million credits are for one species). But our analyses show that around 30% of ecosystem credit demand, 16% of fauna species credit demand, and just one per cent of flora species credit demand, can be matched to the credit supply from these assessments.

Further analysis was undertaken comparing endangered and vulnerable species and ecological communities, with a list produced by DPE of the 'top 20' credit mismatches. It shows that at least seven endangered and ten vulnerable flora species are likely to have a large credit undersupply as are at least three endangered and 15 vulnerable fauna species, including the swift parrot, eastern pygmy possum and bush stone-curlew.

DPE's and the BCT's information to the market does not present a reliable and holistic picture of supply, demand and price to facilitate market development

DPE and the BCT provide lists of credit supply and demand, but this does not present a holistic picture of the market to inform participants about the risks and opportunities of setting up BSA sites and/or purchasing credits.

DPE's publicly available credit supply listing (online downloadable Excel spreadsheet output) is missing information that is relevant to facilitating market transactions. Further, DPE's credit demand list is not integrated with the list of credits that the BCT is seeking to meet its obligations. Having this information presented in two locations and formats makes it difficult for landholders and other credit holders to understand the demand for their credits.

Credit price information is also important to both landholders and developers for their confidence in the market and to facilitate its development, but public lists of transactions do not provide a transparent view of market activity. Information gaps and a lack of transparency around credit prices on the market can incentivise developers to pay into the Biodiversity Conservation Fund, which is managed by the BCT, to meet their obligations. As noted below, the current tool that developers use for this purpose is not considered reliable.

DPE has recently taken steps to improve public information about the market. In December 2021 it published indicative demand for ecosystem credits, and is developing 'dashboards' to display data on potential supply and demand. These are scheduled for release in 2022. In June 2022, DPE released a Biodiversity Credit Price Guide to help market participants estimate prices.

The calculator used by developers to determine how much to pay to acquit their obligations is impacting credit price information and market development, and is yet to be replaced

The Biodiversity Offsets Payment Calculator is considered unreliable by the BCT, DPE and other stakeholders, but remains the current, approved tool for developers to calculate how much to pay into the Biodiversity Conservation Fund to transfer their obligation to the BCT for acquittal.

DPE developed the Biodiversity Offsets Payment Calculator in 2017 and has been responsible for its maintenance since. But the calculator requires an update, or replacement, and work to progress this has been slow. It has not been updated for two years because the volume of credit sales has been too low to inform reliable price estimates, leading to reported under-pricing.

The BCT has advised that it is reasonable to conclude that the calculator has contributed to the increasing number of development proponents paying into the Biodiversity Conservation Fund, and creates a barrier to landholders setting up BSAs by operating as a 'low price ceiling' for their credits.

In addition, the continued use of the calculator may be contributing to the BCT's financial risk. That is, a risk that the Biodiversity Conservation Fund will not have sufficient funds for the BCT to meet its acquired obligations from developers on a like-for-like basis in the future. To date, all of the acquired obligations that the BCT has acquitted have been met on a like-for-like basis.

DPE and the BCT have undertaken consultations on replacing the calculator. The BCT proposed a charge system, the Biodiversity Conservation Fund (BCF) Charge System, that will use four tools including a cost-structure tool in view of the limited data on market prices, to determine a credit price. In August 2022, the Minister for Environment and Heritage approved the implementation of this system to charge developers.

The BCT applied the proposed charge system to re-measure the liability for its offset obligations in its unaudited 31 March 2022 early close financial statements. Based on this, the BCT estimates that a shortfall in funds to acquit its obligations on a like-for-like basis has significantly increased. In the context of the credit supply issues noted above, the BCT will need to consider using the other options available to it, including variation rules and biodiversity conservation actions, to acquit its obligations. The use of these other options could result in suboptimal biodiversity outcomes for the Scheme. DPE has not provided the BCT with clear guidance on when and how to use its other options.

The BCT has inadequate safeguards to mitigate the conflict between its role in facilitating credit supply and its role as market intermediary and market participant

The design of the Scheme has allowed for the BCT to have roles that, from a structural and market design perspective, can come into conflict, but the BCT's safeguards have been inadequate and not maintained through its governance structures.

The key conflict is between the BCT's role in facilitating credit supply (establishing and administering BSAs), and its role as a market intermediary that acquires offset obligations from developers making payments into the Biodiversity Conservation Fund, and a market participant that requires credits (purchasing these from the market or through price offers and tenders). Undertaking these roles creates a risk that the BCT's resources are prioritised towards securing offsets to meet its acquired obligations, at the expense of facilitating market development towards broader Scheme outcomes via the supply of BSAs.

In June 2022, DPE advised that the role of BSA establishment will be transferred from the BCT to be managed by DPE. At the time of writing, details of this transfer of functions and its timing were not available.

¹ Prepared under TPG 22-11 NSW Treasury Policy and Guidelines: Agency Direction for the 2021–22 Mandatory Early Close.

DPE is developing a credit supply strategy but neither DPE nor the BCT have sufficiently reduced barriers to landholder participation

The projected shortfall of adequately matched credits presents a significant risk to the Scheme and biodiversity outcomes. Roles and responsibilities between DPE and the BCT for credit supply have been unclear. As such, effective action has not yet been taken to address the credit shortfall and mismatch with demand.

Potential BSAs sites have been identified and could be a source of credit supply, although further work is needed to support the generation of well-matched credits. Since August 2017, 37 landholders have entered BSAs. The BCT publicly reports there are around 226 BSAs, but this figure includes 189 BSAs that started as BioBanking agreements, some as early as 2011 before being transitioned to the Scheme.

Credit supply from the 226 established BSA sites has been limited: 40% of the BSA sites have not sold enough credits for their Total Fund Deposits to be met. This means that land management actions are not yet being funded. There are now around 60 additional BSAs under development. It can take up to 34 months to establish a BSA.

DPE and the BCT have not adequately addressed various barriers to landholders establishing and finalising BSA sites. In addition to the barriers related to limitations in market information and uncertainty around the likelihood of credit sales and prices (above), there are high up-front costs for landholders, and complex Scheme rules and tax considerations.

The BCT does provide grants to landholders who intend to participate in the BCT's fixed price offers and credit tenders to assist with the costs of establishing a BSA. We also note that the BCT has proposed to increase the BSA application fee ten-fold.

As of 2022, DPE is in the early stages of developing a credit supply strategy to boost uptake of BSAs, enhance market information, and improve estimates of offset obligations. DPE has stated that overall credit supply was intended to be addressed by the market but government intervention in supply is now warranted.

DPE established a method for assessing biodiversity impacts, but lacks oversight of the quality of BSA site assessments and assessors' conflict of interest declarations

DPE has established a detailed method (the Biodiversity Assessment Method) for assessing biodiversity impacts: estimating biodiversity losses at development sites and the expected biodiversity gains from management actions at BSA sites. DPE has also established a system for accrediting assessors to undertake this technical work.

DPE reviews site assessments for major development and the BCT reviews site assessments for proposed BSA sites. Both agencies have indicated they provide feedback on unsatisfactory assessments to support quality. DPE also audited the quality of development site assessments: the scope of this work was limited but it did indicate a significant level of non-compliance with procedures. DPE has started to develop a compliance and assurance framework to improve oversight of its Accredited Assessors, and has developed new training modules.

DPE does not, however, have an overall view of its Accredited Assessor performance, including the review work done by the BCT, and how the quality of assessments of development and BSA sites might be improved.

DPE has a code of conduct for its Accredited Assessors and guidance on identifying and managing conflicts of interest. However, there is no specific requirement for its Accredited Assessors to disclose any conflicts to either their clients or to the authorising agency. This means that DPE does not have visibility of its Accredited Assessors' conflicts of interest disclosures.

DPE does not publish a complete register of credits and their transaction history, a statutory requirement under the Act, which creates transparency and integrity risks

DPE does not maintain a consolidated public register of biodiversity credits in accordance with all the requirements of the Act, and the intent of a single credits register.

Credits issued under the current Scheme since 2019 do not have unique credit identifiers but are grouped into credit 'holdings'. As there is no single register that collates all credits in the market with unique identifiers, it is difficult to track the history of a credit from creation to retirement.

The information that DPE does publish in its public lists of credit transactions and retirements under the current and previous schemes is insufficient for transparency and integrity purposes. The Regulation makes further provision on what the public register of biodiversity credits must contain, but DPE does not provide all of this information.

Public registers that enable credits to be titled and ownership recorded is good practice that provides transparency to the market and greater security for credit buyers.

DPE does not collate information on the discounting of offset obligations and lacks ready access to information to check that developers have correctly acquitted their obligations

The DPE group administering the Scheme lacks ready access to information about when the discounting occurs and why. Discounting (or reduction) of offset obligations can be approved by the Minister for Planning or their delegate for major projects. The DPE systems in which the data is stored do not allow it to be readily extracted and reported to the Environment and Heritage Group within DPE.

This is a notable gap in DPE's visibility of the Scheme's operations because it affects DPE's ability to effectively oversee and monitor the Scheme's operations, quality assure its implementation, and understand outcomes. It also creates a risk that DPE will not have ready access to collated information on the reasons for ministerial decisions with respect to discounting.

Further, DPE is responsible for processing credit retirement but does not maintain consolidated information on developers' offset obligations and how they are meeting these. This means it may not know if developers are acquitting obligations according to the Scheme rules, such as on a like-for-like basis.

DPE introduced a Scheme-specific conflicts of interest protocol in late 2021 to address policy gaps

Conflicts of interest, including perceived conflicts, can be a significant issue in public administration if they call into question the integrity of actions and decisions. Because of the complexities, financial interests and range of stakeholders associated with the Scheme it requires additional safeguards.

DPE introduced a specific conflicts of interest protocol for the Scheme in November 2021, more than four years after it commenced in 2017. Prior, the existing DPE-wide conflicts of interest policies were in place to cover the Scheme. The new protocol provides Scheme-specific advice on managing conflicts for staff within DPE and the BCT. DPE started implementing this new protocol in 2021 and updated its department-wide Code of Ethics and Conduct in 2022.

DPE has provided evidence of new staff declarations since the protocol was implemented, and advises that no new high-risk interests have been declared. Four staff who made declarations prior to the implementation of the protocol have now been identified as having 'high-risk defined interests'.

The BCT has largely aligned its existing policy with DPE's conflicts of interest protocol for the Scheme, but this could be strengthened

The BCT has had a policy on staff participation in BCT programs since December 2020, and in 2022 the BCT updated this to refer to, and better reflect the requirements of, DPE's Scheme-specific protocol and DPE's updated Code of Ethics and Conduct.

The BCT has provided evidence of conflicts of interest declarations being logged in the DPE Ethics Portal, as required under the new protocol. It has also taken steps to improve staff awareness and increase compliance with the DPE's requirements. However, there is scope for the BCT to enhance alignment of its policy with DPE's Scheme-specific protocol to better support the effective management of conflicts of interest.

DPE is yet to implement processes to ensure long-term funding for BSA sites, and there is no plan with the BCT to improve the management of passive sites—these issues present risks to biodiversity gains

DPE has not developed a clear decision-making framework that ensures the adequacy of funds in the Biodiversity Stewardship Payments Fund. A report commissioned by DPE recommended that actions be implemented to address this by December 2020, but that has not yet occurred.

The BCT held approximately \$176 million in trust from Total Fund Deposits at 30 June 2021, invested through TCorp to support payments to BSA landholders. The BCT raised concerns about the financial sustainability of the Biodiversity Stewardship Payments Fund that holds these deposits in April 2020 given the economic conditions at the time.

A review in July 2021 indicated that the adequacy level for active BSAs had improved compared to 2020. However, there remains a lack of clarity around intervention decision-points or options, adequacy margins and risk thresholds with respect to the fund. As such, neither DPE nor the BCT can confirm the long-term sustainability of the fund to provide in-perpetuity management payments to landholders.

At January 2022, around 40% of the 226 total BSAs had not sold enough credits to be in active management to generate biodiversity gains. DPE and the BCT do not have a plan to review the status of these sites and determine if there is scope to work with landholders to transition these sites into active management or implement alternative arrangements to effectively manage these sites. This presents a risk to the integrity of the Scheme, as credit value for any credits sold at these sites may not be translated into biodiversity gains.

DPE and the BCT are yet to take the necessary steps to ensure biodiversity outcomes at BSA sites are monitored and measured

Over 90% of the current BSA sites, most of which were established by DPE under previous schemes but are now administered by the BCT, do not contain ecological monitoring requirements. Ecological monitoring is needed to gauge whether land management actions are achieving the necessary gains to compensate for biodiversity loss. As such, DPE and the BCT do not yet have sufficient information to determine if BSA sites are achieving these gains, or understand the actions required to rectify any shortfall.

The BCT only included ecological monitoring requirements in BSAs in March 2021. Prior to this, DPE and the BCT did not have a structured framework for guiding ecological monitoring activities at BSA sites. This shows a lack of risk management in DPE's implementation of transitional arrangements from previous schemes to the current Scheme in 2017. We have been advised that less than five per cent of Biobanking sites have ongoing ecological monitoring costed into their Total Fund Deposits. The BCT has preliminary plans to re-survey a sample of sites transitioned from the earlier Biobanking scheme to understand actual biodiversity gains resulting from the management of these sites.

The BCT's oversight of landholder's management actions to deliver biodiversity gains at BSA sites is limited by the level of landholder compliance with annual reporting requirements, and poor compliance data. In 2021, 58% of landholders with BSA sites (either passive or active) provided an annual report to the BCT.

DPE is leading work to improve the Scheme's operations and integrity, but this is not guided by a long-term strategy with clear goals or performance measures

DPE established an Integrated Improvement and Assurance Program (IIAP) for the Scheme in July 2021, which aims to enhance its operations and integrity. Progress reports on the program are provided to the Minister for Environment and Heritage. Ongoing reporting was provided to a committee of Cabinet twice in 2021 but ceased with the dissolution of that committee. DPE has been reporting quarterly on its progress implementing the IIAP to an Interdepartmental Reference Group, and a Stakeholder Reference Group that first met in March 2022.

Priority work streams for the IIAP cover policy and regulatory issues; operational and market development issues; technical/scientific work; and Scheme governance and oversight. Some activities have progressed under this program. In particular, DPE has improved training to development consent authorities to help them understand their role and responsibilities in the Scheme, and is continuing to develop these resources.

But some key priorities are not on track or facing critical delivery risks. The replacement of the Biodiversity Offsets Payment Calculator and establishing a framework for ensuring the sustainability of the Biodiversity Stewardship Payments Fund were listed as 'requiring action' in May 2022.

In June 2022, the NSW Government announced a commitment of \$106.7 million to establish the Biodiversity Credits Supply Fund and a related taskforce. The aim is for the fund to purchase priority credits upfront, which would be on-sold to development proponents. The rationale is that this would, among other things, improve price stability and create more certainty for landholders, which would in turn facilitate credit supply. One key risk of this fund is the concentration of market power, which may constrain the maturation of a competitive market and reduce the ability of landholders and developers to negotiate efficient market prices in the trading of credits.

Overall, it remains unclear how DPE is prioritising ecologically sustainable development, consistent with the Act, via the IIAP and related reforms. This is relevant in the context of the Scheme's operational need to support development, such as major projects, and is a risk given the absence of a strategic plan for the Scheme with measures related to biodiversity outcomes.

Recent proposed changes to the Scheme

In June 2022, DPE announced the establishment of a Biodiversity Credits Supply Fund. It advises that responsibility for establishing BSA sites will move from the BCT to a taskforce within DPE. DPE expects the fund to be operating in 2023.

At the time of writing, DPE and BCT have not implemented a new tool to reliably calculate how much to charge developers who are paying to transfer their offset obligations to the BCT. Issues with the current DPE tool have been raised since at least 2020. In August 2022, the new tool proposed by the BCT was approved by the Minister for Environment and Heritage.

This audit has not assessed the effectiveness of this tool or whether its introduction, and other recently proposed changes to the Scheme, will address the risks identified in this report. This will be a matter for DPE and the BCT to address once changes are finalised and implemented.

2. Recommendations

By December 2022, DPE should:

- establish governance arrangements with separate reporting lines to better oversee and manage risks related to the BCT and/or other agencies with multiple roles in the Scheme (for example as market participants and intermediaries, and as administrators of BSA sites)
- collate and maintain centralised information about offset obligations and discounting for major projects (State Significant Development and Infrastructure), including documentation related to ministerial decisions
- evaluate the overall quality of biodiversity assessment reports (for development and stewardship sites) and implement improvement strategies, including a quality assurance process, in collaboration with the BCT.

By July 2023, DPE should:

- 4. implement a long-term strategic plan for the Scheme that defines biodiversity goals with respect to the Act. The strategic plan should include:
 - clearly allocated roles between DPE and the BCT and other relevant agencies, to ensure effective Scheme oversight, delivery, and market operations
 - guidance to the BCT on timeframes and priorities for acquitting its acquired offset obligations, including a method for moving through its acquittal options
 - performance indicators for the Scheme's administration, including the BCT's activities such as the ecological monitoring of BSA sites
 - an approach to measuring and publicly reporting on biodiversity outcomes from the Scheme, including its contribution to State and regional biodiversity goals
- 5. enhance its public credit register to include unique credit identifiers, ownership and transaction history, and information about each offset obligation and rules against which each credit was retired
- 6. implement a resourced plan to improve the operation of the biodiversity credit market, including by improving the transparency of market information and by supporting adequate credit supply. The plan should allocate roles and timeframes for:
 - publishing enhanced information about current and expected credit supply and demand, and credit prices
 - proactively identifying potential Biodiversity Stewardship Agreement (BSA) sites
 - reducing barriers to landholders establishing BSA sites, and accelerating timeframes for the establishment of BSA sites on private land.

By July 2023, the DPE and the Biodiversity Conservation Trust should:

- 7. implement a decision-making and intervention framework to ensure adequate initial and ongoing funding for the long-term management of new and existing BSA sites
- 8. review the status of passive BSA sites and implement a plan to support biodiversity on sites that are at risk of not entering active management
- 9. establish protocols for supporting BSAs where biodiversity outcomes are not on-track due to events that cannot be reasonably controlled or planned for
- 10. implement plans to ensure ecological monitoring occurs on all BSA sites.

