

# Detailed outline of the Biodiversity Assessment Instrument

Nature Repair Committee

**Nature Repair Market Branch** 



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# Detailed outline of the Biodiversity Assessment Instrument

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### **Acknowledgement of Country**

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present.

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# Introduction

The *Nature Repair Act 2023* (the Act) came into effect on 15 December 2023 establishing a framework for a world-first legislated, national, voluntary biodiversity market. The Act provides legislated rules to support transparency and integrity and to foster collaborative efforts to address environmental decline.

The Nature Repair Market scheme is a government initiative that incentivises actions to restore and protect the environment. It encourages nature positive land management practices that deliver improved biodiversity outcomes. The scheme establishes a marketplace where individuals and organisations can undertake nature repair projects to generate a tradable certificate.

The Act established the Nature Repair Committee. The committee is a key part of integrity under the Nature Repair Market.

The committee advises the Minister for the Environment on methods and biodiversity assessment instruments.

The Nature Repair Committee is seeking your views on the detailed outline of the biodiversity assessment instrument for the Nature Repair Market.

To have your say:

- read this proposed biodiversity assessment instrument
- upload your submission via the consultation hub, and
- attach any supporting information or evidence.

The consultation hub survey includes some consultation questions. You can choose to answer all the questions, or just those that matter to you.

If you are unable to submit your feedback through the consultation hub or would like to be added to our mailing list for ongoing updates, please contact us at <a href="mailto:naturerepairmarket@dcceew.gov.au">naturerepairmarket@dcceew.gov.au</a>.

Please submit your feedback by 5:00pm AEST 30 October 2024.

# **Purpose of this document**

This document proposes a draft detailed outline of what would be specified in the biodiversity assessment instrument under the *Nature Repair Act 2023* (the Act). It is intended to support the Nature Repair Committee's statutory consultation on the detailed outline of the biodiversity assessment instrument.

The document is in three parts:

Part 1 introduces the specifics of the biodiversity assessment instrument under the *Nature Repair Act 2023* and outlines the context and feedback underpinning the approach

Part 2 is a detailed outline of the proposed biodiversity assessment instrument (for consultation)

**Part 3** is information and guidance that would support the interpretation and implementation of the biodiversity assessment instrument

Part 2, detailed outline of the biodiversity assessment instrument, is the focus of the consultation.

# What are Biodiversity Assessment Instruments?

The minister may, by legislative instrument, make a biodiversity assessment instrument (BAI) that prescribes requirements that must be complied with by methodology determinations (methods) (subsections 58(1) and (2) of the Act).

The following are examples of requirements that may be prescribed by a BAI:

- requirements relating to the measurement or assessment of biodiversity,
- requirements relating to the measurement or assessment of the enhancement of biodiversity, and/or
- requirements relating to the measurement or assessment of the protection of biodiversity (subsection 58(3) of the Act).

A BAI may be of general application or may be limited as provided in the instrument (subsection 58(4) of the Act). This means that BAI may apply to all methods (paragraph 59(3)(b)) or to a class of methods (paragraph 59(3)(c) of the Act).

The aim of the BAI is to enable potential buyers to compare some aspects of projects under different methods. Without a BAI, each method under the Act could assess biodiversity consistently with the biodiversity integrity standards (BIS) yet do it in an entirely different way.

BAl's are intended to set out consistent requirements for how methods assess biodiversity and its change. This would enable consistent, standardised information that can be used by buyers to compare projects. Buyers can judge which aspects of a project are most important to them.

# How is a Biodiversity Assessment Instrument made?

Before making a BAI, the minister must request the Nature Repair Committee to advise the Minister about whether the minister should make the instrument (subsection 59(2) of the Act).

The committee must publish and consult publicly (generally, minimum 28 days) on a detailed outline of the proposed instrument.

The Minister must not make a BAI unless the Nature Repair Committee advises the minister that it is satisfied that the BAI:

- a. is an appropriate means of achieving consistency of methods, and
- b. would assist in ensuring that methodology determinations (or methods in that class) comply with the biodiversity integrity standards (subsection 59(3) of the Act).

# Consultation that informed this proposal

This proposal is informed by, and builds on, a range of prior consultation and engagement processes including:

- broad stakeholder engagement as part of developing the Nature Repair Market Bill 2023
- insights from First Nations people and organisations
- ongoing discussions with state and territory government representatives

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- advice from the Biodiversity Assessment Expert Reference Group (BAERG)
- insights from the Ecological Knowledge System (EKS) design project, led by CSIRO
- insights from method development and Australian Carbon Credit Units scheme (ACCU scheme).

Feedback received is summarised in each section of the document.

# Scope of this biodiversity assessment instrument

The instrument would apply to all methods under the *Nature Repair Act 2023* (the Act) (for example, covering projects on terrestrial, marine and freshwater).

