

Assessment Metric

July 2025

Important information

Any information published by the NSW Biodiversity Conservation Trust (BCT) about our Assessment Metric, including information in this publication:

- is provided as general guidance only;
- should not be treated as an exhaustive description of how we assesses cost effectiveness for, or makes decisions about, investment in private land conservation; and
- should not be taken to commit BCT to any course of action.

We do not provide any warranty or guarantee in relation to the reliability, accuracy or completeness of any information published about our Assessment Metric. We may vary the composition and/or inputs to the Assessment Metric at any time without notice for specific or targeted investment.

We disclaim, to the maximum extent permitted by law, liability for any direct or indirect loss, damage, cost or expense that you or any person may incur because of the use of, or reliance upon, any information published about our Assessment Metric.

You are responsible for assessing the relevance of the information to you and your circumstances. You should exercise care, use your own judgement, and seek professional advice where appropriate, in deciding how to use the information.

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Introduction

The NSW Biodiversity Conservation Trust (BCT) Assessment Metric (2025) is a decision-support tool designed to guide investment in private land conservation. It aligns with the Biodiversity Conservation Investment Strategy 2018 and the BCT Business Plan, aiming to build a comprehensive, adequate, and representative protected area system.

We have developed an Assessment Metric to determine the best value for money sites in our Conservation Management Program fixed price offer, conservation tenders, co-investment partnerships and revolving fund¹. The Assessment Metric supports cost-effective investment by the BCT in private land conservation.

The metric evaluates conservation proposals using a Biodiversity Value Index (BVI), calculated by dividing the Biodiversity Value Score (BVS) by the cost of conservation management. The BVS is composed of four key components: Conservation Value, Duration, Risk, and Area.

Conservation Value includes both site-specific ecological condition and broader landscape context, with additional weighting for targeted assets and conservation status. Duration rewards longer-term or in-perpetuity agreements. Risk assesses the likelihood of land clearing based on soil capability, and Area values larger conservation sites.

The 2025 update introduces clearer scoring methods, expanded definitions, and improved transparency. It supports strategic prioritisation and ensures efficient, long-term conservation outcomes.

The following information about the Assessment Metric provides general guidance about metric composition and inputs. The BCT may vary the composition and/or inputs to the Assessment Metric for specific or targeted investment at any time without notice. Therefore, you should exercise care, use your own judgement, and seek professional advice where appropriate, in deciding how to use the information.

The Assessment Metric has been peer-reviewed by experts from CSIRO and the University of Adelaide and is subject to ongoing review.

¹ Information about our Conservation Management Program on bct.nsw.gov.au

Metric Design

Our Assessment Metric has been designed to assign each site a **Biodiversity Value Score (BVS)**. The BVS is divided by the price² for conservation management of the site, to generate a single **Biodiversity Value Index (BVI)** to identify the best value for money sites.

$$\text{Biodiversity Value Index (BVI)} = \frac{\text{Biodiversity Value Score (BVS)}}{\text{Price for conservation management}}$$

The **Biodiversity Value Score** (or **BVS**) represents the biodiversity value achieved from conservation management of a site and is made up of four components:

Conservation values	We value sites according to the conservation values they secure. This measure is derived from field assessment of the ecological condition of the site and the predicted future condition of the site based on proposed management actions; the type of environmental values on the property, such as threatened ecological communities; and the value of the site based on its contribution to conservation in the landscape.
Duration	We value the long-term protection of biodiversity through conservation agreements which can be either in-perpetuity ³ or in some offers termed agreements (between 15-75 years). The BVS gives greatest weight to in-perpetuity agreements and greater weight to longer-term agreements relative to shorter-term agreements.
Risk	We value sites with a greater risk of conservation values being lost or impacted in the future, based on the topographic position of the site as assessed through the land and soil capability class of the site and other appropriate surrogates where relevant.
Area	We value sites of greater size by valuing each additional hectare the same. The eligible area of the proposed site to be protected by the conservation agreement is measured.