By July 2023, the Biodiversity Conservation Trust should:

11. report annually on the estimated number and type of offset obligations that can/cannot be met on a like-for-like basis, and the estimated costs for acquitting these within 12 months.

1. Introduction

1.1 Biodiversity and offsetting-type schemes

Biodiversity in New South Wales

The biodiversity in New South Wales is at significant risk, with almost 1,000 animal and plant species considered to be at risk of extinction. The NSW Biodiversity Outlook Report 2020 estimates that without effective management, only 50% of listed threatened species and 59% of listed threatened ecological communities will still exist in 100 years.

The NSW State of the Environment 2021 report identifies habitat destruction and permanent native vegetation clearing as having the biggest impacts on threatened species in the State. Habitat removal or fragmentation reduces its ability to support the needs of plants and animals, including how species can move within a habitat.

Extreme events precipitated by climate change, as well as the spread of pests and diseases, present risks to biodiversity. According to the NSW Government, the 2019–20 bushfires in New South Wales have added to the risk facing the State's biodiversity with about 5.5 million hectares of land burnt. This included areas with a known presence of 293 threatened animal species and 450 threatened plant species.

Biodiversity offsetting as an approach to conservation

When land clearing for development (such as buildings and infrastructure) negatively impacts on biodiversity, the impact can be offset by funding the protection and management of similar biodiversity in the same or other locations. According to the Organisation for Economic Cooperation and Development (OECD), biodiversity offsets are 'measurable conservation outcomes that result from actions designed to compensate for significant, residual biodiversity loss from development projects'. The OECD notes that offsets are intended to be the final step in a mitigation hierarchy whereby reasonable steps are taken first to avoid and minimise biodiversity impacts.

The International Union for the Conservation of Nature reports that in 2019, 37 countries around the world required some form of compensation for biodiversity loss, such as offsetting, as a legal prerequisite to development projects. Biodiversity offset schemes can be implemented using several approaches.

International literature on biodiversity offset-type schemes highlights their complexity and challenges given the time lag between biodiversity that is lost due to development and the gains delivered through offsetting. Maintaining long-term offset benefits to biodiversity is also a challenge.

1.2 The NSW Biodiversity Offsets Scheme

Legislative framework of the Scheme

The NSW Biodiversity Offsets Scheme (the Scheme) was established under the *Biodiversity Conservation Act 2016* (the Act). The purpose of the Act is to, 'maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development'.

The Act (section 1.3) identifies activities to support the achievement of its purpose. Activities that constitute core components of the Scheme include:

- to establish a scientific method to assess losses and gains in biodiversity values
- · to establish a framework to avoid, minimise and offset impacts of development
- to encourage landholders to enter voluntary agreements to conserve biodiversity
- to establish market-based conservation mechanisms through which the impacts to biodiversity values can be offset.

Other core components of the Scheme under the Act include:

- proponents of development projects must first consider whether they can avoid or minimise any negative impacts on biodiversity, and only offset any remaining impacts (section 6.2 (d))
- a standard must be adopted for a Biodiversity Assessment Method to be used in the Scheme that will result in 'no net loss' of biodiversity in the State (section 6.7 (3))
- that a public register of biodiversity credits is kept (section 9.7(1)(d)), with certain required information also specified in the Biodiversity Conservation Regulation 2017 (the Regulation).

The Scheme is implemented through the planning system in New South Wales, via development application requirements of the *Environmental Planning and Assessment Act 1979 Act (EP&A Act)*. This means that biodiversity assessments of proposed developments will be considered by consent authorities as part of the conditions for development approval. The Scheme applies to the following types of development:

- local developments for which local councils are usually the consent authority and which meet certain thresholds related to the area of land cleared or impacts on threatened species (Part 4 development under the EP&A Act)
- major projects, for which the Minister for Planning or their delegate is the consent authority (State Significant Developments and State Significant Infrastructure under the EP&A Act)
- sites seeking biodiversity certification over areas of land subject to development, for which the Minister for the Environment (or delegate) is the approver
- certain development activities undertaken by public authorities that are likely to have significant impacts on certain threatened species, and where the authority proponent has chosen to opt into the Scheme (Part 5 activities under the EP&A Act)
- other projects with proposed clearing of native vegetation, for which the NSW Native Vegetation Panel is the consent authority.²

² This includes native vegetation clearing that requires approval by the NSW Native Vegetation Panel under the *Local Land Services Act 2013* and the State Environmental Planning Policy (Biodiversity and Conservation) 2021.

Development of the Scheme

The Scheme commenced on 25 August 2017. The Scheme was part of the whole of government Land Management and Biodiversity Conservation reforms, informed by the 2014 review of biodiversity legislation in New South Wales.

The Scheme was preceded by several other offsetting-type schemes and approaches, including the 2008 BioBanking scheme, the 2010 Biodiversity Certification scheme, and the 2014 NSW Biodiversity Offsets Policy for Major Projects.

BioBanking agreements that were created under the *Threatened Species Conservation Act 1995*, and still in force at the repeal of that Act, remain active. These agreements were transitioned to the current Scheme for ongoing monitoring in 2017.

The Biodiversity Assessment Method and Accredited Assessors

The Biodiversity Assessment Method, established under section 6.7 of the Act, was developed by the Department of Planning and Environment (DPE).

Application of the Biodiversity Assessment Method provides decision-makers with a means of calculating the offsets required to compensate for the impacts of development and native vegetation clearing on biodiversity. The method also enables assessment of the expected improvements in biodiversity given specific land management actions on a Biodiversity Stewardship Agreement (BSA) site over a 20-year period. This means it should take around 20 years for improvements at a BSA site to compensate for biodiversity lost at a development site.

The Biodiversity Assessment Method is applied by assessors, typically ecological consultants, who DPE accredits under the Scheme (Accredited Assessors). DPE has also operationalised this method into a calculator that allows Accredited Assessors to determine the number and class of biodiversity credits that need to be acquitted for a development, and to be generated by the management of a BSA site.

Biodiversity Stewardship Agreements

Under the Scheme, a landholder establishes an offset site through a BSA, which is an agreement registered on the title of the land. Landholders can be individuals, or government entities and corporations. BSA sites are located in an area other than the immediate footprint of the development.

The BSA is a legal agreement with the Minister administering the Act, that is, the Minister for Environment and Heritage. The Biodiversity Conservation Trust (BCT) negotiate, sign and administer these agreements under delegation from the Minister.

A DPE-Accredited Assessor must prepare a 20-year management plan for the proposed BSA site, using the Biodiversity Assessment Method. The plan must be prepared using the relevant BCT template and is submitted as part of the application for a BSA on the site.

The BSA obliges the landholder to manage their land 'in perpetuity' to preserve or improve biodiversity. The landholder receives annual land management payments from funds managed by the BCT to do so. The BCT is required to undertake compliance monitoring of BSA sites.

Funds for long-term land management

The estimated total cost of long-term BSA site management is called the Total Fund Deposit. This deposit represents the net present value of the estimated costs of the required management actions, administration, and contingencies. It does not include a profit margin for the landholder. The BCT has developed a tool to help landholders calculate the deposit amount.

The Total Fund Deposit is required to be paid by the landholder into the Biodiversity Stewardship Payments Fund immediately following the sale of biodiversity credits.

The BCT manages the Biodiversity Stewardship Payments Fund, investing monies with NSW Treasury Corporation (TCorp), and makes annual land management payments to the landholder. In this way, the sale of biodiversity credits can generate ongoing, permanent funding for the management of the BSA site at which they were generated.

The sale of credits may also return a profit for the landholder. This represents the margin over the Total Fund Deposit paid into its Biodiversity Stewardship Payments Fund.

1.3 Offset options and the credit market under the Scheme

Options to meet offset obligations

Under the Scheme, proponents seeking to progress a development proposal will generate an offset obligation that quantifies, as a number and type of biodiversity credits, the unavoidable impacts on ecosystem or species biodiversity at the development site. The Scheme then requires that offset obligations are met or 'acquitted' before a development can proceed.

The Act and Regulation provides development proponents the following offset options:

- to purchase and retire appropriate credits from the market, or fund an approved alternative conservation action
- to set up a BSA site that will generate the required credits, and retiring these credits
- to pay into the Biodiversity Conservation Fund, which is managed by the BCT that must then source the required credits, or otherwise meet the obligation through alternative actions established in the Regulation
- major mining projects are also enabled to commit to deliver mine site ecological rehabilitation that creates the same threatened ecological community or threatened species habitat.

See Appendix two for detail on the rules to meet obligations.

Biodiversity credits, trading and retirement

Biodiversity credits are units that represent the biodiversity value lost from development and the expected biodiversity gains resulting from the required land management actions on a BSA site over a 20-year period. When a landholder enters into a BSA, the credits must be listed on the public register of credits that DPE is required to maintain under the Act. The assessed number of credits (by class) are then available for immediate sale.

The Scheme establishes two types of credits:

- ecosystem credits, for threatened ecological communities, threatened species habitat (where threatened species can be predicted given the landscape and vegetation), and other plant community types
- species credits, for threatened species that cannot be predicted to occur on or use a site
 based on the landscape and vegetation (survey or expert reports must be used to determine
 if these species are present).

Biodiversity credits can be traded across the Scheme. The credit market consists of 1394 different types of ecosystem credits, which are approved to be traded in 364 different offset trading groups, and 867 different species credits.

An approved transfer of credits results in a legally binding transaction of credit ownership from seller to buyer. The landowner and credit purchaser can negotiate a credit sale price, as long as certain requirements are met, including that the relevant proportion of the Total Fund Deposit is paid upon the credit transfer.

Credits can be traded for various reasons, in addition to a landholder selling credits to a developer to acquit their offset obligation. For example, it is possible for credits to be sold to persons who build a portfolio of credits for future trading. But, to acquit an offset obligation the credits must be retired, and once retired the credits can no longer be sold. There is also scope for philanthropic conservation trades that result in the voluntary retirement of credits.

Trading rules and like-for-like offsetting

The Regulation sets out rules for the types of species and ecosystem that can be used to acquit the offset obligations of a development proposal.

For threatened species traded as species credits, like-for-like rules require that impacts on that species must be offset with the same threatened species anywhere in New South Wales.

For native vegetation traded as an ecosystem credit, the like-for-like rules require that impacts must be offset with native vegetation in the same local area as the impact (based on near or adjacent subregions).

Additionally, the rules require the following for native vegetation that:

- if a threatened ecological community is impacted, the offset must be for the same community
- if the habit of a threatened species is impacted (other than a threatened ecological community), the offset must be native vegetation of the same class and in the same or higher offset trading group
- if the impacted native vegetation contains hollow bearing trees, then the offset vegetation must also contain hollow bearing trees.

See Appendix two for detail on trading and like-for-like rules.

Developer payments to transfer offset obligations

Development proponents have the option to pay directly into the Biodiversity Conservation Fund, rather than purchase credits from the market, to meet their offset obligation. If developers choose to do this, the obligation to acquit the offset transfers to the BCT. This can enable developers to proceed with their project.

The Act requires that the BCT applies the amount paid into the fund towards securing offsets (section 6.31). The BCT must source the required credits, or if the like-for-like rules cannot be met, then otherwise meet the obligation through alternative actions established in the Regulation. The BCT has a greater range of options than developers. These options are detailed in Appendix two.

The Biodiversity Offsets Payment Calculator was developed by DPE to calculate the value that development proponents must pay into the Biodiversity Conservation Fund. The calculator uses an econometric model that requires sufficient statistical information on trades to produce robust estimates and avoid volatile fluctuations in estimated prices.

In August 2022, the BCT received Ministerial approval to implement a new system to calculate the required developer charges and replace the Biodiversity Offsets Payment Calculator.

1.4 Agency roles and responsibilities

Department of Planning and Environment

DPE is the principal government agency responsible for driving sustainable growth in NSW. DPE includes the Environment and Heritage Group with functions such as biodiversity conservation, national park management, and heritage conservation; and the NSW Planning Group, which undertakes functions such as the assessment and approval of State Significant Development and State Significant Infrastructure ('major projects'), urban and regional land use planning and reform activities.

DPE is responsible for the Scheme's design and elements of its implementation under the Act. This includes responsibility for:

- establishing the Scheme's policy, legislative and regulatory framework
- maintaining public registers, including for credits held, credits wanted, and expressions of interest for establishing BSA sites
- developing implementation tools, methodologies and standards
- administering the registration, transfer, retirement, suspension, and/or cancellation of credits.

The Scheme is primarily administered through the Environment and Heritage Group which is intended to work with the community, business and government to protect and strengthen the natural environment. The group includes the Biodiversity, Conservation and Science Division.

DPE has staff allocated to the Scheme across policy, strategy and governance, assessment and systems, operations, and inquiry functions. Staff from other parts of DPE also support the Scheme's implementation as a component of their roles.

The Biodiversity Conservation Trust

The BCT is a statutory not-for-profit body established in 2017 under Part 10 of the Act. The BCT sits within the portfolio of the Minister for Environment and Heritage. The purpose of the BCT is to 'enhance and conserve biodiversity across NSW'.

The BCT delivers private land conservation programs, and fulfils certain roles under the Scheme allocated to it by the Act. These include:

- administering BSAs, including issuing biodiversity credits upon registration of an agreement, and monitoring compliance with agreement terms and land management actions
- managing funds in the Biodiversity Stewardship Payments Fund to provide payments to landholders
- securing offsets on behalf of development proponents who opt to pay into the Biodiversity Conservation Fund to meet their offset obligations
- providing technical and financial assistance to landholders for the purpose of achieving conservation goals.

1.5 About the audit

This audit assessed whether DPE and the BCT have effectively designed and implemented the NSW Biodiversity Offsets Scheme to compensate for the loss of biodiversity due to development. The audit included an examination of:

- governance arrangements, roles and responsibilities, and rules and procedures for establishing the market, establishing BSA sites, and for ensuring offset obligations are met
- how demand and supply sides of the market are operating, and steps taken to support market development
- quality assurance around biodiversity assessment reports by DPE-Accredited Assessors
- how the BCT and developers are meeting their offset obligations
- monitoring and compliance work to oversee the management of BSA sites and support biodiversity outcomes
- oversight of offset sites created under previous schemes and transitioned to this Scheme.

The audit did not examine specific credit transactions and retirements, or the management of individual BSA sites. It did not involve a review of the scientific basis of the Biodiversity Assessment Method. The process of biodiversity certification and the application of the Scheme to land clearing that is approved by the NSW Native Vegetation Panel, was also not included in the audit scope.

More information about this audit is provided in Appendix four.

2. Status of the credit market

This section presents an overview of the status of the biodiversity credit market in New South Wales. It describes development of the market under the Scheme in the context of transitional arrangements from previous schemes, and the extent of market participation and transactions to date. It also presents information about emerging trends in credit demand and supply.

Background

A purpose of the *Biodiversity Conservation Act 2016* (the Act) is to establish a market-based conservation mechanism through which impacts on biodiversity can be offset. Sufficient credits of appropriate types, which are well matched to demand, are necessary for enough transactions to inform prices and enable efficient like-for-like offsetting. For transactions to occur efficiently in the market, participants require reliable and easy-to-access information about supply, demand and price.

The Scheme was established in 2017 with an existing credit supply and offset obligations (credit demand) as regulations had been introduced to preserve and transition credits and obligations from previous schemes including the BioBanking Scheme, which started in 2008.

Credits under the BioBanking scheme are referred to as 'BBAM credits', and credits under the current Scheme are referred to as 'BAM credits'. BBAM credits are still available, and the transitional arrangements enable DPE to determine the 'reasonable equivalence' of these to the current Scheme's credit numbers and classes. DPE has stated that reasonable equivalence of credits is based on ecological not financial equivalence.

2.1 Market activity and development

The market is not well developed: most credit types have never been traded and credit supply has been slow in the context of growing demand

The biodiversity credit market consists of 1394 different types of ecosystem credits, which are approved to be traded in 364 different offset trading groups, and 867 different species credits. Most of these groups and credits, around 86% of ecosystem offset trading groups and 97% of species credits, have never been traded.

The large number of different credit types under the Scheme reflects the complexity of biodiversity and an intent to ensure that the same biodiversity that is impacted by development is offset at Biodiversity Stewardship Agreement (BSA) sites. However, this adds to the challenge of establishing an effective market for the Scheme.

Demand for credits from offset obligations generated by development is projected to grow. For example, DPE-Accredited Assessors did 972 site assessments of biodiversity impacts for proposed developments between August 2017, when the Scheme commenced, and February 2022. Yet uptake of BSA sites, which are required to generate credits, has been limited. Since August 2017, 37 landholders have entered BSAs. The BCT publicly report there are around 226 BSAs, but this figure includes 189 BSAs that started as BioBanking agreements, some as early as 2011 before being transitioned to the Scheme.

At December 2021, there were 58 applications for BSAs in progress. It can take up to 34 months to establish a BSA. As such, the supply of credits compared to demand remains limited in the near term. See section 5.1 for information on support provided to establish BSAs.

Further, credit supply from established BSA sites has been limited. Forty per cent of the 226 BSA sites have not sold enough credits for their Total Fund Deposits to be met. This means that biodiversity management actions are not yet being funded. See section 6.1 for a discussion on the relevance of this to issue to biodiversity outcomes and credit quality.

DPE and the BCT's public information about the Scheme and market does not clearly communicate these details about the status of the Scheme and market maturity. Other gaps in market information are discussed in section 2.2, and data on the potential shortfall and mismatch between supply and demand is presented in section 2.3.

The BCT's acquired obligations from developers have been increasing year-on-year

The Act allows developers to acquit their offset obligations by paying into the Biodiversity Conservation Fund, which the BCT manages. The Act requires that the BCT applies the amount paid into the fund towards securing biodiversity offsets. This can include obligations for biodiversity that is rare, or where an offset is difficult to source.

Since the Scheme commenced in 2017, around 340 development proponents have made payments into the Biodiversity Conservation Fund, worth around \$90 million, as at 9 May 2022. For these obligations, developers have not purchased credits in the market, nor established their own BSA sites to generate the necessary credits. Over the same period, fewer than 27 development proponents have acquitted obligations by purchasing and retiring credits generated under the current Scheme in the market.