# PART 1: Biodiversity Assessment Instrument context

# 1.1 Definitions for key terms and concepts

# 1.1.1 Section summary

The BAI would include definitions that methods would use to support consistent terminology and concepts (as appropriate). This would support project administration and promote the comparability of projects.

The BAI would require methods to incorporate a typology for *activities* under the method and for use in project plans.

### **1.1.2** Context

Defining key terms and concepts for consistent use and application across methods would:

- support project administration and implementation
- support comparison of projects and biodiversity certificates
- support market confidence in claims relating to the biodiversity outcome.

The BAI is not the only place where key terms would be defined. Its focus is terms that should be consistent so that people can compare the biodiversity benefits of different projects. Separately the department is considering terms and concepts that should be defined in the Nature Repair Market Rule (a separate legislative instrument), or other guidance frameworks (for example claims guidance to help scheme users make market claims under commercial laws). Another consideration is how terms and concepts are used by international frameworks to which Australia is a Party, for example the <u>Kunming-Montreal Global Biodiversity Framework</u>.

Definitions are intended to be further considered as part of the legislative drafting process. This may include if the term or concept is, or will be, defined (in whole or part) in other Australian Government legislation or policy. Examples include the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act), the <u>National Reserve System</u> or the implementation of the Independent Review of Australian Carbon Credit Units (ACCUs) (the ACCU Review).

# 1.1.2.1 Typology for activities

Consistent activity descriptions implemented through methods would enable:

- easier comparison of projects
- scheme reporting on activity type
- assessment of management effectiveness to support method review, continuous improvement, and general scheme integrity
- national reporting based around activity type
- integration of scheme information with other programs using the same typology.

# 1.1.3 Feedback so far

There are many terms and concepts that are used inconsistently in different operational contexts and between different academic disciplines. For example, key concepts may be differently understood based on the terms that are used describe them. This could cause confusion (about, for example, the nature of the biodiversity improvement a project would create, and the confidence that a buyer can have in that improvement). This in turn can create barriers to scheme and market participation and/or undermine real and perceived integrity.

There is value in using consistent typologies for methods and for alignment with other programs and schemes.

# 1.2 First Nations knowledge, values and data

# 1.2.1 Section summary

The BAI would require that all methods give project proponents the option to undertake a project that delivers First Nations biodiversity outcomes (biocultural outcomes), as long as proper consent for the use of the knowledge has been obtained. Methods are required to set out additional conditions and requirements for projects choosing this option.

This allows for First Nations knowledge and values to inform the project, as appropriate and applicable. This could influence project design and implementation as well as how biodiversity and its change is described. If the proponent is not a custodian of the relevant Indigenous Cultural Intellectual Property (ICIP) they must obtain consent to use the knowledge and/or data.

Project information relating to First Nations participation or biocultural outcomes would be verified in a culturally appropriate way. This could be by using an established First Nations-led framework, or a First Nations-led or co-design framework developed as part of the method development process.

The BAI provisions relating to First Nations knowledge, values and data would be supported by guidance material to assist proponents. This could include support material for negotiating consent to use Indigenous knowledge and information to guide culturally informed project design and implementation. The aim is to elevate the cultural integrity measures of the project. Guidance material for projects would point to leading Indigenous standards and frameworks to support project planning in line with the requirements of the BAI.

The department anticipates that ongoing engagement with First Nations peoples would be required about these provisions.

### 1.2.2 Context

One of the biodiversity integrity standards in the Act sets out a requirement for consistency with relevant Indigenous knowledge and values. In full, it says that:

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any condition set out in, or requirement imposed by, a method relating to the measurement or assessment of biodiversity must be consistent with relevant Indigenous knowledge and values relating to biodiversity and cultural heritage (so far as reasonably practicable) (paragraph 57(1)(e)(ii)).

Furthermore, objects of the Act include to:

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"support and promote the unique role of Aboriginal persons and Torres Strait Islanders in enhancing and protecting biodiversity in native species in Australia; and

enable the use of the knowledge of Aboriginal persons and Torres Strait Islanders related to biodiversity in native species in Australia, guided by the owners of that knowledge."(s3(d)(i, ii)).

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The department is continuing to engage with First Nations representatives on the appropriate interaction of First Nations knowledge and values with the scheme. One avenue is through the Ecological Knowledge System First Nations activity. The associated First Nations leaders' workshop in March 2024 (in Adelaide/Tarntanya) commenced a co-design process. This process is anticipated to develop a framework for the appropriate interaction of First Nations knowledge and values with the Ecological Knowledge System. The timeframe for delivery of the framework is mid-2025.

In developing the proposal in this document, the department has drawn on insights and perspectives from the First Nations members of the BAERG and their networks. This includes First Nations on-Country practitioners with environmental markets experience.

