



Biodiversity
Conservation
Trust

Biodiversity Conservation Trust

Research Strategy

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1. Introduction

Context

The Biodiversity Conservation Trust (BCT) considers it crucial that its programs and delivery mechanisms are built on best available information and evidence-based research. It is important that they continue to be refined and improved to maximise the conservation benefits and cost-effectiveness of its investments in private land conservation in NSW, and its functions under the Biodiversity Offsets Scheme (BOS).

Research can play a pivotal role in this by:

- enhancing conservation outcomes through better identification and targeting of conservation assets and design of programs, delivery mechanisms and management actions
- increasing landholder participation and satisfaction through identifying factors that enable or limit landholder participation and retention in private land conservation initiatives
- increasing cost-effectiveness of BCT's investment in private land conservation through better understanding of the market and the costs and benefits of different approaches
- providing evidence for the effectiveness of private land conservation as a policy tool.

As the BCT continues to roll out its programs and the number of private land conservation agreements increases, the increased ecological, social and economic monitoring data that the BCT hold will provide a valuable resource for research projects. The BCT is likely to experience increased frequency of requests from researchers for these data. In considering such requests it will be vital for the BCT to:

- 1) prioritise requests that best align with the BCT's research, monitoring and evaluation priorities
- 2) minimise impact on BCT resources
- 3) safeguard the privacy of its landholders and risks of research fatigue
- 4) appropriately safeguard market-sensitive data.

Purpose and objectives

The BCT's Research Strategy (the Strategy) aims to provide information to support the BCT in achieving its objectives as outlined in the BCT's Business Plan and reflected in the Biodiversity Conservation Investment Strategy which guides BCT investment in private land conservation. It has been developed to support BCT's private land conservation, programs and delivery mechanisms. For the BOS, the Strategy aims to continually refine BCT's approach to biodiversity assessment and offsetting for development, based on rigorous scientific evidence and the knowledge this generates.

The Strategy has the following objectives:

- 1) establish how research needs will be identified and prioritised
- 2) establish principles to ensure that research undertaken by or on behalf of BCT is aligned with the BCT's objectives

- 3) ensure data used for research purposes is appropriately managed and protects landholder privacy and sensitivity
- 4) guide how BCT engages with other agencies and organisations in undertaking research
- 5) provide a framework to translate research outcomes into management actions or policy.

The Strategy seeks to establish prioritised research needs across all aspects of private land conservation in NSW. This includes research in the areas of ecology and biodiversity conservation, social and economic factors, as well as legal and governance themes. Consideration is given to short term priorities as well as a longer-term strategic research needs to assist the BCT in adapting to a changing socio-economic and environmental context.

The Strategy aligns to the BCT Business Plan and will be reviewed in light of revisions to the Business Plan.

Principles

BCT investment in research refers to any form of involvement by the BCT, including cash and in-kind contribution and general support, in research initiated by the BCT as well as that driven externally.

The following principles will guide this investment:

Principle 1: *The objectives and conduct of any research must align with BCT's objectives.*

Principle 2: *Research must meet the highest standards of scientific rigour and likely produce useful evidence-based outputs that contribute to the enhancement of private land conservation outcomes.*

Principle 3: *Decisions regarding BCT investment in research will be made having regard to available funds, value for money and NSW Government's investment priorities.*

Principle 4: *BCT will seek to maximise complementarity with other government and non-government programs and avoid duplication of effort.*

Principle 5: *The BCT will respect/protect the privacy of its landholders and ensure the appropriate use of sensitive data.*

Principle 6: *The knowledge generated from BCT's investment in research must be made accessible (where possible, publicly) including to landholders and other stakeholders in private land conservation in NSW.*

In undertaking and supporting research, the BCT will align with the *Australian Code for Responsible Conduct of Research* to ensure the research is conducted responsibly, ethically and with integrity.

2. Research delivery pathways

The range of pathways for delivery of research outcomes are detailed below, together with considerations that BCT will factor into decisions regarding research investment.

BCT undertakes own research

The BCT has a high degree of technical expertise among its staff. Research will be undertaken within the BCT using appropriately skilled staff where resources allow, where there is no real or perceived issue with impartiality and where conducting the research internally is no less cost-effective than if externally provided.