The BCT's acquired obligations from developers have been increasing year-on-year. The following table illustrates the increase in the number of obligations from developments, credits and amount paid into the Biodiversity Conservation Fund.

Exhibit 1: The obligations transferred from development proponents to BCT through payment into the Biodiversity Conservation Fund

Year paid	Number of development proponents that have transferred obligations into the Biodiversity Conservation Fund	Number of obligations transferred	Total amount (\$)
2017–18	3	213	381,514
2018–19	31	4,792	9,363,331
2019–20	74	5,223	10,731,500
2020–21	104	6,433	26,153,762
2021-22 (to 9 May 22)	128	9,361	41,983,419
TOTAL	340	26,022	90,077,166
Unpaid*	25	2,380	10,511,703

Note: The BCT has indicated that most of the 'unpaid' are recent applications.

Source: AO analysis of BCT data 2022.

Around 50% of obligations the BCT has acquired (175 of 365 obligations, including recent but unpaid obligations) have been for developments with relatively small obligations, for example obligations less than \$50,000. Over half the money transferred into the Biodiversity Conservation Fund (about \$58 million, including for the recently transferred but unpaid obligations) relates to around five per cent of developments: these are developments with large obligations of more than \$1 million each.

Of all the credits created under the Scheme that have been retired, we estimate that the BCT has purchased and retired around 25%.

2.2 Market information and transparency

DPE and the BCT's information to the market does not present a reliable and holistic picture of supply and demand to facilitate credit transactions

DPE and the BCT make lists of credit supply, demand and some transactions available, but this does not present a holistic picture of the market to inform participants about the risks and opportunities of setting up BSA sites and/or purchasing credits. Information gaps can also incentivise developers to pay into the Biodiversity Conservation Fund to meet their obligations if they cannot readily locate credits.

The Biodiversity Conservation Regulation 2017 requires DPE to provide a public register of credits and prescribes information that must be included in the register that is relevant to facilitating market transactions. DPE's publicly available list is missing key information as required in the Regulation. Key examples include:

- location details in the list are incomplete for many issued credits, making it difficult for potential buyers to locate suitable credits that meet the like-for-like rules (section 9.4(c-d) requires that the public register of credits includes locational details (Lot and DP number and the local government area))
- contact details on the list are missing for some issued credits (section 9.4(b) requires that the
 public register the contact details of the current holder of the credits or of the agent of the
 holder)
- the list does not indicate if issued credits have been committed for retirement against an obligation, and so are no longer available for sale (section 9.4(e) requires that the public register of credits include information on the status of credits. It provides examples of credit status as 'available, retired or committed').

DPE does not collect and publish information on whether credits (from the current and previous schemes) have been committed to an obligation, even though this information is an important aspect in understanding available credit supply.

Further, DPE's credit demand list is not integrated with the list of credits that the BCT is seeking to meet its obligations. The BCT's list is interactive and links to its portal which can be used by credit holders for offering credits to the BCT. Having this information presented in two locations and formats makes it more difficult for landholders, and other credit holders, to understand the demand for their credits. DPE's credit demand may also not provide a reliable indicator of the total demand for credits at any point in time.³

In December 2021, DPE published information on indicative demand for ecosystem credits (as of November 2021) based on forecast significant development and infrastructure projects. In 2022, DPE is developing an updated methodology to predict future demand, and supply and demand dashboards. The dashboards are intended to display data on the results of potential development and BSA site assessments, including the number of assessments, the land area assessed, the number of credits generated, and the number of offsets required. These are scheduled for public release in late 2022.

20

³ On a March 2022 extract of the DPE Credit Demand List, only one developer was listed requiring credits.

The lack of easily accessible price and transaction information is a transparency issue and market development risk

Credit price information is also important to both landholders and developers for their confidence in the market and to facilitate its development, but DPE's public list of transactions does not provide a transparent view of market activity.

- The BCT establishes forward commitments with landholders and purchases credits via fixed price offer rounds and credit tenders. This transaction and price information is not readily available as the transactions list does not specify those transactions in which the BCT was a party.
- DPE's credit transaction list provides some information on prices paid for a number of offset trading groups and species credits, but DPE maintains separate listings for credit sales and credit retirements. This makes it difficult to gauge the number of transactions in the market and to trace the movement of a credit from sale to retirement from the market.
- DPE's credit transactions list contains incomplete information about the development approval or consent requirements against which credit retirements or transfers were made. This makes it difficult for DPE to have oversight of whether credits are being retired appropriately and whether consent conditions are being met (the risk that this presents to the integrity of the Scheme is discussed in section 4.3).

Difficult-to-locate price information is a key market development risk in the context of reports that the Biodiversity Offsets Payments Calculator is being used by participants to estimate credit prices in lieu of other market information. This was not the intended purpose of the calculator, and it has been reportedly operating as a low 'price ceiling' (see below for detail).

In June 2022, DPE released a Biodiversity Credits Market Sales Dashboard, with historical information about credit sales under the current scheme, and a Biodiversity Credit Price Guide, to help market participants estimate prices for credits.

There are no financial product disclosure statements accompanying the issuing, transaction and retirement of biodiversity credits. Although not a requirement for the Scheme, the absence of such a statement or similar information is not consistent with Good Disclosure Principles for financial products outlined by the Australian Securities and Investment Commission. These guidelines state that product disclosure should be timely, relevant and complete, promote product understanding, promote product comparison, highlight important information, and have regard to consumer needs.

The calculator used by developers to determine how much to pay to acquit their obligations is impacting credit price information and market development

The Biodiversity Offsets Payment Calculator is considered unreliable by the BCT, DPE and other stakeholders, but remains the current, approved tool for developers to use to calculate how much to pay into the Biodiversity Conservation Fund to transfer their obligation to the BCT.

The calculator was developed by DPE in 2017. It uses an econometric model which requires sufficient statistical information on market trades to produce robust estimates and avoid volatile fluctuations in estimated prices. In practice, the actual volume of credit sales in the market has been very low for many credit classes, leading to pricing volatility in some cases.

DPE has not updated the calculator since June 2020, citing a lack of sufficient market data (transactions) to inform an update. However, DPE has also kept it available for public use because a replacement has not been approved, and public consultation indicated stakeholders preferred that the calculator remain available at least until a new system was implemented.

The BCT has advised that it is reasonable to conclude that the Biodiversity Offsets Payment Calculator is having undesirable impacts on the market. It has stated that prices generated by the calculator:

- have contributed to the increasing number of development proponents paying into the Biodiversity Conservation Fund over the past 12 months, as this option may be cheaper than what the market can offer
- make it harder for landholders to make a reasonable return from selling credits, as they
 could be competing with the price generated by the calculator that may be operating to set a
 low 'ceiling price'
- create a financial risk for the BCT by potentially underestimating the amount it will need to meet its acquired obligations (see section 3.3).

DPE and the BCT consulted with stakeholders and developed a new tool to replace the calculator. The status of this work and the new tool, the Biodiversity Conservation Fund (BCF) Charge System, is discussed in section 3.3.

DPE lacks information about the status of unretired credits, limiting its ability to understand the market and sources of credit supply

DPE is responsible for the administration of transferring and retiring credits, but does not collect information about the purpose of a credit sale. As such, DPE does not have reliable information about the large number of existing credits, and whether these could be engaged as a source of supply to better facilitate market operations.

As shown in Exhibit 2 there are over a million unretired credits, mostly from the previous BioBanking scheme (BBAM credits). But DPE does not know what proportion of these unretired credits are being held to meet an offset obligation for a development assessed in BBAM credits, and what proportion remains available to the market.

Exhibit 2: Numbers of unretired credits for the previous scheme (BBAM) and current Scheme (BAM)

	Total credits	Ecosystem credits	Species credits
Unretired BBAM credits (BioBanking scheme)	1,067,624	154,041	913,583
Unretired BAM credits (current Scheme)	146,632	78,359	68,273

Note: These are credits that have been issued but not yet retired. The BBAM species credits were generated under a different scheme and metric. If converted to BAM credits, via equivalence, the number of credits could be an order of magnitude lower i.e., 900,000 species credits could convert to fewer than 90,000 credits.

Source: DPE March 2022.

Government agencies holding these unretired credits include the BCT, agencies with responsibilities for roads and transport, water supply, school infrastructure, regional planning and development, and 11 local councils. Any credits not owned by government agencies or councils are owned by individuals and corporations, including landholders who have generated credits they have not yet sold.

If DPE collected information on the reason for credit sales, it would have a better understanding of how these groups holding credits intend to use them, and of the proportion that could be available to meet current and future demand.

2.3 Emerging trends

Given the limitations in the publicly available information about the market, we analysed data provided to the audit by DPE to better understand the status of the Scheme and market. This is presented below, along with additional analyses undertaken and provided by DPE.

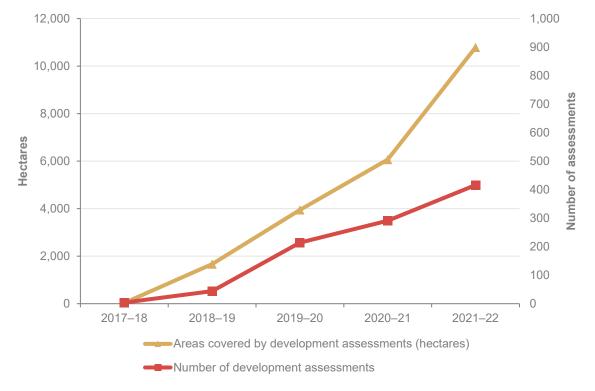
Some of the analyses below are based on credits calculated in completed site assessments of proposed developments and of potential BSA sites since the Scheme commenced up to February 2022. These analyses estimate potential demand and supply of BAM credits. The site assessment data may not fully translate to actual demand for, or supply of, credits because not all developments will proceed (or could proceed but with a different impact area or 'footprint'), and not all BSA sites will be established.

Demand for credits is growing rapidly, predominately driven by major projects

The evidence shows that demand for credits is growing rapidly. DPE states that the \$112.7 billion State government infrastructure pipeline carries a preliminary credit requirement estimate for select major projects in the order of \$6 billion.

Specific data provided by DPE on BAM credits under the Scheme shows that 972 assessments have been undertaken for proposed developments (from August 2017 to February 2022). These assessments, shown in Exhibit 3, indicate that biodiversity may be impacted on a total of around 22,500 hectares of land. Exhibit 4 below shows that a total of around 340,000 ecosystem credits and 1.7 million species credits could be required to offset these impacts.

Exhibit 3: Land area covered by development assessments under the Scheme each year, and number of assessments, 2017 to 2022



Source: AO analysis of DPE data 2022 (August 2017 to February 2022). Figures displayed are annual increases - not totals.

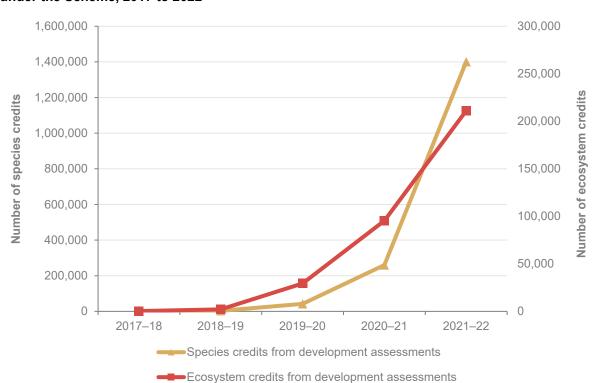


Exhibit 4: Potential credit demand identified each year in development site assessments under the Scheme, 2017 to 2022

Note: One flora species was assessed as requiring around 730,000 credits in 2021–22. Figures displayed are annual increases - not totals. Source: AO analysis of DPE data 2022 (August 2017 to February 2022).

Around 25% of the site assessments in Exhibit 3 relate to major projects (that is, State Significant Development or State Significant Infrastructure), and around 90% of the ecosystem credit obligations and 96% of the species credit obligations in Exhibit 4 relate to major projects.

As noted, the potential credit demand shown in Exhibit 4 may not fully translate to obligations that are issued with development approvals. This is because the approval process could result in a higher or lower obligation, or a development may not go ahead. Further, the Minister for Planning can change or discount the obligation for major projects.

DPE does not, however, maintain readily accessible data on offset obligations in development consent conditions (see section 4.1). This creates a risk that DPE does not have a consolidated record of outcomes and reasons for these ministerial decisions.

There is potential for a substantial shortfall in the current supply of relevant ecosystem and species credits

Analyses of DPE data on issued credits indicates a significant potential shortfall in matched ecosystem and species credits. This data reflects credits issued from finalised BSA sites and obligations established from approved developments.

As shown in Exhibits 5 and 6, matching data on issued ecosystem credits in DPE's credit supply list (164,471 ecosystem credits) with its credit demand list shows that nine per cent of demand can be matched to supply by plant community type and bioregion.

Exhibit 5: Demand for ecosystem credits that is matched by supply, March 2022

	Matched by plant community type and bioregion
Ecosystem credit demand	63,299
Number of ecosystem credits in demand that can be matched with supply	5,869
Excess ecosystem credit demand not met by supply	57,430
Percent of ecosystem credit demand matched	9%

Note: Credit supply data includes those pending review. Matching plant community type by sub-bioregion yields a similar result. Source: AO analysis of DPE data 2022.

Matching data on issued species credits in DPE's credit supply list (138,784 species credits) with its credit demand list indicates that four per cent of demand could be matched to supply.

Exhibit 6: Demand for species credits that is matched by supply, March 2022

	Matched by species ID
Species credit demand	191,495
Number of species credits in demand that can be matched with supply	7,472
Excess species credit demand not met by supply	184,023
Percent of species credit demand matched	4%

Note Credit supply data includes those credits pending review. There were 26,544 credits in the supply register marked as 'equivalence credit' that could not be included in the analysis because they had no species ID.

Source: AO analysis of DPE data 2022.

Credit supply is likely to increase but there remains a significant risk of a shortfall in future credit supply, including for vulnerable and endangered species

Potential BSA sites assessed under Scheme between August 2017 and February 2022 could generate around 360,000 ecosystem credits and almost 1.8 million species credits (noting that 1.6 million credits were for one species). But, our analyses of potential credit demand and supply indicate the significant risk of a substantial future credit supply shortfall compared to demand, where a like-for-like match between the obligation and credit is sought. There are also various barriers to landholders establishing and finalising sites (see section 5), and credits generated from finalised BSAs may not be sold if they are not in demand.

Specifically, our analyses show that around 30% of offset trading group demand can be matched with credit supply according to the same offset trading group. Also, just one per cent of flora species demand and 16% of fauna species demand can be matched to the credit supply. Exhibit 7 presents this information in terms of potential demand that is estimated to not be met by future supply.

Exhibit 7: Potential future credit demand not met by supply, as at March 2022

	Total credit demand	Total credit supply	Credit demand not met by supply	Proportion of credit demand not met by supply (%)
Offset trading group	341,000	305,000	234, 000	69
Flora credits	1,139,000	1,633,000	1,131,000	99
Fauna credits	742,000	146,000	624,000	84

Note: Offset trading group and credit numbers are rounded to the nearest thousand.

Source: AO analysis of DPE data from site assessments 2022.

DPE produced analyses on the assessment results of proposed development and potential BSA sites, identifying the top 20 mismatches of credit supply and demand. The list covers poorly matched species, ecosystem and threatened ecological community credits, and offset trading groups. We compared DPE's lists with species and ecological communities listed as critically endangered, endangered, and vulnerable according to New South Wales legislation (Exhibit 8). Our analyses that follow highlight substantial potential credit undersupply for a number of vulnerable species, and endangered ecological communities.

Exhibit 8: Definitions of threatened species and ecological communities in New South Wales

Section 4.4 of the *Biodiversity Conservation Act 2016* sets out three categories the scientific community can classify as threatened species within New South Wales. These are defined as:

- Critically endangered if the species/ecological community is facing an extremely high risk of extinction in Australia in the immediate future
- Endangered if the species/ecological community is facing a very high risk of extinction in Australia in the near future
- Vulnerable if the species/ecological community is facing a high risk of extinction in Australia in the medium-term future.

Source: Biodiversity Conservation Act 2016 section 4.1-4.4.

Of the 20 species of flora identified by DPE as having poorly matched credits, 11 of these species are listed as vulnerable, eight as endangered, and one is not listed. The three species with the largest potential credit shortfall are:

- Coolabah Bertya, listed as vulnerable with an undersupply of 733,583 credits
- Commersonia procumbens, listed as vulnerable with an undersupply of 49,814 credits
- Tylophora linearis, listed as vulnerable with an undersupply of 40,536 credits.

Of the 20 species of fauna identified by DPE as having poorly matched credits, 16 of these species are listed as vulnerable and four as endangered. The three species with the largest potential shortfall are:

- Squirrel Glider, listed as vulnerable with an undersupply of 106,592 credits
- Eastern Pygmy Possum, listed as vulnerable with an undersupply of 97,917 credits
- Glossy Black Cockatoo, listed as vulnerable with an undersupply of 41,492 credits.

Of the 20 threatened ecological communities identified by DPE as having poorly matched credits, 16 communities are listed as endangered, three are critically endangered and one is vulnerable. There are eight threatened ecological communities that have a potential undersupply of credits. The three with the largest potential undersupply are:

- White Box Yellow Box Blakely's Red Gum, listed as critically endangered with an undersupply of 21,830 credits
- Myall Woodland in the Darling Riverine Plains, listed as endangered with an undersupply of 20,997 credits
- Central Hunter Grey Box—Ironbark Woodland, listed as endangered with an undersupply of 5,584 credits.

3. Scheme goals, strategy and safeguards

This section assesses the clarity and alignment of the goals of the Scheme to key features of its design and operations. It also examines structural elements of the Scheme that aim to maintain integrity within administering agencies, and the status of actions to address risks or issues.

Background

The *Biodiversity Conservation Act 2016* (the Act) sets out the legal framework for the Scheme. Given the complexities, financial interests, and range of stakeholders associated with the Scheme, it requires strong safeguards. Transparency and assurances around the Scheme's integrity are also relevant to participants' confidence in it, which in turn is important for market development.