The BAI would complement other provisions in the Act to deliver the objects of the scheme, including through the Nature Repair Market Rule. For example, the Rule could include:

- For information submitted in the registration application: Any project-related information on relevant Indigenous knowledge and values relating to biodiversity and cultural heritage must be consistent with the agreed purpose, use and disclosure of owners or custodians of that knowledge.
- For Project Plans: Record management requirements could include setting out information to be tracked consistent with an Indigenous Cultural and Intellectual Property (ICIP) agreement or protocol (if applicable).

# 1.2.3 Feedback so far

Feedback has highlighted the importance of the core principles of cultural integrity (which refer to appropriate acknowledgment and use of knowledge, values and Indigenous governance) to be embedded in the BAI to deliver on the objectives of the Act. Demonstrating these principles should include:

- exercising Free, Prior, Informed Consent (FPIC) when engaging on all aspects of the project
  design and implementation (where conditions or requirements of methods relate to matters)
  whereby First Nations rights and interest holders would have an interest in, or connection to,
  the project (whole or part)
- following the FAIR and CARE data governance and management principes
- project information relating to biocultural outcomes are

- o based on genuine engagement and participation of First Nations peoples,
- o respect cultural knowledge and protocols,
- are based on advancing self-determination, and
- deliver on cultural priorities
- conditions to enable culturally sensitive project design and delivery that is:
  - adaptable to enable cultural knowledge and values (with appropriate ICIP agreements and consent),
  - o centred around engagement, participation and Indigenous governance
  - strengths based, whereby the precedence is for Indigenous-led and for the delivery of biocultural outcomes
  - o based on the underlying principle of preventing cultural harm.

Regarding First Nations knowledge and values relating to biodiversity, a strong message has been that projects need to enable biocultural science in the description and management of biodiversity. For example:

- biocultural indicators of healthy country (presence and needs for totem species, breeding occurring, food/ hunting species, habitat and food for species)
- identification of and directing of outcomes to culturally significant entities (species and places)
- land and sea management activities and monitoring are flexible to allow for cultural protocols (timing and activities) and enable cultural processes such as increasing access to Country
- all projects should be based on culturally informed project planning (biodiversity assessment sites not situated in culturally significant sites)
- monitoring and verification of outcomes should be undertaken by First Nations peoples, not be outsourced to non-First Nations peoples or to the Clean Energy Regulator.

# 1.3 Considering climate change

# 1.3.1 Section summary

The BAI would require methods to include provisions for projects to identify and reduce the risks of particular climate change impacts, where this would materially affect project outcomes being achieved.

### 1.3.2 Context

Climate change could have a significant impact on the outcome and trajectory of projects.

The aim of addressing climate change impacts through the BAI is to help reduce the adverse impacts of climate change to projects, where possible.

Transparent requirements to consider climate change would support market confidence, as it should reduce climate-related risks to projects, where those risks are foreseeable and mitigable.

Method development should also ensure that, where relevant, the potential impacts of climate change are transparently considered and informed by fit-for purpose climate-change scenarios. Supporting information could include more detailed information on how to identify the potential impact, how to judge the potential impact on the likelihood of a project succeeding, and what steps must be in a project plan to address climate change impacts.

# 1.3.3 Feedback so far

There are different views amongst experts on how proactively climate change should be addressed by methods and projects. While climate models can provide a broad understanding how climate change might affect different parts of the country, it is difficult to know which ecosystems could be affected to what extent, in composition, when and how. Many restoration practitioners and experts already factor in climate change into their planning and activities drawing on experience from responses to recent climate trends.

Guidance, techniques and protocols to inform the assessment of climate change risks are becoming more widely available. The assessment of potential climate change impacts and potential responses can be complex and data intensive. As much as possible, the method development process should assess the potential climate change risks to the ecosystems and project types to which the method applies and set clear requirements for how projects should identify and address climate change risks.

Buyers may be interested in understanding how climate change impacts have been addressed. However, concerns have been raised over the potential cost to project proponents if there is an expectation for project design and implementation to respond to unknown, future climate change impacts on the project area.

# 1.4 Certainty and confidence

# 1.4.1 Section summary

The BAI would include standard interpretations for methods to draw on when assessing the level of certainty and confidence in accordance with the biodiversity integrity standards. This includes clarifying the interpretation of certainty and confidence. For instance, confidence requires an evaluation of the type, amount, quality, and consistency of evidence unpinning key estimates and assessments.

# 1.4.2 Context

The biodiversity integrity standards establish expectations for any condition set out in, or requirement imposed by, a method relating to the measurement or assessment of biodiversity. This includes that these conditions require a clear indication of the level of certainty and confidence of the achievement of the enhancement or protection (paragraphs 57(e)(v) and (vi)).

To register a biodiversity project under a method, the Regulator must be satisfied that carrying out the project is likely to result in a biodiversity certificate being issued for that project (paragraphs 15(4)(f)(ii) and (g) of the Act).

These requirements establish two focus areas for consistency across methods.