Figure 1 outlines the composition of the Assessment Metric used in the Conservation Management Program. **Table 1** provides a summary of the metric components, including their value ranges.

² The ‘price’ in this case will be the present value (PV) of all proposed future management payments, to ensure sites are assessed on an equal footing irrespective of the actual term of the proposed agreement. [Present value is the current worth of the future series of management payments discounted at the discount rate used by BCT to calculate the sum to be set aside for future payments.]

³ In-perpetuity agreements continue to apply to the land forever and are binding on successors in title.

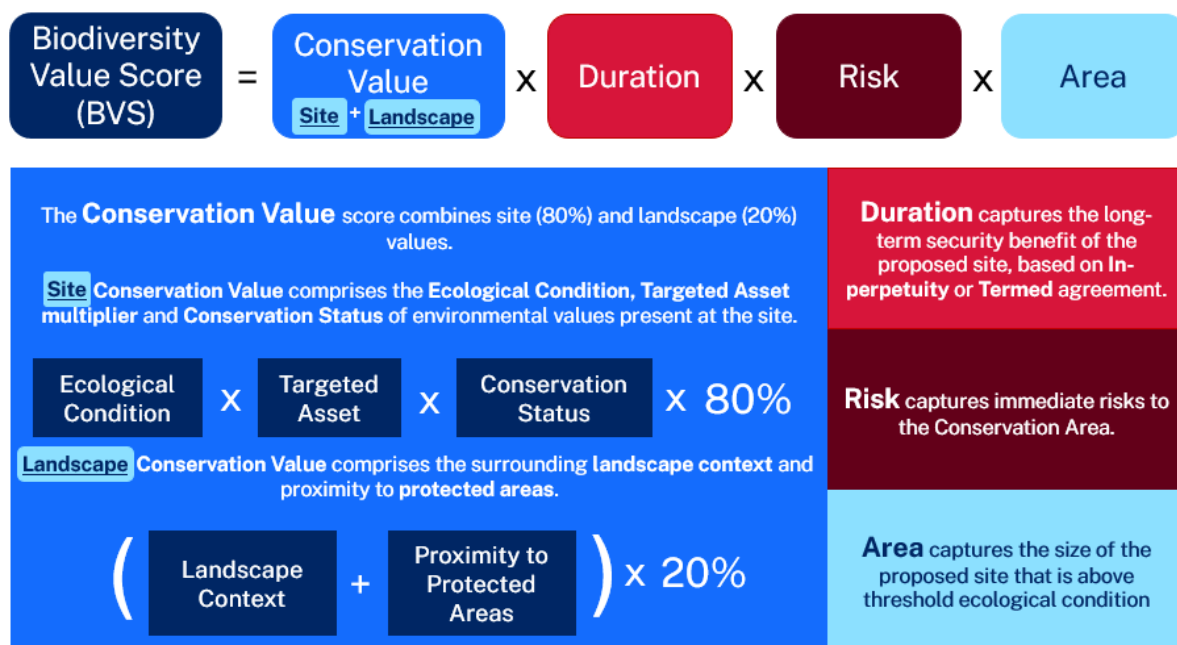


Figure 1: Composition of the Assessment Metric

Table 1: Summary of the metric components and their value ranges.

Metric Component	Value Range
Conservation Value	0 – 100
Site Conservation Value	0 – 80
	<i>(scaled from the maximum possible range of 0 – 300)</i>
▪ Ecological Condition	1 – 100
▪ Targeted Asset multiplier	1 – 3
▪ Conservation Status	0 – 1
Landscape Conservation Value	0 – 20
	<i>(scaled from the maximum possible range of 2 – 200)</i>
▪ Landscape Context	1-100
▪ Proximity to Protected Place	1-100
Duration	0.15 – 1
Risk	1 – 6
Area	Unlimited