Core components of the Scheme, identified in section 1.3 of the Act, are to be consistent with the 'principles of ecologically sustainable development'.

The Act and other administrative arrangements of government allocate responsibility to DPE and the Minister for Environment and Heritage for the Scheme's design and elements of its implementation. This includes responsibility for the Scheme's policy, legislative and regulatory framework.

Responsibility is allocated to the BCT for implementing and operating certain elements of the Scheme. This includes administering Biodiversity Stewardship Agreements (which generate credits) and securing offsets on behalf of development proponents who pay into the Biodiversity Conservation Fund to meet their offset obligations.

This broad legislative framework is not intended to detail responsibilities for the full range of roles and activities that agencies need to take to implement and regulate the Scheme effectively, and ensure its good governance. Agencies should do this as part of sound and transparent public administration.

3.1 Defining goals, objectives and priorities

DPE has not clearly articulated goals and performance measures for the Scheme and how these are expected to contribute to biodiversity outcomes in line with the Act

High level principles and directions for the Scheme are set out in the Act, including its consistency with 'ecologically sustainable development'. The terms 'compensate' and 'offset' are also used with respect to the Scheme in the Act. But DPE has not clearly defined these key terms for operational, performance measurement or evaluation purposes, nor established Scheme specific goals and performance indicators.

The NSW Government's Guide to Better Regulation (TPP 19-01) states that the objective of government action should be clear, consistent with existing objectives or policies, and measurable. It also states that performance measures should be developed based on the objectives of regulation.

There are no biodiversity-specific outcome measures for the Scheme, such as measures of its expected contribution to maintaining biodiversity at a State and regional level. DPE has not made a clear statement on what success for the Scheme would look like in the context of environmental and economic policy priorities, and the progress of major projects.

DPE has advised that the 'no net loss' of biodiversity standard that is used in the Biodiversity Assessment Method (outlined below) is not intended to provide a standard for the Scheme as a whole. The lack of clarity around what the Scheme should be achieving, or contributing to, means that it is difficult to determine what an acceptable level of 'compensation' for biodiversity loss due to development would be, or whether gains achieved through the Scheme will be sufficient to 'offset' impacts.

The Scheme has been operating since 2017, but internal DPE documents, including briefing materials for the former Minister for Environment and Energy, indicate that key policy questions related to the priorities of the Scheme are poorly defined. DPE has expressed various aims and priorities for the Scheme in its public and internal communications. Some variability in expression could be appropriate for different audiences, but there is a lack of alignment and consistency in how the Scheme is described overall (see Exhibit 9).

Exhibit 9: Various expressions of the goals, aims and priorities of the Scheme

The Scheme:

- provides a transparent, consistent and scientifically based approach to biodiversity assessment and decision-making
- is a framework for offsetting unavoidable impacts on biodiversity from development with biodiversity gains through landholder stewardship agreements
- was established to enable proponents to address environmental impacts from development, flexibility and efficiently
- is intended to provide a comprehensive approach to managing biodiversity offsets, seeking to foster a market that delivers effective environmental and economic outcomes for New South Wales.

The DPE website in 2022 also states that one of the goals of the Scheme is to ensure that development does not have 'unacceptable' impacts on native ecosystems and species.

Source: AO collation of DPE documentation.

DPE is developing a draft Monitoring, Evaluation, Reporting and Improvement Framework, which is intended to provide a range of performance indicators for the Scheme. The estimated completion date for the framework is June 2023.

DPE has established rules for varying from like-for-like offsetting, but has not developed a method for assessing how their application could impact biodiversity outcomes

DPE has not developed measures to assess how the application of flexibility to vary from like-for-like offsetting will impact biodiversity, and therefore whether this is consistent with the purpose of the Act.

The Scheme's like-for-like rules seek to ensure that negative biodiversity impacts from development are offset with similar biodiversity (see Appendix two), and there is scope under the Biodiversity Conservation Regulation 2017 that allows development proponents options to vary from these rules. Developers can also pay into the Biodiversity Conservation Fund to transfer their offset obligation/s to the BCT. This enables the developer to proceed with their project. The BCT has a wider range of options than developers to meet their obligations, such as funding conservation actions and other measures approved by the Minister for Environment and Heritage.

DPE has provided standards and guidance for developers and consent authorities to structure decision-making when they are evaluating options to acquit offset obligations. But DPE has not assessed or set measures to evaluate whether, in practice, this flexibility is:

- operating consistent with the intent of the Act to support ecologically sustainable development, noting biodiversity outcomes for the Scheme have not been defined
- functioning to support the establishment of an efficient market, noting the potential impacts on market development that these rules afford the BCT.

This lack of assessment or measurement is relevant in the context of DPE documentation showing that, during the establishment of the Scheme, the (former) Office of Environment and Heritage provided advice that varying from like-for-like offsetting is sub-optimal for biodiversity outcomes. The agreed hierarchy of options and variations represents a negotiated outcome between government policy priorities concerned with offsetting biodiversity impacts and providing flexibility to support development. This evidence is summarised in Exhibit 10.

Exhibit 10: Considerations provided by the (former) Office of Environment and Heritage about the implications of varying from like-for-like rules

- Restricting (like-for-like offsetting) to bio-regions is consistent with the purpose of the *Biodiversity Conservation Act 2016* 'to conserve biodiversity at bioregional and State scales'.
- A threatened ecological community is a unique combination of plants, animals and habitats that the NSW Scientific Committee has identified is facing a high risk of extinction. In recognition of this it is appropriate that under the like-for-like rules offsets should represent the same ecological communities that were impacted.
- Better biodiversity outcomes are achieved when offset sites are located closer to the impact as the site will provide habitat for a greater proportion of the threatened species impacted by development.
- Allowing offsetting with anything more threatened as a first preference will result in more entities becoming threatened and will not maintain diversity.
- Critically endangered entities are our most threatened biodiversity. Requiring like-for-like offsetting for
 these entities will help to ensure that this biodiversity is maintained and will increase public confidence in
 the offsets scheme.
- Restricting proponents to only funding a like-for-like action identified on the schedule will give the community confidence that the proponent's actions will deliver genuine benefits to biodiversity.
- The better environmental outcome would be to provide offsets rather than supplementary measures in the majority of cases. Offsets have the potential to benefit many species where the supplementary measures are species specific.

Source: AO collation of DPE documentation on the development of rules for offsetting.

DPE's 'no net loss' of biodiversity standard reflects the existing threats to biodiversity

The Act states that, when establishing the Biodiversity Assessment Method, the Minister is to adopt a standard that, in the opinion of the Minister, will result in no net loss of biodiversity in New South Wales (section 6.7 (3)). DPE is responsible for developing this standard.

The 'no net loss' of biodiversity standard that DPE developed for the Scheme means that offset obligations, if acquitted in a like-for-like manner by number and type of credit, should ensure that biodiversity loss is not accelerated by development activities. This is because the standard, as described in the operational manual for the Biodiversity Assessment Method, is set against a 'business as usual' scenario. This scenario assumes an existing decline in biodiversity in New South Wales that reflects the threats which already exist for reasons other than development, such as invasive species and climate change.

3.2 Governance and safeguards

The BCT has inadequate safeguards to mitigate the conflict between its role in facilitating credit supply and its role as market intermediary and market participant

The design of the Scheme allows for the BCT to have roles that, from a structural and market design perspective, can come into conflict. Such conflicts exist between the following roles and activities:

- in facilitating credit supply, including enabling the establishment of BSAs and administering those agreements, including compliance activities
- as a market intermediary, by acquiring offset obligations from developers
- as a market participant, by purchasing credits to offset acquired demand.

These roles were created through the establishment of the Scheme under the Act. The BCT has separated responsibilities for these roles into separate teams within the organisation to manage perceived, potential or actual conflicts of interest, and avoid any actual or perceived advantage in the market.

However, the BCT's safeguards for assuring the effectiveness of this separation have not been adequately defined. Further, the stated separation of functions is not maintained through its governance systems as the separate teams report via a single reporting line through the BCT Chief Executive and the BCT Board. The same subcommittee of the BCT Board has oversight of both the credit supply creation and demand offsetting functions.

This creates various risks, including that the BCT's resources will be prioritised towards facilitating the establishment of BSA sites to secure offsets to meet its acquired obligations, at the expense of facilitating market development towards broader Scheme outcomes.

Another risk is to participants' confidence in the market owing to (among other things) the BCT's greater access to market information, and the unrestricted growth in offset obligations it is acquiring from developers. This risk to market confidence is compounded by limitations in the pricing of developer charges (discussed at 2.1) that incentivise developers to pay into the Biodiversity Conservation Fund and transfer their obligation to the BCT for acquittal, at the expense of market participation.

In June 2022, the DPE advised that the role of BSA establishment will be transferred from the BCT to be managed by DPE, as part of a taskforce being established for the newly announced Biodiversity Credits Supply Fund. At the time of writing, details of this transfer were not available including proposed roles and responsibilities and a timeline.

In principle, transfer of the BSA establishment function may help to resolve some of the tension with BCT's role in the market.

DPE introduced a Scheme-specific conflicts of interest protocol in late 2021 to address policy gaps

DPE introduced a specific conflicts of interest protocol for the Scheme in November 2021, more than four years after it commenced in 2017. Prior to this, the existing DPE-wide conflicts of interest policies were in place to cover the Scheme. The new protocol provides Scheme-specific advice on managing conflicts of interest for staff within DPE and the BCT.

The Scheme-specific protocol was informed by findings from a DPE-commissioned review into the need for an enhanced approach to identifying and managing conflicts in relation to the Scheme, and by the BCT's existing policy on staff participation in BCT's programs. DPE acknowledged that this Scheme should have had stronger and more specific safeguards from the outset, given the high level of risk.

Since late 2021, DPE has also implemented changes to strengthen its department-wide conflicts of interest policies and improve the visibility of declarations across the department. DPE now requires its staff to submit annual conflict declarations via a portal (the 'Ethics Portal'), which is intended to provide central oversight of management strategies for conflicts. It also requires that staff with 'high-risk defined interests' offload these within 12 months. In March 2022, DPE also updated its Code of Ethics and Conduct.

DPE provided the audit with conflict of interest management plans for four staff with what are now defined as 'high-risk defined interests' in the Scheme. These declarations and management plans were made prior to the new protocol and relate to staff with an interest in land generating credits established under the BioBanking scheme. Two of these staff are no longer with DPE, while the remaining two will be required to comply with the new protocol. DPE advises that no new high-risk interests have been declared since it was introduced.

The BCT has largely aligned its existing policy with DPE's conflicts of interest protocol for the Scheme, but this could be strengthened

The BCT Board approved a decision in 2018 to restrict staff participation in BCT programs to those programs without funding, and a policy to this effect has been in place since December 2020. In 2022, the BCT updated this policy to refer to and better reflect the requirements of DPE's Scheme-specific conflicts of interest protocol, and DPE's updated Code of Ethics and Conduct. The BCT published a revised policy on staff participation in BCT's programs in April 2022.

The BCT has provided evidence of conflicts of interest declarations being logged in the DPE Ethics Portal, as required under the new protocol. It has also taken steps to improve staff awareness and increase compliance with the DPE's Code of Ethics and Conduct, and conflicts of interest declaration requirements. For example, the BCT has provided evidence of training around 45 staff in the protocol in January 2022.

However, there are two key weaknesses with the BCT's policy on staff participation in its programs:

- The BCT policy is far narrower than DPE's Scheme-specific protocol and Code of Ethics and Conduct with respect to considering the context in which a conflict of interest exists and should be declared: the BCT policy refers narrowly to considering the interests of 'close family members'.
- Certain ethical breaches and misconduct issues appear only to apply to new employees
 under the BCT policy. Specifically, it is only under the New Employee section of the policy
 that the following breach is defined: to, 'use knowledge gained through employment with the
 BCT regarding credit values for private benefit...may be considered a breach of ethical
 standards and could be treated as a misconduct issue'.

Addressing these weaknesses is needed to enhance the BCT's policy alignment with DPE's Scheme-specific protocol and ensure that the BCT can support effective conflict of interest management.

3.3 Strategic planning and improvement

DPE did not adequately plan for and manage risks when implementing transitional arrangements from previous scheme, creating risks to outcomes under the current Scheme

The effectiveness of the current Scheme has been negatively impacted by inadequate transitional arrangements from previous schemes, particularly the BioBanking scheme. DPE has provided limited information on any planning and risk management undertaken during the transition period.

Key issues that have arisen, and which contribute to the risk that BSA sites that commenced under the BioBanking scheme will not be managed and financed to generate the required biodiversity outcomes, are summarised below.

- Lack of ecological monitoring requirements: DPE transitioned Biobanking agreements to the BCT for administration in August 2017 but the need for additional ecological monitoring requirements on these sites, such that they would be monitored to the same standard as new BSAs, was not embedded. The risks created by this gap are heightened further as transitional arrangements allowed some pending BioBanking agreements to be entered into up to August 2020.
- Lack of planning for the sustainability of funds for payments to landholders: DPE did not have a plan with the BCT to address the risk that account balances for BioBanking sites which were transitioned to BSAs sites could become inadequate and not cover the cost of management payments in perpetuity. This was a risk because the Total Fund Deposits for the BioBanking accounts had been calculated using a higher (3.5%) discount rate set by DPE than that use for agreements under the current Scheme (2.6%), making them more vulnerable to changing economic conditions.

Section 6 assesses the implications of these risks for the Scheme in further detail.

Further, DPE did not adequately communicate the transitional arrangements and their implications to existing or potential market participants. Publicly exhibited material for the Biodiversity Conservation Regulation 2017 explained the intent of the transitional arrangements but the related savings and transitional regulation itself was not publicly exhibited.

DPE developed a 'reasonable equivalence' process to support trading across the BBAM (BioBanking) and BAM (Biodiversity Offsets Scheme) credit markets. However, concerns have since been raised about DPE's administrative processes for converting BioBanking credits into credits under the new Scheme, such as what constitutes a procedurally fair approach to establishing the reasonable equivalence of value between types of credits.

DPE has since communicated that the reasonable equivalence of credits was based on ecological not financial equivalence. We note that how credits are valued has financial relevance to market participants who are making investment decisions, including the consideration of capital gains tax on credit sales.

DPE's lack of communication on this matter, and about its potential financial impacts on credit holders, has created some uncertainty about the value of credits generated under the previous scheme.

DPE and the BCT have not coordinated a timely response to replacing the offsets payment calculator, creating financial risks for the BCT

DPE developed the Biodiversity Offsets Payment Calculator in 2017 and has been responsible for its maintenance since, but the calculator requires an update or replacement and work to progress this has been slow. Recommendations were made, in a 2020 review commissioned by DPE to replace the calculator with a developer-charges system, and for responsibility of this to be transferred to the BCT. This has not yet occurred.

The calculator is used by developers to determine how much they need to pay into the Biodiversity Conservation Fund to transfer their obligation, and provides an estimate of the costs that the BCT will incur in offsetting these.

In addition to the impact of the reported unreliability of the calculator on price information and market development (see section 2.1), it may be contributing to the BCT's financial risk by affecting the adequacy of funds in the Biodiversity Conservation Fund that is managed by the BCT.

In 2020–21 the BCT used an unpublished version of the calculator to estimate its liabilities for its acquired offset obligations because the published version had not been updated by DPE with more recent market data. In doing so, the BCT recorded a loss against its provision for developer payments of around \$11.5 million in 2019–20 and around \$600,000 in 2020–21. The continued use of the calculator creates a risk that the Biodiversity Conservation Fund will not have sufficient funds for the BCT to meet these obligations on a like-for-like basis in the future.

DPE and the BCT have undertaken staged consultations to develop an approach intended to improve on and replace the calculator. The BCT proposed the Biodiversity Conservation Fund Charge System (BCF Charge System) that uses four tools within a decision support framework to determine a credit price. The main tool is a cost-structure tool that estimates a charge by calculating the typical costs of generating different credits, and provisions for opportunity costs, transactions costs and a return on investment.

In August 2022, the Minister for Environment and Heritage approved the BCF Charge System for calculating how much developers need to pay into the Biodiversity Conservation Fund. Arrangements for implementing the charge system for this purpose have not been publicly communicated.

Prior to this approval, the BCT applied the BCF Charge System to re-measure the liability for its offset obligations in its unaudited 31 March 2022 early close financial statements. Using the charge system, it estimates the cost to acquit its obligations on a like-for-like basis at 31 March 2022 is \$125 million. For comparison purposes, the BCT also used the BOPC to remeasure its liability for its offset obligations for the same period — the BOPC was the method to measure this liability in its 30 June financial statements — it estimates the cost acquittal at around \$91million at 31 March 2022. This is a difference of around \$34 million.

The BCT advises that, if the use of the Biodiversity Offsets Payment Calculator is continued, its estimated shortfall is expected to continue to grow as payments into the Biodiversity Conservation Fund remain the preferred avenue for developers to acquit their obligations. This trend means that the BCT may need to consider making use of the alternative options it has available to acquit its obligations, including the use of variation rules and other biodiversity conservation actions. However, the use of these other options could result in suboptimal biodiversity outcomes for the Scheme.

DPE and the BCT have not documented an agreed approach to Scheme fees, reflecting the lack of clarity or agreement with respect to Scheme priorities and risks

Section 6.38 of the Act sets out requirements for payments to be made, charged as fees, towards the costs of administering the Scheme and ensuring compliance. Scheme fees are set in the Regulation. DPE and the BCT have not documented an agreed approach to setting, charging and waiving fees for the Scheme in view of priorities such as encouraging participation while supporting cost recovery.

The BCT Board considers that administration fees are intended to cover the costs of the BCT's services under the Scheme. BCT modelling indicates current fees are not covering costs. The BCT advised the former Minister for Environment and Energy in 2020 that unrecovered costs exceeded \$2 million and were expected to increase to about over \$3 million a year. In 2022, the BCT advises this has occurred.