- 1. Consistent treatment and communication of certainty and confidence, including estimates and projections.
- 2. Consistency in how methods are designed such that projects can demonstrate they are likely to deliver the biodiversity outcome for the project (for example through the information they provide as part of project registration and certificate application).

The aim of consistency and transparency in these aspects is to:

- improve the ability of buyers to understand the factors that may contribute to uncertainty in project outcome by using consistent terminology,
- help methods comply with the biodiversity integrity standards relating to certainty and confidence,
- help the Regulator to assess if the project is likely to result in the issuance of a certificate, which is a project registration requirement under the Act (paragraphs 15(4)(f)(ii); and 15(4)(g)).

The consideration of confidence and certainty to meet the biodiversity integrity standards is intended to inform how methods set conditions and requirements for projects so that they are likely to achieve their outcomes. This is addressed in the section of the biodiversity assessment instrument on 'Monitoring, measuring and assessing biodiversity outcomes at the project area'.

### 1.4.3 Feedback so far

Potential buyers may want to understand how methods and projects have addressed different sources of uncertainty. The level of confidence and certainty that is considered acceptable may depend on how a buyer intends to use the biodiversity outcome from the project.

Addressing or calculating uncertainty can require large amounts of data. Methods can reduce project costs by providing explicit guidance on how to demonstrate that a project is likely to achieve its biodiversity outcome.

The requirement for projects to be likely to achieve the biodiversity outcome acts as a threshold and may limit innovative projects. There are a lot of unknowns about restoration, and even 'failed restoration' is not a failure if you learn from it, for example by monitoring of outcomes.

There are many different interpretations of 'likely', 'certainty' and 'confidence' across the legal, economic and scientific disciplines. Clarity in what is meant by each term and consistency in the application of concepts is important for market integrity.

Some interpretations of 'likely' could remove incentives for issuing certificates later on the trajectory, or investment in better data or monitoring, to reduce the risks of project failures. However, additional information on confidence or certainty provided to the buyer may lead to project that are just 'likely' being devalued.

# 1.5 Establishing how to measure change in project biodiversity

# 1.5.1 Section summary

The BAI would establish a set of standard *biodiversity project characteristics* to enable consistent communication about biodiversity in the project area and how it is changing. Having information on a set of characteristics allows proponents to build a picture of the change in the overall capability of the project area to support biodiversity. The measured change in the *biodiversity project characteristics* provides information on the project outcome. This information would be included on the biodiversity register.

The BAI would require methods to include provisions for all projects to consistently assess the project status and change for the standard biodiversity project characteristics.

Standard biodiversity project characteristics would include:

- ecosystem condition
- removal of threats
- commitment to protection of biodiversity
- capability of the project area to support threatened species
- culturally significant entities.

Additional 'method-specific' biodiversity project characteristics may be prescribed where relevant.

To support a consistent, transparent and targeted approach, the biodiversity assessment instrument would:

- set requirements for establishing and describing the project starting state, reference ecosystems and counterfactual scenarios
- set parameters for how to assess and communicate change in these characteristics to support project comparison and consistent reporting
- allow methods to establish the specific approach to assessing and communicating change in biodiversity project characteristics, consistent with the parameters in the biodiversity assessment instrument.

# 1.5.2 Starting state assessment

The BAI would require methods to include provisions that projects must undertake an assessment of the starting state of the project area, and this may include an initial in-field site assessment. Methods must set out requirements for the starting state assessment to ensure that the project can meet the relevant information and assessment requirements, including those in the Nature Repair Market Rule and the BAI.

# 1.5.2.1 Context

An appropriately detailed assessment of the starting state reduces the risk that inappropriate management activities cause harm or that project benefits are incorrectly estimated.

In-field site assessments can be costly, so the effort associated with the assessment of starting state should be tailored appropriately. Some methods and projects could have higher risks if there is an error in the assessment of starting state. The appropriate level of site information should be collected to ensure the starting state is accurately defined and perverse outcomes are avoided.

### 1.5.2.2 Feedback so far

Understanding the historic drivers of change on the site can support more accurate prediction of how biodiversity could change as a result of management activities. Historic information includes historical water and fire regimes, cultural management activities, and what threats, pressures and drivers contributed to the change on the site.

Assessments should be able to include culturally significant entities and reflect cultural customs and Indigenous ecological knowledge. This can be done by allowing multiple sources of knowledge - for example oral histories and seasonal calendars.

# 1.5.3 Identifying reference ecosystems

The BAI would require methods to set out provisions for projects to establish reference ecosystems. Reference ecosystems are compared with the present state of ecosystems in the project area to establish ecosystem condition as 'departure from reference' (or similarity to reference).

### 1.5.3.1 Context

A key part of describing the biodiversity outcome from a project is understanding the status of biodiversity in the project area and how it could change. The BAI would require methods to assess ecosystem condition and how it would change due to the project. This assessment would be relative to a reference ecosystem.