Primary Metric Components

1. Conservation Value

Description and Intent	
The Conservation Value score of a site combines the conservation values present within the site (Site Conservation Value), as well as those outside of the site but in the local surrounding landscape (Landscape Conservation Value). Site Conservation Value (SCV) represents 80% of the final Conservation Value score because it represents the ecological condition of the native vegetation and the conservation assets to be conserved and managed at the site. Landscape Conservation Value (LCV) contributes 20% of the Conservation Value score in recognition of the influence that position in landscape has on long term ecological resilience and viability of the site. We may apply an alternative weighting for offers that target specific landscape outcomes.	
Score Range	0 – 100 [Comprising 0-80 from SCV and 0-20 from LCV]
Data Source	See Site Conservation Value and Landscape Conservation Value below
BCIS	See Site Conservation Value and Landscape Conservation Value below

a) Site Conservation Value

Description and Intent	
The Site Conservation Value score is an assessment of the ecological value of the site. This is a field-based measure that involves assessment of: ▪ ecological condition of the site, including the predicted future condition of the site based on landholder commitment to undertake a set of proposed management actions. This ensures that the greater the number of management actions a landholder commits to, the greater the projected improvement in ecological condition will be. ▪ Targeted Asset multiplier (x3) is scored for land extent considered to reflect our determined target assets. Where no target exists, the score will be x1. ▪ conservation status of environmental values on the property, such as threatened ecological communities, threatened species and significant wetlands. The Site Conservation Value score represents the product of these two attributes, scaled to a value of 0-80. $\text{Site Conservation Value} = \text{Ecological Condition} \times \text{Conservation Status}$ Measurement of each factor is addressed in more detail below.	
Score Range	0 – 80
Data Source	See ecological condition and conservation status below
BCIS	See ecological condition and conservation status below

i. Ecological Condition

Description and Intent	
The Ecological Condition of a site is measured using the following expression: $\text{Ecological Condition} = \text{Current ecological condition} + \text{Gain} \left(\frac{\text{difference between current and future predicted condition}}{\text{future predicted condition}} \right)$ Current ecological condition. This is assessed from multiple plot-based ecological surveys throughout the candidate site. A minimum of one ecological survey plot is conducted for every vegetation class present within the proposed site. Where vegetation classes vary significantly in condition, additional plots are surveyed to reflect the variation. Where ecological condition falls below set thresholds, this land will be ineligible for scoring. The method used to measure ecological condition will vary based on whether the vegetation assessed is considered a target asset or not. - For target assets, a Targeted Habitat Assessment is undertaken using a method developed by BCT considering the best available information. A minimum of one sample is collected for each zone of stratified target habitat. - For all vegetation zones (including target assets), a Rapid Vegetation Integrity (Rapid VI) Assessment is conducted based on principles set out in the Biodiversity Assessment Method (BAM). A minimum of one 50x20m plot is conducted for every vegetation class present within the proposed site. Where vegetation classes vary significantly in condition, additional plots are conducted to capture this variation in condition. Vegetation condition is assessed against benchmark values for vegetation classes in each IBRA subregion. Where relevant, we apply dynamic benchmarks developed for vegetation classes. Gain in condition predicted for a site is based on agreed management actions implemented by the landholder. The assessment of gain is consistent with the BAM.	
Score Range	1 – 100
Data Source	Field-based ecological survey; state or regional vegetation map products.
BCIS principles	Prioritising sites of better current and future predicted ecological condition: - Improves protection of good samples of the least protected ecosystems (BCIS Principle 1) - Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Seeks to promote long-term outcomes (BCIS Principle 2) by encouraging landholders to adopt a greater number and more impactful management actions - Complements other government and non-government programs (BCIS Principle 3) - Supports sustainable farming enterprises and promotes regional economic benefits and avoids land use conflicts (BCIS Principle 4)