Research conducted by BCT itself will be subject to independent peer review where required as determined by the Chief Executive.

BCT supports research undertaken externally

Research may be undertaken externally to BCT, through other government agencies, academic institutions, private sector business, non-government or peak bodies or community groups. This research may be initiated by BCT or initiated elsewhere with BCT as a contributing partner. Types of contribution from the BCT may include cash or in-kind via staff time or access to data.

BCT may contribute to research outcomes through funding for scholarships

The BCT will investigate opportunities to establish scholarship programs with several institutions including universities, agricultural high schools and colleges. These scholarships will be targeted at the research needs identified in the Research Strategy.

Research funded as Conservation Action under Biodiversity Offset Scheme

The offset rules established by the Biodiversity Conservation Regulation 2017 allow the BCT to fund biodiversity conservation actions to offset obligations received through developer payments into the Biodiversity Conservation Fund under the Biodiversity Offsets Scheme.

Eligible conservation actions may include research that directly benefits threatened species or ecological communities impacted by development or clearing of native vegetation.

The Regulation allows the BCT to fund a biodiversity conservation action as the third option for securing biodiversity offsets after like-for-like and variation rules are considered. The BCT's Biodiversity Conservation Actions Framework will guide the use of this option, including research-related conservation actions.

Citizen science

The BCT recognises the important role that citizen science can play in both improving understanding of the benefits of private land conservation and in educating and engaging landholders. The BCT may

therefore support such projects through in-kind contributions or undertaking complementary projects, and work with DPIE who have the lead on citizen science within the NSW Government.

Over time, the BCT's Ecological Monitoring Module will increase the capability of our landholders to engage in citizen science.

3. Complementary processes and programs

BCT processes and programs

This Strategy has linkages with other BCT processes and programs as outlined below. Most of those listed below are available on the BCT website.

BCT program/process	Purpose	Link to Research Strategy
Monitoring and Evaluation Framework and associated modules	Outlines BCT's approach to monitoring, evaluating and reporting on investment outcomes in private land conservation and BCT functions under the Biodiversity Offsets Scheme.	The framework and associated modules will be an important source of ecological, social and economic data for research purposes.
BCT Ecological Monitoring Module	The monitoring and evaluation of all ecological outcomes from the BCT's investment in private land management.	This module in particular will be an important source of ecological data for research purposes.
BCT Risk Management Framework	The BCT Risk Management Framework outlines the BCT's approach to identifying, assessing and treating risk based on the Board's risk appetite statement.	Priority risks will be incorporated into identifying research needs where relevant.
BCT Education Strategy	Establishes a strategic, designed and prioritised approach to BCT's investment in biodiversity education.	The Education Strategy provides a mechanism for supporting research through scholarships and other approaches and can assist in dissemination of research outcomes.
BCT Aboriginal Engagement	Establishes principles and actions to guide interactions with Aboriginal communities, build partnerships and increase.	Identifies priority actions that may have research components that can be reflected in the Research Strategy. Also sets out

Implementation Plan and Action Plan	participation of Aboriginal landholders in BCT programs.	principles for interactions with Aboriginal communities to be adopted in research undertaken by or for BCT.
Communications and Stakeholder Engagement Strategy	Sets out how the BCT will communicate and engage with its various stakeholders to fulfil its objectives and functions.	Identifies research providers among the BCT's stakeholders and acknowledges dual benefits of collaboration and co-promotion.
Ecological Management guidelines	Series of technical guidelines relating to specific conservation management actions (e.g. restoration, grazing).	The process of developing management guidelines may identify important knowledge gaps that the Research Strategy can assist in addressing. Relevant research outcomes can build the evidence base and support the refinement of ecological management guidelines.

Other programs and policies

There are a large range of government and non-government programs and policies within NSW that are focused on biodiversity conservation on private land directly or indirectly. Specific examples of government programs and initiatives include the NSW Koala Strategy and Saving our Species program, both of which partly involve conservation on private land, and programs such as Restoration Science within DPIE Science.