### 1.5.3.2 Feedback so far

There are different perspectives from experts on the how reference ecosystems should be applied in the Nature Repair Market scheme, including the level of prescription. Existing assessment frameworks differ in terminology and how they determine reference ecosystems. Feedback has highlighted the dynamic nature of Australia's ecosystems and the need for this to be reflected in the scheme's approach.

Some biodiversity assessment frameworks use a 'historic' (or pre-industrialisation reference) to determine what ecosystem characteristics the management activities should aim for. Others develop a reference from existing relevant, minimally or undegraded examples.

A historic or contemporary ecosystem may not always be a realistic guide for project planning or condition assessment. For example, climate change or extensive, irreversible hydrological or topographic change may mean that aiming to return to the historic ecosystem may not be feasible.

However, there are also concerns around the concept of 'novel or engineered ecosystems', and an 'anything goes' approach to defining the benchmarks for condition and outcome assessment. A lack of transparency and justification for the reference ecosystem determination could undermine both scheme and ecological integrity. A common view is that where the ecosystem that the project is aiming to enhance differs significantly from the historic reference ecosystem, this should be clearly explained and justified. However, there are also examples in the coastal and marine space where there may be very limited information on the historic reference ecosystem.

# 1.5.3.3 Ecosystem condition as a consistent approach

Most jurisdictions in Australia use ecosystem condition, or a similar concept, as part of how biodiversity is assessed in environmental policies and regulation. They have systems, data and expertise in place to support the implementation of these systems. Having ecosystem condition as part of the BAI would enable projects in those jurisdictions to draw on the higher resolution data and local expertise already available. This would support comparability in the description of the ecosystem/s in the project area and how to assess change in those ecosystems, while drawing on best available information.

# 1.5.3.4 Ecosystem and vegetation mapping

Most of the existing ecosystem mapping that would be available to proponents is appropriate for use at regional to national scales. These maps are compiled using various methods by different organisations at different resolutions and currency. Generally, these methods involve some sort of extrapolation or modelling to extend data from known locations across the landscape. This means at

finer scales, e.g. paddock or property scales, it is hard to be sure that the mapping is accurate. Ecosystem mapping can provide a useful guide and initial information about what ecosystems could be on the property. This may be useful, for example, for initial desktop research on a potential project. However, in most cases for project planning purposes, available mapping may need to be verified in-field by someone with appropriate expertise.

# 1.5.4 Establishing counterfactual scenarios

A counterfactual is used as a comparison to estimate or assess what would have happened without the action. The biodiversity assessment instrument would require that methods include provisions for project to establish counterfactual scenarios and, including any requirements for evidence.

### 1.5.4.1 Context

The first Biodiversity Integrity Standard requires that the enhancement or protection from the project would be 'unlikely to occur if the project was not carried out'. Demonstrating this requires making assumptions about what would have happened without the project.

### 1.5.4.2 Feedback so far

How counterfactuals are determined can significantly influence how the outcome of a project is assessed. Transparency around the choice of counterfactual would support confidence in the scheme.

# 1.5.5 Identifying standard biodiversity project characteristics

### 1.5.5.1 Context

The Explanatory Memorandum for the *Nature Repair Act 2023* notes that a BAI would guide the development of the information in methods that defines the attributes of a project relating to biodiversity. This information could be included on the register or in a biodiversity certificate. It would provide the emerging market with information it can have confidence in concerning the activities and outcomes of a project.

Standard biodiversity project characteristics would support consistent and comparable descriptions of biodiversity projects. Methods may need additional biodiversity project characteristics to describe and measure outcomes that are a focus of the method, for example benefits for a specific species, where this is relevant.

### 1.5.5.2 Feedback so far

The proposed biodiversity project characteristics are based on feedback from stakeholders about what aspects are important to assess from a biodiversity perspective, and what factors may be considered important to different buyers. To measure these characteristics, experts and other stakeholders indicated that the scheme should draw on other existing systems and standards.

An assessment of ecosystem condition is used widely in existing Australian programs that aim to assess biodiversity condition, such as State and Territory offset schemes, Terrestrial Ecosystem Research Network Ecological Monitoring Systems Australia (EMSA) modules, and by vegetation-based Accounting for Nature methods. A focus on characteristics that represent structure, function and composition to inform 'ecosystem condition' would align with existing, operational programs for biodiversity assessment and monitoring. These are a subset of characteristics of recognised frameworks including the UN System of Environmental-Economic Accounting (UN SEEA) and the Society for Ecological Restoration Australia (SERA) Standard for Ecological Restoration frameworks.

The SERA Standard for Ecological Restoration provides guidance on six ecosystem attributes when describing the condition of the reference ecosystem. These attributes help to set project goals and targets along a trajectory of recovery, and to enable the tracking of restoration progress over time and between sites. The six ecosystem attributes are: absence of threats, physical conditions, species composition, structural diversity, ecosystem function, and external exchanges.