In 2022 the BCT has sought approval from the Minister of Environment and Heritage to increase the fee for establishing a Biodiversity Stewardship Agreement (BSA) ten-fold, from \$2,650 to \$26,500. See section 6 on support for, and barriers to, landholder participation in the Scheme. The BCT indicated it is subsidising the uncovered costs related to the Scheme from its private land conservation program.

The BCT had been waiving its management fee for the Biodiversity Stewardship Payment Fund since 2017–18, citing concerns about the adequacy of accounts in the fund (see below). The BCT manages the Biodiversity Stewardship Payment Fund to provide payments to landholders to manage their BSAs sites.

In December 2020, the BCT reported to the former Minister for Environment and Energy that it had lost around \$645,000 in potential revenue from waiving its 0.3% fund manager fee in previous years. A review commissioned by DPE, which reported in June 2021, advised against this fee-waiving practice because DPE should determine when intervention is necessary, and which type of intervention is appropriate, to support assets in the fund.

The BCT ceased waiving its Biodiversity Stewardship Payment Fund manager fee in the 2021–22 financial year.

DPE and the BCT have not implemented a framework for the sustainability of long-term management payments to landholders with Biodiversity Stewardship Agreement sites

DPE and the BCT have not implemented an agreed approach to deciding what interventions are appropriate to support the adequacy of Total Fund Deposits in landholders' BSA accounts within the Biodiversity Stewardship Payment Fund.⁴ Further, DPE is yet to respond effectively to the adequacy concerns raised by the BCT. These are key issues presenting risk to the financial sustainability of the Scheme and biodiversity outcomes.

The Act makes DPE responsible for setting the discount rate, which is a primary factor affecting the sustainability of accounts in the fund. DPE did reduce the discount rate from 3.5% to 2.6% in November 2018, which meant that BSA sites established after that date were more financially sustainable. However, this did not address the sustainability of funding for existing sites, including those transitioned across from the previous schemes.

The BCT raised concerns about the financial sustainability of the Biodiversity Stewardship Payment Fund to the former Minister for Environment and Energy in June 2020 and flagged the option of a cash injection sourced from consolidated revenue, or from the BCT's other conservation programs. This adequacy risk and the need for a cash injection had reportedly been reduced under changed economic conditions in 2022, but an agreed framework for managing the adequacy of the Biodiversity Stewardship Payment Fund is yet to be established.

See section 6.1 on why the sustainability of funding matters for credit quality.

DPE is leading work to improve the Scheme's operations and integrity, but this is not guided by a long-term strategy with clear goals or performance measures

DPE has five streams of work underway to improve the Scheme as part of its Integrated Improvement and Assurance Program (IIAP). This work is being monitored by an advisor appointed by the former Minister for Environment and Energy in July 2021. The advisor is now reporting to the Minister for Environment and Heritage.

In addition, DPE has been reporting quarterly on the IIAP to an Interdepartmental Reference Group for the Scheme since May 2021. Quarterly reports were delivered to a committee of Cabinet in July 2021 and November 2021. Cabinet reporting is no longer occurring, but reports will continue to be provided to the relevant Minister, the Interdepartmental Reference Group, and a Stakeholder Reference Group. The Stakeholder Reference Group met for the first time in March 2022.

Priority work streams for the IIAP are summarised in Exhibit 11.

⁴ The Total Fund Deposit associated with each BSA account is 'ring-fenced' within the overall Biodiversity Stewardship Payments Fund, as required by the Regulation.

Exhibit 11. Selected priority work streams for the IIAP

- 1. Integrating the Scheme into decision-making to support conservation and economic priorities
- 2. Enabling participation: by providing tools, information, and other support
- Improving market functioning: more certainty and visibility for participants, better matching of supply and demand
- 4. A credible science-based approach
- 5. Ensuring confidence in the Scheme with a strong regulatory and governance framework.

Source: AO summary of DPE documentation.

Examples of IIAP projects reported by DPE as 'on track' or 'complete' as of May 2022 include:

- producing guidelines for government agencies participating in the Scheme
- establishing a Scheme help desk and concierge-style support for proponents of major projects
- aligning the listing of New South Wales threatened species and ecological communities with the Commonwealth listing
- reviewing the scientific basis of Scheme requirements and rules
- establishing a governance framework for the IIAP.

See Appendix three for these and other examples of activities and their status under the IIAP, as of May 2022. We note that replacing the Biodiversity Offsets Payment Calculator and establishing a framework for ensuring the sustainability of the Biodiversity Stewardship Payments Fund are listed as requiring action.

Documentation about the IIAP shows that DPE is delivering the program with internal and external stakeholders via the interdepartmental and stakeholder reference groups. But it is unclear how DPE is prioritising ecologically sustainable development, consistent with the Act, via the IIAP. DPE has also not provided evidence of analysed costs and benefits, and policy rationale, for some key IIAP proposals, such as using Crown lands and National Parks as a source of offsets. These issues are relevant in the context of the Scheme's operational need to support development, such as major projects, and is a risk given the absence of a strategic plan for the Scheme, and the lack of measures related to biodiversity outcomes.

DPE did, however, develop a business case and new policy proposal for establishing a Biodiversity Credits Supply Fund under the IIAP. In June 2022, the NSW Government announced a commitment of \$106.7 million to establish this fund and a related taskforce. The aim of the fund is to purchase priority credits upfront, which would then be on-sold to public or private development proponents requiring these to offset the impacts of their projects. The rationale is that this would, among other things, improve price stability and create more certainty for landholders, which would in turn facilitate credit supply.

One key risk of the Biodiversity Credits Supply Fund is that the concentration of market power in a single, large buyer will constrain the maturation of a competitive market, and reduce the ability of landholders and developers to negotiate efficient market prices in the trading of credits. There is also a risk of high administrative costs which may make it challenging for the fund to be operated on a cost-recovery basis.

DPE has not progressed some other initiatives that were recommended in 2014 as part of the Land Management and Biodiversity Conservation Reforms, and which could have alleviated some of the current issues with the Scheme. For example, supporting supply by converting voluntary conservation agreements to BSAs sites, and working with developers and landholders as a broker to set up BSAs, were recommended at the time.

4. Minimising and offsetting biodiversity loss

This section assesses how effectively components of the Scheme have been designed and are being implemented to provide assurance that the impacts of development are being avoided and minimised such that only 'unavoidable' impacts remain to be offset. The section also assesses whether the Scheme and its market embeds the necessary controls to ensure that obligations are offset as required.

Background

The Biodiversity Assessment Method, and the quality of its application by DPE-Accredited Assessors, is critical to the robustness the Scheme. The method is designed to be applied to avoid and minimise impacts at proposed development sites before identifying offset obligations. The effectiveness of Scheme outcomes requires that obligations are offset with the retirement of the necessary and appropriate credits.

The *Biodiversity Conservation Act 2016* (the Act) requires the relevant Minister (the current Minister for Environment and Heritage) to establish a method for the purpose of assessing the impacts of actions on threatened species and ecological communities.

The Act also specifies that this method must be applied by an accredited person. DPE is responsible for the design and implementation of this accreditation system, arrangements for which are set out in an instrument under the Act.

A Biodiversity Development Assessment Report is a report by a DPE-Accredited Assessor using the Biodiversity Assessment Method. These reports assess the biodiversity impacts of the proposed development and establish offset obligations as part of the development approval process. It is important that local councils and other development consent authorities understand and can assess the quality of these reports.

DPE manages the process of 'retiring' credits against the identified offset obligations. Once a credit is retired it cannot be reused to acquit another obligation, which is critical to Scheme outcomes. DPE is also responsible for maintaining records of credit transactions, which results in a legally binding transfer of credit ownership from seller to buyer.

4.1 Avoiding and minimising impacts prior to offsetting

DPE has a method to assess biodiversity impacts but could strengthen its standards and guidance for Accredited Assessors to ensure impacts are first avoided and minimised

DPE established the Biodiversity Assessment Method in 2017, and undertook a 12-month cross-agency review of the method in 2018 before a revised method was issued in 2020. But DPE has produced limited practical guidance, in the Biodiversity Assessment Method or elsewhere, for assessors, developers and consent authorities on what steps to take to avoid and minimise the impacts of development.

The method is intended to provide a consistent approach to assessing biodiversity impacts from a proposed development, and biodiversity improvements from management actions at a Biodiversity Stewardship Agreement (BSA) site. It includes requirements but not minimum standards for avoiding and minimising impacts of development before offsetting is required.

DPE has accredited 355 assessors to apply the Biodiversity Assessment Method, according to the public register accessed in June 2022. Assessors are typically ecological consultants. DPE considers a person is eligible to be accredited when they have successfully completed relevant training in biodiversity assessment, are a fit and proper person, and have knowledge, skills or experience that are appropriate to exercise the relevant functions.

It can be expected that providing specific, detailed guidance on avoiding and minimising biodiversity impacts is challenging given the wide range of projects that could be assessed. But creating a consistent approach for all types of development was recommended in the 2014 Independent Biodiversity Legislation Review Panel report. Ensuring the Biodiversity Assessment Method will 'clearly guide developers on how to avoid and minimise impacts to biodiversity' was also a commitment in the Minister's second reading speech for the Biodiversity Conservation Bill 2016.

DPE has stated in 2022 that it is developing additional guidance on avoiding and minimising impacts. The Biodiversity Assessment Method is also scheduled to be reviewed as part of the five-year review of the Act, commencing August 2022.

The rules of the Scheme allow the Minister for Planning to reduce obligations in certain circumstances, but DPE does not collate information about when this occurs and why

The DPE group administering the Scheme lacks ready access to information about when the discounting of offset obligations occurs and why. This is a notable gap in DPE's visibility of the Scheme's operations because it affects DPE's ability to effectively oversee and monitor the Scheme's operations, quality assure its implementation, and understand outcomes.

Discounting (or reduction) can be approved by the Minister for Planning for major projects (that is, for State Significant Development or Infrastructure). In relation to local development under Part 4 of the *Environmental Planning and Assessment Act 1979*, agreement ('concurrence') is required between the consent authority, usually a local council, and DPE for a reduced obligation.

But information is not readily available to DPE's Environment and Heritage Group on the extent of discounting in development consents for major projects. This is because the relevant DPE systems in which the data is stored (the Major Projects system and the NSW Planning Portal) do not allow DPE to readily extract and report on the data. This issue creates a risk that DPE will not have ready access to information that collates the reasons for ministerial decisions with respect to discounting.

DPE has indicated it has only received and approved one request for concurrence for a reduced obligation for local development under Part 4 of the Act.

4.2 Quality assurance in establishing offset obligations

DPE has improved training to development consent authorities to help them understand their role and responsibilities in the Scheme

DPE provides local councils and other consent authorities with training and support to undertake their role in the Scheme, including the consideration of Biodiversity Development Assessment Reports prepared by DPE-Accredited Assessors. The reports are submitted to consent authorities, along with other material, to support development applications. DPE is continuing to develop these training resources.

To be consistent with the purposes of the Scheme and Biodiversity Assessment Method, the Biodiversity Development Assessment Reports must outline actions undertaken to avoid and minimise the impacts of development on biodiversity before detailing the remaining impacts to be offset. It is important for the effectiveness of the Scheme that consent authorities can interpret these reports and gauge the quality of information presented.

DPE's local government training first became available in 2018 and was delivered through a team of regional support officers. DPE reported that it sponsored around 300 council staff to undertake training in how to approve reports, and 37 were sponsored to do the assessor accreditation training. DPE released local government eLearning modules and provided further sponsorship for council staff in 2022. In May 2022, around 100 councils had submitted over 300 expressions of interest to access this training, with all staff approved for DPE sponsorship.

DPE has also published tailored resources to support local government staff including a

- manual designed for staff new to the Scheme
- Biodiversity Development Assessment Reports template and associated guidance for local (Part 4) assessments
- biodiversity assessment and approvals pathways document.

DPE advises that a checklist to accompany the approval pathways document and workshops to consolidate eLearning modules are planned for later in 2022.

DPE reviews development assessment reports for major projects, but does not collate this and other relevant information to oversee and ensure continual quality improvement

DPE could do more to collate information on the quality of Biodiversity Development Assessment Reports to support their improvement and provide greater quality assurance around the Scheme. This is relevant in view of an audit that DPE did in 2021 of the quality of these reports by its Accredited Assessors. Although that audit had a limited scope, it indicated a range of issues and a significant level of assessor non-compliance with procedures.

DPE's Environment and Heritage Group reviews Biodiversity Development Assessment Reports on behalf of the Planning Group in relation to approvals for State Significant Development and Infrastructure ('major projects'). But DPE:

- does not collate data on the proportion of Biodiversity Development Assessment Reports that are unsatisfactory and need to be resubmitted by the assessor
- does not routinely review Biodiversity Development Assessment Reports for local (Part 4) development.
- does not capture the review work the BCT does on Biodiversity Stewardship Site Assessment Reports (for the establishment of BSAs).

Collating and reviewing this information would provide DPE with useful intelligence about the work of its Accredited Assessors.

DPE does have an escalation process to deal with quality issues relating to its Accredited Assessors' work. This process includes actions from face-to-face meetings and monitoring assessment work, through to audits and varying or suspending accreditation. DPE has drafted an interim compliance and assurance framework that includes a strategic audit program and a de-accreditation process. Public consultation on this has commenced and DPE advises there will be a pilot application of the interim framework: the first (of three) pilots is expected to be completed in August 2022.

DPE advises in 2022 that it has implemented or commenced work on all of the recommendations from its 2021 audit of Biodiversity Development Assessment Reports, and developed new training modules for Accredited Assessors.

The BCT has responsibility for reviewing the Biodiversity Stewardship Site Assessment Reports prepared by DPE-Accredited Assessors for landholders (see section 5).

DPE has established a code of conduct for its Accredited Assessors, but does not collect information on their actual or potential conflicts of interest

DPE's 2019 code of conduct for its Accredited Assessors' states that they must not act in a manner involving dishonesty, fraud, deceit, misrepresentation or bias; not advertise or conduct themselves in a manner that will bring disrepute to the Scheme or the Minister; and not act in circumstances where there is actual, perceived or potential conflict of interest.

The code of conduct is part of the Accredited Assessor application form. It is signed once, at the time of applying for accreditation.

DPE has developed guidance for its Accredited Assessors on identifying and managing conflicts of interest, but there is no specific requirement for its assessors to disclose any conflicts to either their clients or to the consent authority. This means that DPE does not have visibility of its Accredited Assessors' conflict of interest disclosures.

There is potential for conflicts if DPE-Accredited Assessors also act as brokers for credits in the market, noting DPE has not regulated the provision of broker services

Without oversight of Accredited Assessors' actual or potential conflicts of interest, DPE is unable to identify or manage the risk of assessors operating as brokers and benefiting inappropriately from transactions under the Scheme.

As noted below, the Act (section 6.6) allows for brokers to be regulated to operate in the Scheme, although DPE has not developed such regulations for this to occur.

DPE has advised that its Accredited Assessors could use their knowledge of buyers and sellers to assist parties to find each other, and that assessors could continue to operate under their accreditation and the code of conduct while doing so. However, this gives rise to a risk that Accredited Assessors have access to information from their assessments that others do not have access to, and which may be used to obtain financial benefit.

4.3 Oversight of credit transactions

DPE does not publish a complete register of credits and their transaction history, a statutory requirement under the Act, which creates transparency and integrity risks

DPE does not maintain a consolidated public register of biodiversity credits in accordance with all the requirements of the Act, and the intent of a single credits register. The Regulation makes further provision for what the public register of biodiversity credits must contain. This includes requirements to provide the credit owners' contact details, the location of credits; their status as available or retired; and reasons for transaction, but DPE does not provide all of this information.

DPE does maintain public listings of credit transactions and retirements for credits under the current and the previous schemes, but the information it publishes is insufficient for transparency and integrity purposes. Unlike credits issued under BioBanking agreements, credits issued under the current Scheme since 2019 do not have unique credit identifiers. Credits are grouped into credit 'holdings'. As DPE does not have a single register that collates all credits in the market with unique identifiers, it is difficult to track the history of a credit from creation to retirement. The current public listings of credit transactions do not allow credits to be traced if holdings are split across multiple transfers as new credit identifiers are created.

It may also be difficult for DPE to demonstrate it is transferring and retiring credits in accordance with its procedures as there are no unique credit identifiers, and because DPE does not collect information about or monitor the reason for credit transfers.

Other schemes in Australia that involve the trading of environmental credits (such as carbon and water markets) have public registers that enable credits to be titled and ownership recorded. Such registers also record credit transfers, dates of transactions and retirements. This is good practice that provides transparency to the market and greater security for credit buyers.

DPE does not have access to information to check that developers have correctly acquitted their offset obligations

Although DPE is responsible for processing credit retirements, DPE does not maintain consolidated information on developer obligations and how developers are meeting those obligations. This means that DPE may not know if developers are acquitting obligations as required under the Scheme rules, such as on a like-for-like basis. Being able to match the BSA site that created the credit and the development site against which it is acquitted is important for the transparency of the Scheme—particularly for providing assurance that the correct credits were retired to offset the relevant development impact.

For developments where the Minister for Planning or delegate is the consent authority (that is, State Significant Development or Infrastructure), information on offset obligations cannot be extracted easily from DPE systems for the Environment and Heritage Group that administers the Scheme. The information is held by DPE's Planning Group. For example, the information is embedded within attachments and is not stored in separate data fields in the Planning Group's systems. There is also no approach for this information to be routinely provided to the Environment and Heritage Group.

DPE also has limited visibility of which credits are used to retire which obligations for other kinds of development. That is, for developments approved by local councils or other consent authorities such as water utilities and other statutory landholders. This information is held by those parties and there is no system or agreement for it to be provided to DPE.

Brokers can operate within the market, but DPE has not developed processes to accredit, monitor or regulate this activity

The Act (section 6.6) allows for brokers to be regulated to operate in the Scheme, but DPE does not have information on the extent to which this is occurring. DPE has not developed regulations for broker services. While there is no requirement for DPE to do so, there is evidence from other environmental offset schemes that well-regulated broker services can support market development.

We note on the DPE website for the Scheme, it states:

Anyone conducting a brokering service should consider whether they are providers of financial services under the provisions of the *Corporations Act*, 2001 (Commonwealth) and the Australian Securities and Investments Commission Act, 2001 (Commonwealth) and should be aware of the laws, any licences or permits and industry codes of conduct that may apply to the financial and insurance services industry and to any specific service they provide.