ii. Targeted Asset

Description and Intent	
A campaign may be designed to target a particular asset, be it vegetation or fauna, which we refer to as Targeted Assets. Targeted Assets are defined by the BCT, guided by a working group and BCIS objectives, and have a core requirement of being able to be spatially mapped. Areas of Targeted Asset receive a multiplier (standard value of 3x) that ensures areas of Targeted Asset are weighted three times that of other areas in the calculation of the BVS.	
Score Range	1 – 3
Data Source	Field-based ecological survey; state or regional vegetation map products.
BCIS principles	Prioritising sites of better current and future predicted ecological condition: - Improves protection of good samples of the least protected ecosystems (BCIS Principle 1) - Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Seeks to promote long-term outcomes (BCIS Principle 2) by encouraging landholders to adopt a greater number and more impactful management actions - Complements other government and non-government programs (BCIS Principle 3) - Supports sustainable farming enterprises and promotes regional economic benefits and avoids land use conflicts (BCIS Principle 4)

iii. Conservation Status

Description and Intent	
Conservation Status refers to specific priority conservation assets that are the focus of our investment. The BCT Priority Assets and their relative importance are set out in Table 2, and are selected to reflect the specific objectives of any given CMP offering. We may vary weightings or identify additional specific conservation assets that are applicable for targeted offers. Conservation Status is calculated by summing each of the Priority Assets and rescaling 0-1, as follows: $\text{Conservation Status} = \frac{\sum(\text{BCT Priority Assets})}{\text{Total assets}} (\text{scaled } 0 - 1)$ Where two attributes are listed as significant under different jurisdictions (e.g. Commonwealth vs State level), the higher of the respective Conservation Status scores will apply.	
Score Range	Conservation Status = 0 – 1 Each individual priority asset = 1 –4

Data Source	Threatened Ecological Community: Field-based ecological survey Wetlands: Field-based ecological survey + Directory of Important Wetlands of Australia + Ramsar Wetlands of NSW Saving our Species site managed species sites: SoS Database
BCIS principles	Prioritising sites of high conservation status: - Improves protection of good samples of the least protected ecosystems (BCIS Principle 1) - Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Seeks to promote long-term outcomes (BCIS Principle 2) - Complements other government and non-government programs (BCIS Principle 3) - Supports sustainable farming enterprises and promotes regional economic benefits and avoids land use conflicts (BCIS Principle 4)

Table 2: Components of Conservation Status, including associated weightings

Conservation Status					
	Low	Medium	High	Very High	Weighting
Score	0.25	0.5	0.75	1	(% of total score)
BCT Priority Asset					
Threatened Ecological Community (TEC) ⁴	Other	Vulnerable Ecological Community (VEC)	Endangered Ecological Community (EEC)	Critically Endangered Ecological Community (CEEC)	4
Wetlands	Absent	Other wetlands	Directory of Important Wetlands Australia (DIWA); Coastal wetlands (identified under Coastal Management State Environmental Planning Policy)	Ramsar wetlands	2
Species listed under the Saving our Species Program ⁵	Absent	Other site-managed threatened species	Site-managed Endangered species	Site-managed Critically Endangered species	2
Additional rows added as requested by BCT					

⁴ Listed under either NSW or Commonwealth legislation

⁵ Any site intersecting with a Saving Our Species Priority Management Site

b) Landscape Conservation Value

Description and Intent	
The Landscape Conservation Value is a measure of the site's contribution to the conservation values in the broader surrounding landscape. To prioritise sites that maintain and build a network of core areas and corridors, we target sites (where possible) that are: - established in a landscape context of existing high vegetation cover - encourage connectivity with existing permanently protected places The Landscape Conservation Value score represents the sum of these attributes, scaled to a value of 0-20. $\text{Landscape Conservation Value} = \text{Landscape Context} + \text{Proximity to Protected Place}$ Measurement of each factor is addressed in more detail below.	
Score Range	0 – 20
Data Source	See Landscape Context and Proximity to Protected Place below.