The SERA standard proposes a 5-star scale for assessing progress against a reference. It provides a good example of how complex information about restoration can be distilled and communicated effectively. Feedback from experts is that adopting a rating scale for assessing progress along a trajectory of recovery (like a star rating) is suitable if it is tailored to the method and the relevant activities and systems. It has the benefit of being visual, simple and repeatable.

Alignment with International frameworks (such as UN SEEA) may support international buyers to engage more easily with the scheme. Stakeholders have noted that the Taskforce on Nature-related Financial Disclosures (TNFD) draws on the UN SEEA framework, and hence the Nature Repair Market being consistent with UN SEEA could be beneficial.

# 1.6 Monitoring, measuring and assessing biodiversity outcomes at the project area

# 1.6.1 Section summary

The BAI would require methods to include provisions for projects to describe the expected change in standard and method-specific biodiversity project characteristics. Methods should set conditions and requirements for projects to ensure that all projects consistent with that method would be likely to achieve the biodiversity outcome for the project. This includes stating the value or level that must be reached for the project to be considered 'likely' to achieve the biodiversity outcome.

The BAI would require methods to include provisions for projects to undertake monitoring to inform ongoing reporting. Monitoring should be aligned with the biodiversity project characteristics. Requirements would include more comprehensive and accurate monitoring and in-field assessment where risks to biodiversity are higher.

### **1.6.2** Context

Monitoring standards that allow for consistent assessment and description of progress and anticipated outcomes of the project would help to allow relative comparison between projects. This is especially relevant when comparing projects with different starting states and different ecosystem responses to management actions.

Before approving the registration of a project, the Clean Energy Regulator must be satisfied that several requirements have been met. One of these is that implementation of the project plan is likely to result in a biodiversity certificate being issued in respect of the project, or carrying out the project is likely to result in a biodiversity certificate being issued in respect of the project (Sections 15 (4)(fii) and 15(4)(g) of the Act).

Before approving the issuance of a certificate, the Clean Energy Regulator must be satisfied that 'the project is sufficiently progressed to have resulted in, or be likely to result in, the biodiversity outcome for the project (Section 70(2)(f)).

This requires clarity in the anticipated biodiversity outcome for the project, and the factors needed to determine if it is likely to be achieved.

The starting state of a project area provides the comparison against which biodiversity change is assessed through ongoing monitoring, which can include both remote and in-field approaches. Consistently describing monitoring requirements would help to compare projects and help make sources of uncertainty and costs transparent.

# 1.6.3 Feedback so far

The clear delineation of requirements and thresholds that must be met for the project to be considered 'likely' would support:

- the project proponent to plan and budget for project delivery
- the Clean Energy Regulator to determine that a project is likely to deliver the biodiversity outcome at project registration and certificate issuance.

Market confidence and comparison would be supported by a standard way of providing the evidence showing that certain activities could lead to certain outcomes, over a given time frame.

Monitoring of biodiversity activities and biodiversity project characteristics should be used to demonstrate that project outcomes are on track or likely to be delivered. Different monitoring approaches are appropriate for different methods.

Experts have noted that comprehensive monitoring may provide greater confidence in the project outcome but can be costly. Remote monitoring may be more cost effective but less accurate. There is rapid innovation in commercially available technologies to support monitoring, so stakeholders have suggested that there is benefit in methods being technology neutral.

# 1.7 Assessing and describing broader biodiversity benefits

# 1.7.1 Section summary

The BAI would require that methods allow for projects to identify and describe the benefits from the project to the broader landscape and seascape. This would enable assessments of whether and how the project outcomes would provide broader benefits beyond the project area. This information would support buyers to understand and compare the broader biodiversity benefits of projects.

Changes to the broader benefits from projects are outside the control of the project proponent, but where projects do make a broader contribution, it should be acknowledged (e.g. benefits to Matters of National Environmental Significance).

### **1.7.2** Context

Project activities and outcomes can have benefits to biodiversity beyond the project area. Consistently assessing and describing that contribution to the broader landscape/seascape would help people compare projects. Examples of broader landscape/seascape benefits include:

- contribution to connectivity
- ecological priority (incorporating representativeness, complementarity, adequacy, rarity, irreplaceability)
- adequacy of existing protection in the broader bioregion or landscape/seascape.

## Including them enables:

- scrutiny of how broader benefits would be assessed during method development, including statutory consultation
- consistent application across projects
- potential broader benefits of projects to be recognised and verified.

Changes to the broader benefits from projects are outside the control of the project proponent. It may not appropriate for project proponents to be accountable for delivering that broader benefit. However, where projects do make a broader contribution, it should be acknowledged (e.g. benefits to Matters of National Environmental Significance). Including acknowledgement of a project's contribution to conservation in the broader landscape/seascape in the method would allow the Clean Energy Regulator to verify that the assessment was consistent with the method.