As DPE is not currently accrediting brokers (or establishing other regulatory approaches for these services), it has not developed a conflict of interest policy for brokers. The code of conduct for its Accredited Assessors would apply to assessors offering brokerage services. As noted above, this code of conduct requires that assessors do not act in circumstances where there is an actual, perceived or potential conflict of interest, but it does not include requirements that conflicts of interest are disclosed to DPE.

As DPE also does not record the reason for credit transactions, the operation of brokers or other market intermediaries in the Scheme cannot be readily identified.

5. Establishing biodiversity stewardship sites

This section assesses how effectively the supply of biodiversity credits has been supported by encouraging and enabling landholders to participate in the Scheme. It also assesses whether sufficient action is underway to address issues and risks to the establishment of BSA sites, especially in the context of known credit supply issues (section 2).

Background

Credit supply is generated when a landholder establishes a Biodiversity Stewardship Agreement (BSA) on their land. Establishing a BSA sites requires landholders to agree to an in-perpetuity management plan, so it is important that they have sufficient support and access to relevant information about risks and opportunities when deciding to do so. Ensuring adequate credits supply underpins the Scheme's ability to deliver the intended biodiversity outcomes.

A landholder establishes an offset site through a Biodiversity Stewardship Agreement (BSA), which is a legal agreement with the Minister of Environment and Heritage (delegated to the Biodiversity Conservation Trust). The BSA is registered on the title of the land.

DPE-Accredited Assessors develop Biodiversity Stewardship Site Assessment Reports, which are submitted by landholders to the BCT as part of the BSA application. These reports apply the Biodiversity Assessment Method to detail the number and types of credits that a BSA site is expected to generate by implementing a 20-year management plan. The BCT issues credits to landholders on registration of the BSA.

Ensuring an adequate and appropriate supply of credits is important so that like-for-like matches between credits and obligations can be efficiently secured in a timely way. This minimises the use of offset variation rules, and can avoid potential delays in developers securing appropriate offsets to meet their offset obligations. It also makes it easier for the BCT to locate the necessary credits to acquit the obligations it acquires from developers.

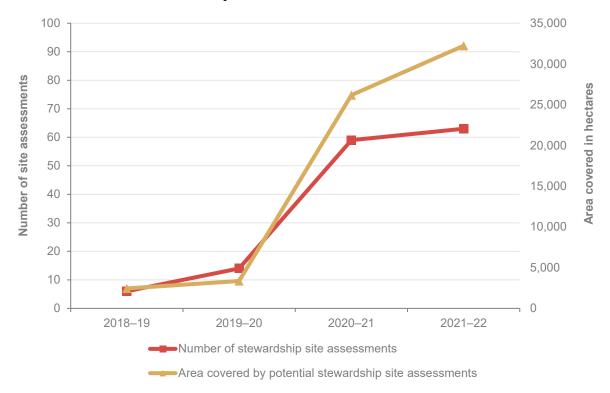
5.1 Supporting landholders to establish sites

Applications for BSAs are increasing and could improve credit supply, but further work is needed to ensure supply is matched with demand

DPE data show that assessments for potential BSA sites increased four-fold between 2019–20 and 2020–21. There were 142 site assessments between August 2017 and February 2022, covering a total land area of around 64,000 hectares (Exhibit 12). But not all of these assessments will proceed to an executed BSA. BCT data shows that, over the same period, 37 BSAs were executed.

At December 2021, the BCT was processing applications for 58 potential new BSAs. The extent to which these applications, if they proceed to an executed BSA, will align with current or future demand for offset obligations from developers is unclear. As discussed in section 2, there is evidence of poor alignment between existing and potential credit supply and demand.

Exhibit 12: Number of site assessments for potential BSAs and the associated land area, assessed under the Scheme each year 2018 to 2022



Note: There were no site assessments in 2017-18.

Source: AO analysis of DPE data from site assessments (August 2017 to February 2022).

The BCT has guidance for landholders and procedures for establishing BSA sites, but applications can take years to finalise

The BCT has a range of guidance materials to support landholders to decide whether to pursue BSAs and how to establish these, and its procedures include a target timeframe of 'around 14 days' to process BSA applications. But in practice BSAs can take years to finalise.

Key guidance provided by the BCT to landholders considering establishing a BSA site include:

- flowcharts and infographics outlining conservation agreement types and application steps
- guidelines on the expectations and requirements of establishing and managing a BSA
- a tool to estimate the deposit for BSA site management payments (Total Fund Deposit),
 which must be applied by an appropriately qualified person, such as a DPE-Accredited Assessor
- fact sheets on engaging Accredited Assessors
- a guide (published in February 2020) that sets out taxation principles that landholders will need to consider in setting up a BSA (this does not remove the requirement for landholders to obtain taxation advice on their specific circumstances)⁵
- fact sheets on the BCT's credit demand initiatives such as Fixed Price Offers.

The BCT also has procedures for reviewing Biodiversity Stewardship Site Assessment Reports that accompany BSA applications, and has provided some evidence that it reviews these reports.

⁵ Tax implications for establishing BSA sites may include capital gains tax on the sale of credit; income tax on management payments; and GST on transactions, including the sale of credits and supply of stewardship services.

The BCT's internal target of 'around 14 weeks' for processing BSAs (from application submission to agreement registration) does not include the time taken by the applicant to submit requested amendments and additional justifications. For example, additional justifications for the conclusions of site assessments and costing of management actions. These activities can substantially increase the total time for an agreement to be finalised. BCT data shows that, in practice, applications can take up to 34 months to be finalised, with an average time of around 15 months.

The BCT does not collate information about the overall results from its review of Biodiversity Stewardship Site Assessment Reports. If collated, this information could be provided to DPE for feedback on its Accredited Assessor program, and would be useful for identifying quality gaps.

The BCT also works directly with some landholders to encourage them to establish BSAs. As outlined below, this effort is focused on meeting demand for its acquired obligations rather than facilitating credit supply in the market more broadly.

Neither DPE nor the BCT have adequately addressed the range of barriers that are preventing or delaying landholders from participating in the Scheme

There are barriers to landholder participation in the Scheme. The current credit supply issues, particularly the mismatch between credit supply and demand, increase the risk that these barriers will have substantial impacts on the effectiveness of the Scheme into the future if they are not adequately addressed.

Barriers to landholders entering the Scheme include high upfront costs, complex tax implications, and uncertainty around the likelihood of credit sales and prices. Upfront costs are driven by factors such as the:

- time to understand the rules and operations of the Scheme, noting the Scheme's complexity
- costs and time for preparing Biodiversity Stewardship Site Assessments, a costed site
 management plan, and ensuring the Total Fund Deposit is calculated by an appropriately
 qualified person, such as a DPE-Accredited Assessor (we have been advised this can cost
 up to \$200,000 depending on the size and complexity of the site being assessed)
- costs and time to seek and receive legal and taxation advice
- administration costs including the BSA application fee (currently \$2,650), and obtaining relevant supporting documents to establish eligibility for the Scheme
- time to understand credit demand and prices, and the opportunity costs of a BSA site
- time to find a buyer/s for credits.

The poorly structured and incomplete information about the market, produced by DPE and the BCT (see section 2.2), contributes to these upfront costs by creating uncertainty, which is a further barrier to landholder participation.

A risk for landholders is ending up 'out of pocket' (not able to benefit from their investment in setting up a BSA). There are indications that some landholders with a BSA site are not able or willing to sell their credits as almost 40% of BSA sites are under passive management. DPE and the BCT are yet to review the status of these sites to understand why this has occurred.

Some development proponents, including government agencies and state-owned corporations, are proactively setting up BSA sites to acquit their obligations. This can involve identifying potential BSA sites, providing financial assistance to the landholders to meet the upfront costs, and entering into 'options agreements' to purchase the credits generated. This approach can provide landholders with greater certainty around credit sales and improve the alignment of supply and demand. But it may not contribute to long-term market development if the prices that these development proponents negotiate are reduced and do not reflect the full cost to landholders of establishing BSA sites.

DPE has not developed processes to regulate brokers, which can operate in markets to reduce uncertainty by assisting participants to understand risks and opportunities (see discussion on brokers in section 4.3)

We note that the BCT has proposed to increase the BSA application fee ten-fold (see section 3.3).

In June 2022, the DPE advised that the role of BSA establishment will be transferred from the BCT to be managed by DPE (see section 5.2). The implications of this change to the process of BSA establishment, and the barriers to landholder participation, are not yet clear.

The BCT assists landholders to establish sites that will generate credits to acquit its acquired obligations

The BCT has been encouraging landholders in Western Sydney and the Hunter Valley to participate in the Scheme to help meet its acquired offset obligations. This involves inviting landholders' participation, providing education, undertaking feasibility assessments and business cases, and offering financial assistance (grants) for upfront costs.

The BCT's open fixed price offer and credit tender initiatives aim to help meet its acquired obligations. The BCT has provided evidence that 12 landholders have agreed to sell the credits they generate to the BCT. There is no clear evidence that these initiatives encourage an increase in the overall supply of credits to the market, but they may encourage some landholders to progress their BSA applications. The BCT's financial assistance to landholders is only available to those that intend to participate in the BCT's fixed price offers and credit tenders.

We have not seen evidence of DPE assessing the costs and potential benefits of providing broader financial assistance, such as interest free loans, that aim to encourage credit supply.

5.2 Planning to ensure adequate credit supply

DPE is developing a credit supply strategy, but responsibility for this, and for implementing activities to facilitate supply, between DPE and the BCT has been unclear

Roles and responsibilities for credit supply between DPE and the BCT have been unclear since the Scheme commenced in 2017. As such, effective action has not yet been taken to address the current credit shortfall and mismatch with demand, as outlined in section 2. DPE has acknowledged that overall credit supply was intended to be addressed by the market but considers that government intervention in supply is now warranted.

DPE advises in 2022 it is in the early stages of developing a credit supply strategy to boost uptake of BSAs, enhance the information on credit availability and price for landholders and developers, and improve estimates of offset obligations. DPE has taken some steps to improve its publicly-available information on the market (see section 2.2).

In June 2022, the NSW Government announced a commitment of \$106.7 million to establish a Biodiversity Credits Supply Fund and Taskforce. DPE advises that a taskforce established to implement this reform will consider ways to better support landholder participation. For example, by waiving application fees and introducing other mechanisms to reduce upfront costs, and reducing the time taken to consider and approve BSAs.

While the BCT facilitates credit supply by establishing BSAs, its position is that it is not responsible for generating or promoting overall credit supply, just for securing credits to offset the obligations it acquires from development proponents.

Credit supply issues create a risk that the BCT will not be able to continue to routinely acquit credits on a like-for-like basis

At 9 May 2022, 340 developers had made payments worth almost \$90 million into the Biodiversity Conservation Fund to transfer their offset obligations to the BCT.

The BCT has a Board-approved annual plan aiming to acquit a portion of its current obligations. However, the BCT does not have a costed strategy for acquitting its remaining obligations, including outlining whether the necessary credits will be available for purchase and retirement. The BCT has more options available to it than developers to acquit its obligations, and this can be expected to become increasingly necessary in the context of credit supply issues (section 2), especially for credits relating to rare species. This poses a risk to biodiversity outcomes.

At 30 December 2021, the BCT had retired around 20% of its obligations by credit number, and advises that 100% of these acquittals have been on a like-for-like basis.

The BCT has purchase agreements with landholders (commitments to sell credits to the BCT) and further credits held but not yet retired against a specific obligation. At 30 December 2021, the BCT advises that these additional credits mean that it should be able to acquit 37% of its obligations (by credit number), if all related BSAs are finalised.

The BCT's Program Implementation Plan for the Scheme (September 2020–2024) adopts timeframes for stepping through the offset rules, including variations from like-for-like. The BCT reported in March 2022 that it aims to acquit its acquired obligations within three to five years.

The BCT has advised that it will do an audit of its outstanding obligations in 2022 to develop a plan for Board approval that considers the application of variation rules and conservation actions to acquit long-held obligations.

6. Biodiversity outcomes

This section assesses how effectively BSA sites, which need to be managed by landholders to generate the biodiversity gains represented by credits, are regulated and supported by the Biodiversity Conservation Trust. It also assesses whether actions have been taken to address identified risks to the suitability of funds required to ensure long-term BSA site management.

Background

For Biodiversity Stewardship Agreement (BSA) sites to achieve the expected biodiversity gains to offset losses from development impact, they need sufficient funding for the required management actions, and to be effectively regulated and supported over the long-term. Funding for these sites is generated through the returns on landholders' initial investment (Total Fund Deposit). The BCT is required to monitor landholders' compliance with BSAs and should also ensure ecological outcomes on sites are measured.

DPE and the BCT are responsible for developing and implementing a system of oversight to ensure the implementation of management actions at BSA sites is delivering the intended outcomes in a financially and environmentally sustainable way. The agencies' key mechanisms for delivering this are:

- calculating the costs of the required land management actions in perpetuity
- annual reporting systems for monitoring compliance with land management requirements
- reporting systems for monitoring ecological outcomes arising from land management actions.

Landholders are required to pay the required Total Fund Deposit amount for their BSA accounts into the Biodiversity Stewardship Payments Fund, which is held in trust and managed by the BCT. A costing tool is used by landholders to calculate the value of the deposit, based on the required management payments (in perpetuity), administrative fees, and the discount rate applied.

The Total Fund Deposit can be paid upfront but is usually paid from the proceeds of the sale of credits. Once this occurs the BSA site becomes 'active' and management payments commence to enable the landholder to undertake the required management actions. BSA sites that have not yet sold enough credits to make the deposit are 'passive' sites that do not require active land management.

Sites in passive management for an extended duration present risks to biodiversity outcomes, and potentially to Scheme integrity, if the quality of credits is undermined due to an absence of active site management.

6.1 Sustainability of site funding

The BCT requires contingencies for the costs of some unexpected events on BSA sites but there are no guidelines for estimating contingencies for natural disasters, such as bushfire

The BCT's BSA Total Fund Deposit Guide for landholders explains that management costs should include contingences i.e., costs for things that cannot be reasonably planned for. The guide also outlines how contingency costs are to be identified, justified, and incorporated into the Total Fund Deposit. But there is no clear statement about how climate change impacts should be accounted for in management costings, especially following a major event, and the extent to which the increasing severity or frequency of natural disasters can be planned for, or is considered 'force majeure'.

Examples, provided in the BCT's guide, of situations where contingency funding could be needed include: fence vandalism; rubbish dumping; persistent or newly recorded feral pest/weed species; or if the required outcome is not achieved and alternative management actions need to be implemented. The guide also states that force majeure events may occur and that the BCT would work with the landholder to adapt their management actions in these cases.

We note that DPE has undertaken work to develop a NSW National Parks and Wildlife Service Climate Change Adaptation Strategy that maps out biodiversity conservation management actions in the context of climate change. There is a lack of evidence that learnings from this framework have been applied to the Scheme.

DPE is yet to implement processes with the BCT to ensure long-term funding for BSA sites

DPE has not developed a clear decision-making framework that ensures the adequacy of funds held in the Biodiversity Stewardship Payments Fund. The BCT raised concerns about this in 2020, under previous economic conditions, but the underlying sources of risk have not been addressed. Both DPE and the BCT have provided more recent consultant reports about the adequacy of Total Fund Deposits and the fund's short-term solvency. However, neither agency can confirm its long-term sustainability to provide in-perpetuity management payments to landholders. This presents a risk to biodiversity outcomes being achieved under the Scheme.

At 30 June 2021, the BCT held approximately \$176 million in trust from Total Fund Deposits invested through TCorp to support payments to BSA landholders. ⁶

The BCT raised concerns about the financial sustainability of the Biodiversity Stewardship Payments Fund in April 2020 given the economic conditions at the time. Specifically, it reported to DPE that 97 of the 111 BSAs established at that time had triggered the 20% operating deficit threshold. It also flagged the option of a \$8.35 million cash injection to the Biodiversity Stewardship Payments Fund for the first quarter of 2020–21. The preferred source of this cash injection was not confirmed, although the potential for this to come from the BCT's other conservation programs was considered at the time.

There was and remains a lack of clarity around intervention decision-points or options, adequacy margins and risk thresholds for the management of the Biodiversity Stewardship Payment Fund. A report commissioned by DPE recommended that this lack of clarity be addressed, and actions implemented by December 2020, but that has not yet happened.

The BCT was waiving its fund manager fee for the Biodiversity Stewardship Payments Fund to support its adequacy (see section 3.3), but at February 2022 had not used the option of withholding management payments to landholders with Total Fund Deposit balances at risk.

A more recent review in July 2021 indicated that the overall adequacy level for active BSAs had improved to 118%, owing to improved economic conditions.

DPE's Integrated Improvement and Assurance Program for the Scheme (see Appendix three) listed the development of a management framework for the Biodiversity Stewardship Payments Fund as a medium priority with further action required in May 2022.

⁶ The TFD associated with each BSA account is 'ring-fenced' within the overall Biodiversity Stewardship Payments Fund (BSPF), as required by the Regulation.

DPE and the BCT do not have a plan to review the status of passive BSA sites and improve their management where needed, presenting a risk to biodiversity gains

A large proportion of BSA sites are in passive management but neither DPE nor the BCT have consolidated information on why this is the case, or a plan to review and take action (when appropriate), presenting a risk to biodiversity gains.

- Of the 226 total BSAs (those established under previous and the current Scheme), 40% (88 sites) were in passive management in January 2022, many of which are more than five years old.
- Of the 40 BSA sites established under the current Scheme, as at April 2022, about 60% (25 sites) were in passive management and eight of these sites had sold more than three quarters of credits they need to become active.

As passive BSA sites do not yet have funding associated with them, the required management actions have little or no cost and generally aim to maintain the existing condition of the site, such as not removing fallen logs or clearing vegetation. Maintaining a site under passive management for an extended period increases the risk that the site will not achieve the required long-term biodiversity gains, and species protection.