The BCT creates a number of products in delivering its programs including site scale vegetation maps, threatened ecological community maps, floristic plot data set, and species observations. The BCT is consolidating these into a corporate database which will enable the data to be more easily shared with other stakeholders in DPIE and contribute to the state-wide vegetation classification and mapping, and to threatened species conservation programs. The BCT is also working with DPIE's BioNet Team to automate scheduled transfers of biodiversity data from BCT corporate databases to BioNet.

The BCT works collaboratively with DPIE Science Division on vegetation condition benchmarks including providing relevant field data collected by BCT staff; and assisting with testing the application of various products in an operational environment.

The BCT is also liaising with DPIE's Science Division to feed BCT research needs into their Knowledge Strategy, currently being developed.

NSW National Parks and Wildlife Service is also an important agency to acknowledge given the complementary objectives and adjacency of the many areas of private land currently or potentially in the future under conservation, to public protected areas.

The BCT is also investing in research being led by Australian Land Conservancy Alliance (ALCA) through membership of the alliance and direct sponsorship of such research.

The BCT will always seek to work collaboratively with others to achieve research outcomes and will actively avoid duplication of effort and investment. The BCT will also build research networks so it is better equipped to know what research is occurring that may be relevant to BCT's work.

4. Identifying research priorities

The BCT will identify research priorities using input from its staff and Board members. BCT may seek the input of other government and non-government organisations with key interest in private land conservation and biodiversity protection on the research priorities identified. The input of relevant subject matter experts may also be sought where appropriate.

Research priorities will be identified thematically to allow flexibility in research approaches and encourage innovation. Research priorities will include a general description of the research need, the relevance to the BCT's targets and objectives and the relative priority.

The BCT will also work closely with researchers to develop the research questions and have check in points in research agreements/contracts where the BCT can have input into the way the research is conducted. This recognises that it is important that the research conducted asks the right question to ensure outputs are fit for purpose. This approach aligns with the research prospectus being developed by DPIE, which invites a spectrum of research interests, from themes to very specific questions.

The process will remain flexible and adaptive to respond to new and emerging research priorities. The BCT may therefore invest in research outside the priorities identified but will ensure such investment is otherwise consistent with the principles established in this Strategy.

The current research priorities are listed in **Appendix 1**.

5. Research evaluation and governance

Requests and proposals through the BCT research pathways (included those identified within BCT) will be approved by the BCT Executive, having regard to the following assessment criteria..

1. relevance to BCIS – ensuring that research contributes to the objectives and targets of the BCIS and is consistent with investment principles and other BCT programs and processes
2. benefit to BCT – considering likely outputs and outcomes of the research
3. uncertainty and urgency – measures of the relative uncertainty (e.g. lack of knowledge) and urgency of the research in relation to the business needs of the BCT

4. risk – considering risks to BCT landholders, the BCT itself and the broader NSW Government
5. complementarity to other programs – with higher priority to research that supports other government and non-government programs and avoids duplication of effort
6. investment – considering overall investment required as well as value for money

The BCT will then enter into relevant contractual arrangements, where needed (subject to the nature of the proposal and BCT's contribution), consistent with established procurement processes as well as confidentiality and data sharing agreements as required.

BCT research register

A BCT research register will be established to enable tracking of research proposals, as well as research outputs and outcomes.

6. Protection of landholder privacy and sensitive information

Landholder privacy

The BCT is committed to protecting the privacy of its landholders and partners, in accordance with the Privacy and Personal Information Protection Act 1998 (NSW).

The distribution of data held by the BCT to research partners will be consistent with the requirements of that legislation as well as the Biodiversity Conservation Act 2016 and the terms of agreements entered into with landholders.

BCT may make available additional data beyond that included in the publicly available public register of private land conservation agreements with the consent of agreement holders to ensure compliance with the NSW privacy law.

Data will not be made available where consent of relevant landholders is not provided, or where potential misuse of data would present an unacceptable level of risk to the BCT.

Sensitive information

In addition to landholder data, the BCT also manages a large amount of sensitive information that must be appropriately managed and protected. This includes market sensitive information, data relating to the location of threatened entities and potentially cultural heritage sites and other cultural information.