An alternative option is that the broader benefit assessment is undertaken outside of the formal scheme. This information could be drawn on to inform how buyers value the certificate, but the Clean Energy Regulator would not have a verification role. How the broader benefits were assessed would not be tested against the biodiversity integrity standards as part of the statutory process of creating a method.

The EKS's National Biodiversity Assessment System (NBAS) is establishing an approach to assessing broader biodiversity benefits, providing a measure of how the project is contributing to avoiding the loss or decline of biodiversity as a whole.

# 1.7.3 Feedback so far

Stakeholder and expert feedback has consistently highlighted the need to consider the broader benefits of a project at the landscape/seascape or national level. This enables the benefits of projects arising from the project's value to the landscape/seascape to be considered and valued by buyers. Having this information available would support decisions by proponents on where to put projects for the greatest biodiversity benefit and may create more of an incentive to undertake projects.

Broader national and international level benefits that stakeholders have highlighted as being of potential interest to buyers include:

- benefits to Matters of National Environmental Significance
- contributions to national and sub-national priorities
- contributions to international commitments.

# 1.8 Data suitability and sharing requirements

# 1.8.1 Section summary

The BAI would require that methods include provisions for projects to meet requirements for the quality and management of data, collect ecological data using an appropriate standard, share ecological data in a standard format, and allow flexibility for culturally appropriate data management.

# 1.8.2 Context

## 1.8.2.1 Appropriate and suitable data

The use of appropriate and suitable data and information to inform methods and projects would be a key part of ensuring genuine outcomes and building trust in the scheme.

Data and information used to inform methods and projects should be fit-for-purpose for its application (for example, project or landscape/seascape level assessment). Projects would need to have access to data and information to inform reporting over long project timeframes.

Guidance on the assessment of 'appropriate and suitable data and information' would support consideration of methods by the Committee and assessment of projects by the Clean Energy Regulator.

# 1.8.2.2 Accessibility and reuse of data

Information and data generated through project monitoring can improve understanding of the environment and how to manage it effectively.

An object of the Act is to contribute to building a knowledge base, and capacity, related to the enhancement or protection of biodiversity in native species in Australia.

Having this information accessible in a standard format that can be drawn on by organisations such as Environment Information Australia would improve the information and data supporting the scheme and help fulfil the object of the Act.

Requirements for data suitability and sharing in the BAI would aim to be consistent with standards and repositories used by Environment Information Australia, and the National Environmental Standard for Data and Information, including considerations for First Nations data.

## 1.8.3 Feedback so far

Early feedback on the Nature Repair Market Bill highlighted that collecting, sharing and maintaining reliable and trusted environmental information would be essential for the integrity and success of the scheme. Where appropriate, this should draw on and align with established and emerging international and domestic frameworks, standards, models and data. The use of appropriate and suitable data and information to inform methods and projects would be a key part of ensuring genuine outcomes and building trust in the scheme. Due to the long-term nature of projects under the scheme, datasets and models used to support project implementation need to be enduring.

Stakeholders have also highlighted the need for feedback loops so that the information generated by projects can improve our understanding of management effectiveness and support continuous improvement in underlying datasets. This should be balanced with a need for proponents to be able to confidently plan projects based on available data.

Improved accessibility, confidence and consistency of information used and generated by the scheme can also support other uses, as appropriate. These include private sector reporting on nature risk and opportunities, State of the Environment Reporting, environmental economic accounting at national and regional scales, reporting on biodiversity including international biodiversity reporting and other government activities and programs.

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A consistent message has been that requirements for data sharing should be consistent with National Environmental Standards for Data and Information, including considerations for First Nations data.

# PART 2: Draft detailed outline of the Biodiversity Assessment Instrument

# Scope of this biodiversity assessment instrument

Unless specified, this instrument would apply to all methods under the Act.

# 2.1 Definitions for key terms and concepts

The BAI would:

- define and interpret key terms in the list of definitions at **Appendix A**.
- provide further interpretation of key concepts in relevant sections of the instrument
- require methods to incorporate a typology for activities under the method and for use in project plans.
  - The typology would be incorporated 'from time to time', available on the department's website.