A BSA site could remain in passive management if there is no demand for the credits generated by that site or the landholder is waiting for a better offer to sell their credits. Sites can also be passive if a BSA has been established to meet demand from upcoming development that is in the early stages of planning. Consolidated information about the status of passive BSA sites would be useful for strategic planning purposes with respect to the Scheme and helping to address credit supply issues.

But the BCT does not maintain consolidated information on the status of passive BSA sites, such as information about the proportion of credits sold and Total Fund Deposit paid. For example, the BCT does not know the proportion of credits sold for the 62 passive BioBanking agreements that were transitioned to the current Scheme, as this information is held by DPE. The BCT does hold information on the proportion of the total value of Total Fund Deposits paid for passive sites established under the current Scheme (around 12% of the total value). Further, DPE does not have visibility of credit holders' plans for the use of their credits.

The BCT has stated in its BSA Total Fund Deposit guide for landholders that a challenge in costing management actions for a site is the potential need for a risk contingency related to a decline in site condition if it is in passive management for an extended period.

DPE and the BCT do not have a plan to review the status of passive BSA sites and determine if there is scope to work with landholders to transition these sites into active management or implement alternative arrangements for their effective management. This presents a risk to the integrity of the Scheme, as credit value for any credits sold at these sites may not be translated into biodiversity gains. These sites also present a reputational risk, as they indicate that prospective landholders may not be able to sell the credits they generate and could be 'out-of-pocket'.

6.2 Site regulation, support and reporting

The BCT has not yet applied a risk-based approach to its compliance monitoring, but its Board has recently approved this approach for implementation

The BCT has been implementing a compliance monitoring framework since 2019 that includes landholders submitting annual reports outlining progress against required land management actions. The BCT's internal operating procedures indicate that all active BSA sites should have an annual site visit, and that passive site visits should be prioritised according to levels of risk and available resources.

The BCT advises that passive BSA sites have not been prioritised for site visits due to resourcing constraints. As such, the level of compliance monitoring undertaken for BSA sites has been based on the agreement status (passive or active sites), rather than an assessment of risk.

The BCT has developed a new risk-based approach to prioritising resources for BSA site assessments, which has been endorsed by its Board. The new approach is due to be implemented in 2022. It is intended to prioritise site visits using a weighting tool that estimates the probability of non-compliance for each site, the potential impact of non-compliance on conservation values, and the need to maintain the relationship with the landholder.

The BCT plans to apply the weighting tool across all the agreements it oversees, including wildlife refuges, conservation agreements, and BSAs under the Scheme. As there could be compliance risks on passive as well as active sites (especially those that are passive for an extended period) this risk-based approach is better aligned to an objective of the BCT's compliance policy: to 'uphold the integrity of the Scheme by providing assurance that the biodiversity credits sold to offset the impacts of development are backed by the intended biodiversity conservation gains'.

The BCT's oversight of management actions at BSA sites is limited by low levels of compliance with annual reporting, low rates of site visits, and poor compliance data

The BCT's compliance policy requires that the landholders of BSA sites submit an annual report with information on the general condition of BSA and progress against specified actions. This requirement applies to all BSAs, including those established under the previous BioBanking scheme:

- For active BSA sites, this annual reporting includes the completion of scheduled land management actions for that period.
- For passive BSA sites, this annual reporting can include actions such as complying with legislative requirements for not removing or clearing any vegetation or bush rocks.

The stewardship agreements require that these reports are assessed and approved by the BCT prior to annual land management payments being released. In 2021, around 58% of landholders with BSA sites (active or passive) provided an annual report to the BCT.

In 2020, compliance site visits occurred for 33 of 111 active BSA sites, and for five of 80 passive sites. The BCT suspended site visits for most of 2021 given public movement restrictions during the COVID-19 pandemic and, reportedly in some cases, landholders' reluctance to risk exposure.

The BCT has not provided consolidated data on site visits, if any, conducted during 2021. The BCT did conduct some alternative compliance activities during that period, including interrogation of aerial footage.

The BCT's compliance policy states that a centralised database of non-compliance will be compiled and used to identify trends in non-compliance and undertake preventive activities. The BCT has indicated that this database is under development but has not provided a timeline for completion.

The BCT's 2019–20 and 2020–21 Annual Reports provide organisation-level information about compliance activities, such as number of site visits conducted, but do not include specific details on compliance performance at BSA sites. This reporting is required by the BCT's compliance policy. For example, its Annual Reports do not include information on proportion of annual land management reports submitted for BSAs, nor the level of compliance with the required land management actions.

The BCT has limited guidance related to the use of its compliance mechanisms, creating a risk of inconsistent compliance decisions on BSA sites

Stewardship agreements state that the Minister for Environment and Heritage can withhold payments for non-compliance with annual reporting requirements, although this mechanism is not included in BCT's compliance policy.

The BCT's compliance policy states that providing knowledge and support to landholders is its preferred first-line response to non-compliance. The BCT has not produced guidance for staff that specifies under what conditions payments should be withheld, or defined a delegation of authority from the Minister of Environment and Heritage with respect to decisions to withhold management payments. These gaps create a risk that compliance decisions are inconsistently implemented across the State.

We note that payments were withheld for three of 47 reports classified as 'off track' or 'overdue' (i.e., non-compliant) in 2020. This number increased in 2021, with 11 payments withheld for 36 non-compliant reports.

The BCT's compliance policy lists other statutory mechanisms for managing non-compliance including suspending or cancelling credits, issuing Biodiversity Credit Enforcement Orders, or commencing civil or criminal proceedings. The BCT's authority for enforcing compliance decisions is limited as DPE is the regulatory body, meaning that unresolved breaches of compliance must be referred to DPE for enforcement. The BCT advised the audit that to date no such cases have been referred to DPE.

Over 90% of active BSA sites do not have ecological monitoring requirements, limiting assessment of biodiversity outcomes

Ecological monitoring requirements were only included in BSAs established after March 2021, following the introduction of the BCT's Ecological Monitoring Module. The module is a framework and procedures that aims to:

- collect and analyse data to inform the evaluation and reporting of ecological outcomes (at site, regional and State scales) against relevant BCT objectives, and to demonstrate return on investment to the BCT Board, Government, landholders, and the wider community
- enable the evaluation of management effectiveness (and for assumptions to be tested) with respect to improvements in biodiversity values, the security of those values, the contribution to a 'no net loss' of biodiversity standard, and the relationships between different indicators of ecological integrity, to inform adaptive program improvement.

The application of the Ecological Monitoring Module is not specific to BSAs under the Scheme, but based on risk across a number of the BCT's programs. The BCT has procedures to guide the development of ecological monitoring activities through the Ecological Monitoring Module, with detailed specifications for identifying the biodiversity metrics to be tracked.

Prior to March 2021, the BCT did not have a structured framework guiding its ecological monitoring activities at BSA sites. Information is not yet available on biodiversity improvement on BSAs sites created under the current Scheme: it is too soon for this given the transition of sites from the previous scheme, and the recent implementation of this ecological monitoring.

The BCT plans to improve the integration between the ecological monitoring activities and compliance activities. This was expected to be completed in 2021, but is not yet finalised. This integration is important to ensure that ecological underperformance can be addressed via compliance mechanisms where necessary.

DPE has indicated that ecological monitoring did occur on BioBanking sites transitioned from the previous scheme, but has not provided evidence of this taking place. We have been advised, however, that less than five per cent of BioBanking sites have ongoing ecological monitoring costed into their Total Fund Deposits. This means that DPE does not have information on the biodiversity outcomes of BioBanking sites that transitioned to the current Scheme.

The BCT advises that ecological monitoring requirements will not be retrofitted to existing agreements. This means there will be a gap in ecological outcomes data for agreements established prior to March 2021, equating to around 90% of active BSAs.

The BCT has preliminary plans to re-survey a sample of sites (15–20%) transitioned from the earlier BioBanking scheme to understand actual biodiversity gains resulting from the management of these sites.

Section two

Appendices

Appendix one – Response from agencies

Response from Department of Planning and Environment

Department of Planning and Environment



Our ref: ED22/83

Your ref: D2213766/PA6691

Mr Ian Goodwin Deputy-Auditor General for New South Wales Audit Office of New South Wales mail@audit.nsw.gov.au

Subject: Performance Audit- Biodiversity Offset Scheme

Dear Mr Goodwin

Thank you for the opportunity to consider and respond to your Performance Audit - Biodiversity Offsets Scheme.

I welcome the report's findings and recommendations. Please find attached the Department of Planning and Environment's response to each of the report's recommendations. The Department is supportive of the recommendations directed to the Department.

The NSW Biodiversity Offsets Scheme is a world leading approach to ensuring ecologically sustainable development and a key component of the Government's approach to combatting the decline of biodiversity. I appreciate the Audit Office's acknowledgement of the work undertaken to improve the scheme since it commenced in 2017.

The NSW Government is committed to continuously improving the scheme through our Integrated Improvement and Assurance Program (IIAP), independently overseen by Mr Mike Mrdak AO. In his most recent progress report to the Minister for the Environment and Heritage, Mr Mrdak noted 'strong and well-structured progress' is being made to deliver key improvements and 'the scheme is now in the strongest position it has been in since commencement'. A major achievement is the establishment of the Biodiversity Credits Supply Fund, a ground-breaking initiative which will accelerate the establishment of Biodiversity Stewardship Agreements (BSAs) to generate "in demand" biodiversity credits. In addition, we are improving the scheme by:

- · making it easier for stakeholders to participate in the scheme (reducing barriers to entry for BSAs)
- further strengthening the biodiversity credit market and improving price information
- · maintaining a scientifically rigorous approach to assessing biodiversity values
- · ensuring confidence in the scheme through improved auditing and monitoring.

Your audit recommendations will significantly contribute to informing our evolving IIAP.

26 Aug-st 2022

I thank the audit team for the significant work they have undertaken and their professional and collaborative approach to working with the Department. If you have any further questions, please do not hesitate to contact me.

Yours sincerely

Mick Cassel Secretary

Encl: DPE response to recommendations

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Department of Planning and Environment response to performance audit recommendations on the Biodiversity Offsets Scheme

Recommendation		Response	
1.	By December 2022, DPE should establish governance arrangements with separate reporting lines to better oversee and manage risks related to the BCT and/or other agencies with multiple roles in the Scheme (for example as market participants and intermediaries, and as administrators of BSA sites)	Agreed in principle	DPE has put in place strong and effective governance arrangements to address risks and ensure that multiple roles in the scheme are effectively managed. DPE will continue to review and, if necessary, revise these arrangements to ensure they are appropriate and effective. Existing governance for the scheme includes a Biodiversity Offsets Scheme Board and an Interdepartmental Reference Group. Significantly, DPE is working to engage IPART to undertake an overall biodiversity credit market monitoring role. A new Credits Supply Taskforce has been established within DPE with the objective of increasing supply of biodiversity credits. This includes the function for approving Biodiversity Stewardship Agreements (BSAs), previously delivered by the BCT. Separate reporting lines for the Taskforce have been established within DPE to the extent feasible. The Taskforce will publish its probity arrangements to ensure full transparency.
2.	By December 2022, DPE should collate and maintain centralised information about offset obligations and discounting for major projects (State Significant Development and Infrastructure), including documentation related to ministerial decisions	Agreed in principle	DPE recognises the need to maintain centralised information on offset obligations for major projects, and is committed to doing so as soon as possible, to support monitoring and reporting of scheme performance. Documents detailing credit calculations under the scheme and final credit obligations imposed for major projects are recorded on DPE's Planning Portal. However, this information is contained in various documents submitted at different points of the application process. DPE is working towards collating this information in a central location to support analysis and reporting. While there are challenges in integrating data between the Planning Portal and Biodiversity Offsets Scheme systems which will make it difficult to meet the recommended timeframe, this will be

1

Recommendation	Response	
		achieved as soon as possible. Delivery timing will be identified after information and capabilities are reviewed.
By December 2022, DPE should evaluate the overall quality of biodiversity assessment reports (for development and stewardship sites) and implement improvement strategies, including a quality assurance process, in collaboration with the BCT.	Agreed	DPE recognises high quality biodiversity assessment reports are critical to a robust scheme. DPE has established extensive resources to support accredited assessors in preparing reports, including a best-practice template for biodiversity development assessment reports. By the end of 2022, DPE will expand and strengthen oversight of accredited assessors by implementing a compliance and assurance plan, audit protocol and de-accreditation process. This will include reviewing a sample of biodiversity assessment reports to evaluate their quality. Responsibility for reviewing biodiversity stewardship site assessment reports has moved from the BCT to the Credits Supply Taskforce in DPE. Information from the DPE review of biodiversity development assessment reports will inform ongoing audits, quality assurance and improvement strategies.
4. By July 2023, DPE should implement a long-term strategic plan for the Scheme that defines biodiversity goals with respect to the Act. The strategic plan should include: • clearly allocated roles between DPE and the BCT and other relevant agencies, to ensure effective Scheme oversight, delivery, and market operations • guidance to the BCT on timeframes and priorities for acquitting its acquired offset obligations, including a method for moving through its acquittal options	Agreed	DPE will develop a long-term strategic plan for the scheme. Considerable work is already underway that will inform the plan, including priorities identified in the Integrated Improvement and Assurance Program (IIAP) and a monitoring, evaluation, reporting and improvement framework, which is under development. Recommendations such as those in the Audit Office report will inform the evolving IIAP. The work of the Credit Supply Taskforce is central to the development of a long-term strategic plan for the Scheme. For example, in proactively identifying BSA sites the Taskforce will, to the extent possible, seek to ensure that BSAs contribute to and integrate with other conservation measures to promote regional and State objectives.

2

Recommendation	Response	
 performance indicators for the Scheme's administration, including the BCT's activities sure as the ecological monitoring of BSA sites an approach to measuring and publicly reporting on biodiversity outcomes from the Scheme, including its contribution to State and regional biodiversity goals. 		DPE will support the BCT to finalise a framework to acquit offset obligations transferred to the Biodiversity Conservation Fund. The management and control of this Fund, and the range of options to acquit these obligations, is the statutory responsibility of the BCT. The long-term strategic plan will include clear performance indicators. As a priority, these indicators will provide objective measures of success in delivering biodiversity outcomes. The strategic plan will articulate the role of the Scheme in meeting State and regional biodiversity goals and, in particular, how it relates to and integrates with other conservation policies and measures.
5. By July 2023, DPE should enhance its public credit register to include unique credit identifiers, ownership and transaction history, and informatio about each offset obligation and rules against whice each credit was retired		DPE recognises the need for greater transparency of credit lifecycles and how offset obligations are met. DPE is working to improve the public registers to increase the accessibility and quality of information available. DPE can trace the lifecycle of credit holdings in the current system and is examining options to improve transparency. Implementation of unique credit identifiers is unlikely to be possible in the current systems. Accordingly, DPE will investigate the feasibility of creating unique credit identifiers if a new credit management system is considered, noting this would require significant investment.
		DPE recognises that publishing information in a central location on offset obligations and how they are met would increase transparency in the scheme. Development of new registers would be subject to a funding decision by government.
By July 2023, DPE should implement a resourced p to improve the operation of the biodiversity credit market, including by improving the transparency o market information and by supporting adequate		DPE is undertaking significant work to improve the operation of the credit market, which will be brought together under a single plan. A \$106 million Biodiversity Credits Supply Fund has been established to improve functioning of the biodiversity credit market. This is a ground-

Recommendation	Response	
credit supply. The plan should allocate roles and timeframes for:	of credits, including by accelerating the esta within DPE will manage the Fund. The Taskfor support landholders to enter BSAs and signification of types that are in demand. The Taskforce is in measures to make it easier for landholders to simplifying the BSA template and adopting a approval process. The BSA application fee will no combination, these measures will significate reducing the cost and time involved in enter	breaking initiative designed to significantly enhance the supply and integrity of credits, including by accelerating the establishment of BSAs. A Taskforce within DPE will manage the Fund. The Taskforce will proactively identify and
 publishing enhanced information about current and expected credit supply and demand, and credit prices 		support landholders to enter BSAs and significantly increase supply of credit types that are in demand. The Taskforce is implementing a range of specific measures to make it easier for landholders to enter into BSAs, including
 proactively identifying potential Biodiversity Stewardship Agreement (BSA) sites 		simplifying the BSA template and adopting a streamlined application and approval process. The BSA application fee will be waived until 30 June 2023.
 reducing barriers to landholders establishing BSA sites, and accelerating timeframes for the 		In combination, these measures will significantly reduce barriers to entry by reducing the cost and time involved in entering into a BSA.
establishment of BSA sites on private land.		The Taskforce is seeking to ensure that its proactive identification of BSA sites will, to the extent possible, contribute to and integrate with other conservation measures to promote regional and State objectives.
		DPE has published market information including a Biodiversity Credits Market Sales Dashboard, credit pricing guidance, and an Offset Trading Group lookup tool for identifying like-for-like options. DPE will continue to improve market information and tools.
		Further work to address other barriers to market participation will be informed by customer journey mapping, subject to resourcing and approval.
By July 2023, the DPE and the Biodiversity Conservation Trust should implement a decision- making and intervention framework to ensure adequate initial and ongoing funding for the long- term management of new and existing BSA sites	Agreed	DPE and the BCT are developing a risk-based framework to support the financial sustainability of the Biodiversity Stewardships Payments Fund (BSPF), informed by expert advice from EY Port Jackson Partners.
		DPE has adopted a transparent formula for calculating the Total Fund Deposit (TFD) amount for new BSAs that incorporates a risk tolerance threshold set by the Minister. The TFD is paid into the BSPF on the sale of credits to fund the long-term management of the site.
		The adequacy of the BSPF is managed through the BCT's investment strategies and the adequacy mechanisms established by the <i>Biodiversity Conservation Act 2016</i> .