i. Landscape Context

Description and Intent	
Landscape context represents how well-connected the habitat is to other surrounding habitat in an area that includes the proposed agreement area and a 1500m buffer. Values derived from a raster layer of the Biodiversity Indicators Program Ecological Carrying Capacity (ECC) index are aggregated in that area for each site.	
Score Range	1 – 100
Data Source	NSW Biodiversity Indicator Program
BCIS principles	Prioritising sites with greater connection to the surrounding habitat: - Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Supports sustainable farming enterprises and promotes regional economic benefits and avoids land use conflicts (BCIS Principle 4)

ii. Proximity to Permanently Protected Places

Description and Intent	
Sites close to existing permanently protected places⁶ are prioritised. Proximity to protected places is measured using spatial information and scored on a scale of 1-100, where: • 100 is where a site adjoins a permanently protected place. • 0 is 10km (or further) proximal to a permanently protected place.	
Score Range	1 – 100
Data Source	Collaborative Australian Protected Area Database BCT Agreements Database
BCIS principles	Prioritising sites close to Permanently Protected Places: ▪ Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) ▪ Complements other government and non-government programs seeking to build the protected area system (BCIS Principle 3)

2. Duration

Description and Intent	
There is a preference for establishment of new in-perpetuity agreements over termed agreements. The Duration score is calculated according to the below expression: $Duration = \frac{T}{100}$ Where T=Term (years, starting from 15-75, In-perpetuity agreements receive a term of 100)	
Score Range	0.15 – 1
Data Source	BCT Landholder Application and Agreement Geodatabase
BCIS principles	Prioritising sites with long-term agreements: ▪ Improves protection of good samples of the least protected ecosystems (BCIS Principle 1)

⁶ Permanently protected places are outlined in the our [Existing Obligations and Agreements](#) and include In-perpetuity conservation agreements under the (i) *Nature Conservation Trust Act 2001*, (ii) *National Parks and Wildlife Act 1974*, (iii) *Native Vegetation Conservation Act 1997*, and (iv) *Biodiversity Conservation Act 2016*.

	- Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Promotes long-term outcomes – both for landholders and the environment (BCIS Principle 2) - Supports sustainable farming enterprises and promotes regional economic benefits (BCIS Principle 4) by providing ongoing conservation management payments
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3. Risk

Description and Intent	
Land capability is the inherent physical capacity of the land to sustain a range of land uses and management practices in the long term without degradation to soil, land, air and water resources. Sites on land with higher capability (i.e., potentially suitable for cultivation) are at a higher risk of clearing for agriculture compared to those on less fertile lands. To score 'risk' a simple step-wise scale is used, based on the state-wide mapping of Land and Soil Capability Class (Table 3). Sites on land subject to specific types of existing in-perpetuity agreements will be subject to a reduced Risk score. Any area of land that is subject to one of these existing agreements will automatically receive the lowest Risk score of 1. The reduced Risk score is only applied to the area of land that is under the existing agreement.	
Score Range	1 – 6 (as per Table 3)
Data Source	DPIE Land and Soil Capability Mapping for NSW
BCIS principles	Prioritising sites with a greater risk of clearing: - Improves protection of good samples of the least protected ecosystems (BCIS Principle 1) - Improves landscape connectivity and contribution to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Complements other government and non-government programs (BCIS Principle 3) by targeting conservation of over cleared landscapes - Ensures investment is efficient (BCIS Principle 5)

Table 3: Scoring by Land and Soil Capability class.

Average Land and Soil Capability class	Score
1	6
2	6
3	6
4	3
5	2
6	2
7	1
8	1

4. Area

Description and Intent	
This is the area (Ha) of the proposed site that is eligible ⁷ . This score increases linearly with area because we value each additional area under agreement the same.	
Score Range	Unlimited ⁸
Data Source	BCT Agreement Geodatabase
BCIS principles	Prioritising larger sites: - Improves protection of good samples of the least protected ecosystems (BCIS Principle 1) - Improves landscape connectivity and contributing to a Comprehensive, Adequate and Representative (CAR) protected area system (BCIS Principle 1) - Ensures investment is efficient (BCIS Principle 5) by securing large tracts of land

⁷ Eligibility is defined for each offer made under our Conservation Management Program

⁸ Minimum area varies depending on the eligibility requirements of individual offers.