The protection of the intellectual property of the owners of such information will always be the first priority of the BCT and the sharing of such information will only be done with the consent of the owners and with the use of appropriate confidentiality and data sharing agreements with the end users.

7. Communication and extension

Promotion of collaborative research

The BCT will promote our collaborative research both internally and externally through various communication channels, with focus on the outcomes of how the research is being used.

Publication of research

The BCT also recognises the importance of publishing research findings for the value of scientific peer review and to contribute to scientific understanding of the benefits of private land conservation and to further its development.

BCT staff will be encouraged to publish, or contribute to the publication of, the findings of research which the organisation has undertaken or supported where publication:

- contributes to the BCT achieving its objectives and targets
- is in the public interest
- appropriately protects the privacy of landholders and other partners
- appropriately protects market sensitive information that could jeopardise the efficient delivery of BCT's programs and delivery mechanisms
- appropriately protects any other sensitive information including threatened entities.

Research page on BCT website

To ensure that the BCT's investment in research supports the promotion of public knowledge of the value of biodiversity conservation, a dedicated Research page will be established on the BCT website. This page will host the Research Strategy, and research summaries prepared by research providers (or links to research outputs as relevant).

Review of Strategy

The Strategy will be a living document - allowing new priorities to be incorporated as needed. A formal review will be undertaken every two years.

Appendix 1: BCT priority research needs for 2020-2022

1. Economics of private land conservation

Research that supports BCT in increasing landholder participation in private land conservation and achieving its targets of diversifying income and investment streams of landholders and rural and regional communities. Includes research related to:

- the financial incentives and barriers that private land conservation presents to landholders
- how private land conservation can integrate into farm economics now and into the future
- valuing of natural capital
- issues and opportunities associated with stacking of payments for ecosystem services, particularly concepts of complementarity and additionality.

Primary links to BCT goals, targets and principles: BCIS Targets 2 & 4. BCIS Investment Principle 2, 3, 4. BCT Business Plan Strategic Goals 1, 3 & 4.

2. Enhancing conservation outcomes from private land conservation

Research that support BCT in achieving its objective of optimising biodiversity outcomes. Includes research related to:

- understanding the effectiveness and efficiency of conservation management actions on private land
- improving baseline ecological data used by BCT in the planning of its programs and delivery mechanisms
- bushfire management and recovery and the role of fire as a conservation management action including cultural burning practices
- understanding the relationship between private land conservation and climate change, from the scale of state-wide planning to site scale conservation management.

Primary links to BCT goals, targets and principles: BCIS Targets 1 & 3. BCIS Investment Principle 1& 5. BCT Business Plan Strategic Goal 1.

3. Increasing landholder participation in private land conservation

Research that supports BCT in achieving its goal of encouraging landowners to enter agreements to conserve biodiversity and support productive landscapes. This includes research related to:

- societal perceptions of private land conservation and how that influences landholder decisions
- identification and measurement of non-monetary benefits of private land conservation
- supporting increased engagement of Aboriginal people and communities in private land conservation
- supporting the establishment of knowledge sharing communities within the BCT's landholders (e.g. communities of practice) to increase landholder education and enhance efficiency of BCT staff.

Primary links to BCT goals, targets and principles: BCIS Targets 2 & 4. BCIS Investment Principle 2, 3 & 4. BCT Business Plan Strategic Goals 1, 3 & 4.

4. Continuous improvement of the private land conservation toolbox

Research that supports the continued refinement and evolution of the policies, programs and delivery mechanisms that the BCT employs to achieve its goals and targets. This includes research related to:

- developments in best-practice private land conservation policy and practice and design of market-based instruments, including offsets both within Australia and internationally
- development of leading-edge conservation planning tools and techniques to support enhanced biodiversity outcomes from private land conservation
- supporting the effective delivery of the Biodiversity Offsets Program, including credit demand forecasting and strategic offset identification support tools.

Primary links to BCT goals, targets and principles: BCIS Targets 1 - 4. BCIS Investment Principle 1, 2 & 5. BCT Business Plan Strategic Goals 1, 2 & 5.