Recommendation		Response	
8.	By July 2023, the DPE and the Biodiversity Conservation Trust should review the status of passive BSA sites and implement a plan to support biodiversity on sites that are at risk of not entering active management	Agreed	DPE recognises moving passive BSA sites into active management would support the achievement of long-term biodiversity gains. The BCT has responsibility for reviewing the status of BSA sites. DPE will work with the BCT to develop options to support sites identified by the BCT as being at risk of not entering active management.
9.	By July 2023, the DPE and the Biodiversity Conservation Trust should establish protocols for supporting BSAs where biodiversity outcomes are not on-track due to events that cannot be reasonably controlled or planned for	Agreed	DPE will work with the dedicated compliance team the BCT is establishing to ensure protocols are in place to support BSAs where biodiversity outcomes are not on track.
10	By July 2023, the DPE and the Biodiversity Conservation Trust should implement plans to ensure ecological monitoring occurs on all BSA sites.	Agreed	Ecological monitoring requirements were included in management plans of new BSAs from March 2021. DPE will support, as needed, the work of the BCT to refine its ecological monitoring to ensure the program is strategic and addresses any gaps in monitoring older sites.
11	By July 2023, the Biodiversity Conservation Trust should report annually on the estimated number and type of offset obligations that can/cannot be met on a like-for-like basis, and the estimated costs for acquitting these within 12 months.	Agreed. Please refer to the BCT response	

Response from Biodiversity Conservation Trust



Our ref: DOC22/751084

Mr Ian Goodwin Deputy Auditor-General Level 15, 1 Margaret Street SYDNEY NSW 2000

Dear Mr Goodwin

Subject: Performance Audit - Biodiversity Offsets Scheme

Thank you for your letter dated 28 July 2022 inviting our response to your performance audit of the Biodiversity Offsets Scheme.

The Biodiversity Conservation Trust (BCT) Board has noted the findings of the report and supports the recommendations of the audit. Our response to the recommendations that apply to the BCT is in the enclosed table.

I note that the report recognises that the Department of Planning and Environment (DPE) has recently announced significant changes to the management of aspects of the Biodiversity Offsets Scheme. The BCT is working closely with DPE to ensure a smooth transition to the new arrangements, which moves responsibility for the establishment and variation of Biodiversity Stewardship Agreements (BSAs) from the BCT to the new Biodiversity Credits Supply Taskforce.

I would also like to the highlight that the BCT Board has recently approved additional resources for managing compliance across biodiversity stewardship and private land conservation agreements. The BCT is also continuing to improve and refine its ecological monitoring program.

Yours sincerely

Niall Blair Chair

25 August 2022

Encl: Response to recommendations

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Recommendations directed jointly to the Department of Planning and Environment and BCT	Response	
7. By July 2023, DPE and BCT should implement a decision-making and intervention framework to ensure adequate initial and ongoing funding for the long-term management of new and existing BSA sites	Supported. The BCT will seek to continue working closely with DPE to implement the recommendations from Port Jackson Partners to improve the management of the Biodiversity Stewardships Payment Fund.	
8. By July 2023, DPE and BCT should review the status of passive BSA sites and implement a plan to support biodiversity on sites that are at risk of not entering active management	Supported. The BCT has already commenced a desktop review of passive BSA sites and will seek to work with DPE to develop options to support sites that are at risk of not entering active management.	
9. By July 2023, DPE and BCT should establish protocols for supporting BSAs where biodiversity outcomes are not on-track due to events that cannot be reasonably controlled or planned for	Supported. The BCT is in the process of establishing a dedicated compliance team that will seek to work with DPE to ensure appropriate procedures are in place to support BSA sites where biodiversity outcomes are not on track.	
10. By July 2023, DPE and BCT should implement plans to ensure ecological monitoring occurs on all BSA sites	Supported. The BCT is currently refining its ecological monitoring program to address the gap in monitoring for older sites which, in consultation with DPE, will consider cost and resourcing impacts on both the BCT and landholders.	
Recommendations directed to the BCT	Response	
11. By July 2023, the BCT should report annually on the estimated number and type of offset obligations that can/cannot be met on a like-for-like basis, and the estimated costs for acquitting these within 12 months.	Supported. The BCT currently reports on the expected costs of all outstanding obligations held in the BCF in its annual report. A report highlighting credit types that are likely to be difficult to offset on a like-for-like basis will be provided to the Board annually.	

Appendix two – Like-for-like, variation and ancillary rules

Like for like

Section 6.3 of the Biodiversity Conservation Regulation 2017 contains the like-for-like rules for biodiversity credits.

6.3(2) states that, in the case of impacts on threatened ecological communities, like-for-like biodiversity credits represent:

- a) the same threatened ecological community located in:
 - i) the same or an adjoining Interim Biogeographic Regionalisation of Australia subregion as the impacted site, or
 - ii) any such subregion that is within 100 kilometres of the outer edge of the impacted site, and
- b) if the threatened ecological community contains hollow bearing trees—vegetation that contains hollow bearing trees.

6.3(3) In the case of impacts on the habitat of threatened species that are ecosystem credit species or other native vegetation (other than impacts on threatened ecological communities), like-for-like biodiversity credits represent:

- a) the same class of native vegetation located in:
 - i) the same or an adjoining Interim Biogeographic Regionalisation of Australia subregion as the impacted site, or
 - ii) any such subregion that is within 100 kilometres of the outer edge of the impacted site, and
- b) the same or a higher offset trading group, and
- c) if the impacted habitat contains hollow bearing trees—vegetation that contains hollow bearing trees.

6.3(4) In the case of impacts on threatened species that are species credit species, like-for-like biodiversity credits represent the same threatened species.

Acquittal options for proponents

Under section 6.2 of the Regulation, proponents are permitted to meet their offset obligation by:

- retiring credits based on the like-for-like rules, or
- funding a biodiversity conservation action that benefits the threatened entity impacted by the development. The action must be listed in the 'Ancillary rules: Biodiversity conservation actions' and meet the other requirements set out by these rules, or
- committing to deliver mine site ecological rehabilitation that creates the same ecological
 community or threatened species habitat (available for major mining projects only). The
 ecological rehabilitation must meet the requirements set out in the `ancillary rules for mine
 site ecological rehabilitation' which will be published by the Environment Agency Head, or
- making a payment to the Biodiversity Conservation Fund calculated using the offsets payments calculator.

If a proponent can demonstrate they were not able to find like-for-like credits and chooses not to use the other offset options, they can seek approval to offset with a broader suite of biodiversity using the variation rules.

BCT acquittal hierarchy

BCT's hierarchy of options available to acquit its obligations (under section 6.6 of the Regulation) are:

- retire credits under the like-for-like rules or fund a biodiversity conservation action that benefits the entity impacted and is listed in the ancillary rules
- retire credits under the variation rules (noting the variation rules can be applied to all threatened entities, unlike for proponents where impacts on entities identified in the ancillary rules are excluded from the variation rules)
- fund a biodiversity action that benefits the entity impacted, but this action does not need to be listed in the ancillary rules
- retire credits under the variation rules, but these credits can be generated from anywhere in the State i.e., the location requirement in the variation rules does not apply
- use any other conservation measure approved by the Minister for the Environment.

Under the Regulation (6.6) the order in which the Biodiversity Conservation Trust is to consider the appropriate option is the descending order in which those options are set out above.

Variation rules

Variation rules under biodiversity offsets scheme are contained in section 6.4 of the Regulation. 6.4(1) The circumstances in which the ordinary offset rules for the determination of the like-for-like biodiversity credits required to be retired as a biodiversity conservation measure may be varied are as follows (the variation rules)—

- a) The proponent who is to retire the biodiversity credits has taken reasonable steps to obtain the requisite like-for-like biodiversity credits and requests the variation of the ordinary offset rules.
- b) In the case of impacts on threatened ecological communities or on the habitat of threatened species that are ecosystem credit species or other native vegetation—the biodiversity credits to be retired need not represent the same threatened ecological community or the same class of vegetation or represent a location in the same or adjoining Interim Biogeographic Regionalisation of Australia subregion, so long as
 - i) they represent the same vegetation formation, and
 - ii) they are in the same or a higher offset trading group, and
 - iii) they represent a location that is in-
 - (A) the same Interim Biogeographic Regionalisation of Australia region as the impacted site, or
 - (B) a subregion that is within 100 kilometres of the outer edge of the impacted site, and
 - iv) if the impacted habitat contains hollow bearing trees—they represent vegetation that contains hollow bearing trees or artificial hollows.
- c) In the case of impacts on threatened species that are species credit species—the biodiversity credits to be retired need not represent the same threatened species, so long as
 - i) if the impacted species is a plant—they represent a plant, and
 - ii) if the impacted species is an animal—they represent an animal, and
 - iii) they represent a species that has the same or a higher category of listing under Part 4 of the Act as a threatened species, and
 - iv) they represent a location that is in-
 - (A) the same or an adjoining Interim Biogeographic Regionalisation of Australia subregion as the impacted site, or
 - (B) any such subregion that is within 100 kilometres of the outer edge of the impacted site.

6.4(2) The variation rules do not apply in relation to impacts on threatened species or ecological communities that are excluded by the Environment Agency Head.

Ancillary rules

Under section 6.5 of the Regulation, the Environment Agency Head is to publish ancillary rules for the purposes of the interpretation and application of the offset rules and variation rules.

Under the 'Ancillary rules: Biodiversity conservation actions', to use a conservation action as a measure to offset or compensate for impacts on biodiversity values, the action must:

- benefit the threatened species or ecological community impacted by the development or clearing of native vegetation
- be selected from the list in these ancillary rules (note this only covers 23 species)
- be delivered through the NSW Government Saving our Species program to ensure biodiversity benefits are achieved, including the management of funding and implementation of the action
- be of an equivalent value to the amount calculated by the offsets payment calculator (as in force from time to time) for the retirement of the number of like-for-like biodiversity credits for which the action is intended to be a measure to offset or compensate. Before seeking approval from the consent authority or Native Vegetation Panel, applicants must seek written agreement from the Office of Environment and Heritage (now part of DPE) to the proposed action being delivered through the NSW Government Saving our Species program.

Examples of biodiversity conservation actions include targeted surveys, research and threat identification.

Before applying the variation rules, the proponent must demonstrate to the decision-maker that they have been unable to find like-for-like credits after following the reasonable steps, set out in the Ancillary rules: Reasonable steps to seek like for like credits. In summary, these steps are:

- checking the credit register for the required credits
- contacting landholders on the landholder expression of interest register
- lodging an expression of interest on the credits wanted register.

The variation rules can't be applied by proponents for impacts on some threatened entities listed in the Ancillary rules: impacts on threatened entities excluded from variation. All critically endangered entities are included on this list. This restriction does not apply to the Biodiversity Conservation Trust.

Appendix three – Detail on progress of the IIAP

DPE's priority work streams and examples of projects and their reported status under the Integrated Improvement and Assurance Program, May 2022

1. Policy: integrating the Scheme into decision-making to support conservation and economic priorities

Examples of projects reported by DPE as 'on track' or 'complete':

- · Contributing to reviews and inquiries related to the Scheme
- Producing guidelines for government agencies participating in the Scheme

Examples of projects reported by DPE as 'requiring action':

 Integrating the Scheme with other conservation and economic priorities e.g., considering additional flexibility for Critical State Significant Infrastructure; reforms to reduce uncertainty for developers where rezoning has already sought to offset and minimise biodiversity impacts.

2. Enabling participation: by providing tools, information, and other support

Examples of projects reported by DPE as 'on track' or 'complete':

- · Establishing a Scheme Helpdesk
- · Establishing a concierge-style support for proponents of major projects

Examples of projects 'requiring action':

- Simplifying and improving public information about the Scheme
- Expanding landholder support to engage potential participants.

3. Improving market functioning: more certainty and visibility for participants, better matching of supply and demand

Examples of projects reported by DPE as 'on track' or 'complete':

- Developing a business case and policy proposal for a Biodiversity Credit Supply Fund
- Engaging the Independent Price and Regulatory Tribunal to monitor and report on competition in the market

Examples of projects reported by DPE as 'requiring action':

- Increasing credit supply by considering using public lands such as Crown lands and National Park estate to generate credits
- BCT to lead improvements to processing of BSAs to keep pace with demand
- Publishing regular forecasts of demand and estimated supply.

4. A credible science-based approach

Examples of projects reported by DPE as 'on track' or 'complete':

- Aligning listing of NSW threatened entities with the Commonwealth
- Providing data and reviewing the scientific basis of Scheme requirements and rules
 Examples of projects reported by DPE as 'requiring action':
- · Providing manual on the implementation of the Biodiversity Assessment Method
- · Improving public systems to manage credit creation, transactions and retirements
- Developing other specific BAM guidance, mapping and survey data.

5. Ensuring confidence in the Scheme with a strong regulatory and governance framework

Examples of projects reported by DPE as 'on track' or 'complete':

- Establishing governance framework for the IIAP
- Developing a risk framework, risk assessment and reporting approach
- Released template for Biodiversity Development Assessment Report to improve quality.

Examples of projects reported by DPE as 'requiring action':

- Developing a whole-Scheme communications strategy
- · Replace the Biodiversity Offsets Payment Calculator
- · Establish a framework for the management of the Biodiversity Stewardship Payments Fund.

Source: AO summary of DPE data.

Appendix four - About the audit

Audit objective

This audit assessed whether the Department of Planning and Environment and the Biodiversity Conservation Trust have effectively designed and implemented the Biodiversity Offset Scheme to compensate for the loss of biodiversity due to development.

Audit criteria

We addressed the audit objective by considering the following audit criteria:

- rules and processes have been established to efficiently compensate for biodiversity loss
- rules and processes are being effectively applied to meet offset obligations
- rules and processes are being effectively applied to establish Biodiversity Stewardship Agreement (BSA) sites
- land areas covered by Biodiversity Stewardship Agreements are adequately regulated and supported.

Audit scope and focus

In assessing the audit criteria, we checked the following aspects:

- governance arrangements, roles and responsibilities, rules and procedures for establishing the market, establishing BSA sites, and for ensuring offset obligations are met
- how demand and supply sides of the credit market are operating, and steps taken to support market development
- quality assurance around biodiversity assessment reports by DPE-Accredited Assessors
- how the BCT and developers and are meeting their offset obligations
- monitoring and compliance work to oversee the management of BSA sites and support biodiversity outcomes
- oversight of sites created under previous schemes and transitioned to this Scheme.

Audit exclusions

The audit did not assess:

- the Biodiversity Assessment Method in detail
- processes to compile the biodiversity values map
- assurance processes for accreditation of Accredited Assessors
- specific credit transactions and retirements, or the management of individual BSA sites
- management of the Biodiversity Conservation Fund and Biodiversity Stewardship Payments
- impacts of the Scheme on small landholders wishing to develop their sites
- rural offset sites (set asides) administered under the Local Land Services Act 2016
- the process of biodiversity certification or the application of the Scheme to land clearing that is approved by the NSW Native Vegetation Panel.

Audit approach

Audit procedures included:

- interviewing staff from audited agencies and relevant external stakeholders
- examining documents and reports provided by the audited agencies, including legislation and regulations, policy and procedures documents, and activity and performance reports
- analysing activity and performance data provided by audited agencies.

The audit approach was complemented by quality assurance processes within the Audit Office to ensure compliance with professional standards.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standard ASAE 3500 'Performance Engagements' and other professional standards. The standards require the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with requirements specified in the *Government Sector Audit Act 1983* and the *Local Government Act 1993*.

Acknowledgements

We gratefully acknowledge the cooperation and assistance provided by the Department of Planning and Environment and the Biodiversity Conservation Trust.

In particular, we wish to thank our liaison officers and the staff who participated in audit interviews and provided materials relevant to the audit. We also gratefully acknowledge the range of government and non-government stakeholders who participated in interviews or provided information to the audit.

Audit cost

Including staff costs and overheads, the estimated cost of the audit is \$542,400.

Appendix five – Performance auditing

What are performance audits?

Performance audits determine whether State or local government entities carry out their activities effectively, and do so economically and efficiently and in compliance with all relevant laws.

The activities examined by a performance audit may include a government program, all or part of an audited entity, or more than one entity. They can also consider particular issues which affect the whole public sector and/or the whole local government sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake performance audits is set out in section 38B of the *Public Finance and Audit Act 1983* for state government entities, and in section 421B of the *Local Government Act 1993* for local government entities.

Why do we conduct performance audits?

Performance audits provide independent assurance to the NSW Parliament and the public.

Through their recommendations, performance audits seek to improve the value for money the community receives from government services.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, state and local government entities, other interested stakeholders and Audit Office research.

How are performance audits selected?

When selecting and scoping topics, we aim to choose topics that reflect the interests of parliament in holding the government to account. Performance audits are selected at the discretion of the Auditor-General based on our own research, suggestions from the public, and consultation with parliamentarians, agency heads and key government stakeholders. Our three-year performance audit program is published on the website and is reviewed annually to ensure it continues to address significant issues of interest to parliament, aligns with government priorities, and reflects contemporary thinking on public sector management. Our program is sufficiently flexible to allow us to respond readily to any emerging issues.

What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team develops an understanding of the audit topic and responsible entities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the audited entity, program or activities are assessed. Criteria may be based on relevant legislation, internal policies and procedures, industry standards, best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork, the audit team meets with management representatives to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with management representatives to check that facts presented in the draft report are accurate and to seek input in developing practical recommendations on areas of improvement.

A final report is then provided to the head of the audited entity who is invited to formally respond to the report. The report presented to the NSW Parliament includes any response from the head of the audited entity. The relevant minister and the Treasurer are also provided with a copy of the final report. In performance audits that involve multiple entities, there may be responses from more than one audited entity or from a nominated coordinating entity.

Who checks to see if recommendations have been implemented?

After the report is presented to the NSW Parliament, it is usual for the entity's audit committee to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament's Public Accounts Committee to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report received by the NSW Parliament. These reports are available on the NSW Parliament website.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

The Public Accounts Committee appoints an independent reviewer to report on compliance with auditing practices and standards every four years. The reviewer's report is presented to the NSW Parliament and available on its website.

Periodic peer reviews by other Audit Offices test our activities against relevant standards and better practice.

Each audit is subject to internal review prior to its release.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 9275 7100.

Professional people with purpose

OUR VISION

Our insights inform and challenge government to improve outcomes for citizens.

OUR PURPOSE

To help Parliament hold government accountable for its use of public resources.

OUR VALUES

Pride in purpose
Curious and open-minded
Valuing people
Contagious integrity
Courage (even when it's uncomfortable)



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