# 2.2 First Nations knowledge, values and data

The BAI would set out that methods:

- must not contain conditions or requirements that would prevent project proponents from engaging with First Nations people or using Indigenous knowledge and practices, as appropriate, in relation to the design of their project; and
- must contain conditions on registration to the effect that if the project area is or contains a
  Native Title area, or is subject to relevant Indigenous land rights or interests, the project
  proponent must demonstrate that they have engaged appropriately with the relevant First
  Nations representatives in relation to the design of their project, including how Indigenous
  knowledge is used; and
- must contain conditions on registration to the effect that if a project proponent engages with
  First Nations representatives or includes or are informed by Indigenous knowledge and
  values in relation to the design and implementation of the project (including by identifying
  and describing biocultural outcomes), the project proponent must:
  - a. provide evidence that they have obtained the appropriate attribution for, or consent for use of, that knowledge or information disclosed during that engagement,
  - provide evidence that culturally appropriate approaches are being used for the collection, interpretation, use, record and governance of that knowledge or information disclosed during that engagement,
  - c. provide details on how the project design and implementation includes or is informed by Indigenous knowledge and values, including by nominating to deliver a biocultural outcome by applying the culturally significant entities biodiversity project characteristic
- must contain conditions on issuing a certificate to the effect that where a project proponent engages with First Nations representatives or uses Indigenous knowledge in relation to the

design and implementation of the project, the project proponent needs to demonstrate that they have implemented the project consistently with the consent for the use of the Indigenous knowledge provided by the relevant First Nations representatives.

These provisions would be addressed in the method as follows:

- conditions for registration of a biodiversity project (s45(1)(b)), and the content of the project plan (if applicable)
- conditions that must be met for a biodiversity certificate to be issued (s45(1)(e)).

# 2.3 Considering climate change

The BAI would require that methods include provisions that:

- require projects to identify eligible project areas which may be subject to a particular climate change impact that may affect the likelihood of the project achieving the biodiversity outcome in the project period
- require that projects demonstrate how they plan to reduce the risks of particular climate change impacts, as relevant, and provide evidence.

These provisions would be addressed in the method through project registration (s45(1)(b)) and the project plan (if applicable).

# 2.4 Certainty and confidence

The BAI would require that methods adopt the interpretation of certainty as the combination of two factors:

- The level of confidence in an assumption, estimation or projection. Confidence would be based on the type, amount, quality, and consistency of evidence and would be expressed qualitatively, and
- 2. Quantified measures of uncertainty based on statistical analysis of observations or model results, or known uncertainty associated with a measurement tool.

Higher levels of certainty are achieved through high confidence and/or low uncertainty.

These interpretations may be adopted by methods when setting requirements for the measurement or assessment of the enhancement of biodiversity. This could be at least for biodiversity project reports (s45(3)(c)), applications for biodiversity certificates (s45(1)(d)) and/or requirements to monitor the project (s45(3)(f)).

# 2.5 Establishing how to measure change in project biodiversity

# 2.5.1 Starting state assessment

The BAI would require that methods include provisions that:

• require projects to undertake an assessment of the starting state of the project area, which may include an initial in-field site assessment where relevant, require that projects proponents must consult with any statutory First Nations rights and interest holders that

have an interest in, or connection to, the project area (whole or part) in advance of planning the site assessment

- set out the types of information needed to inform the assessment of starting state, including the details of any in-field site assessment
- set out requirements for what should be included in the starting state assessment
- require projects to undertake an assessment of historic drivers of change
- set out the type of information needed to inform an assessment of historic drivers.

These provisions would be addressed in the method through project registration (s45(1)(b)).

# 2.5.2 Identifying reference ecosystems

The BAI would require that methods include provisions relating to establishing reference ecosystems for projects.

The BAI would require that methods include provisions that:

- projects must interpret reference ecosystem as per the definition in Appendix A.
- projects must identify and describe reference ecosystem(s) for the project area.
- projects must:
  - o provide available evidence on the historic reference ecosystem(s) of the project area
  - o provide evidence and justification for the reference ecosystems identified.
- projects may:
  - consider cultural land management practices as part of requirements for projects to establish a reference ecosystem/s
  - o consider First Nations knowledge and values in the description of the reference ecosystem (with appropriate ICIP consents).

These provisions would be addressed in the method through project registration (s45(1)(b)).

# 2.5.3 Establishing counterfactual scenarios

The BAI would require that methods include provisions:

- that set conditions and requirements for projects to determine counterfactual scenarios, including which characteristics and indicators require counterfactual scenarios.
- for project information to include details on the counterfactual scenarios.
- for projects to provide an assessment of the anticipated or monitored change in biodiversity project characteristics against the relevant counterfactual scenario, as determined by the method.

These provisions would be addressed in the method as follows:

- conditions for registration of a biodiversity project (s 45(1)(b)), and the content of the project plan (if applicable)
- conditions to apply for a biodiversity certificate (45(1)(d)(i))
- requirements for the measurement or assessment of the enhancement of biodiversity. This could be at least for biodiversity project reports (s45(3)(c)), applications for biodiversity certificates (s45(1)(d)(i)) and/or requirements to monitor the project (s45(3)(f)).

# 2.5.4 Identifying biodiversity project characteristics

The BAI would establish biodiversity project characteristics as:

 the characteristics of a project that are measured to assess and communicate the protection and enhancement of biodiversity in native species. They include biotic, abiotic, legal, governance and cultural properties and functions relevant to describing and assessing biodiversity projects.

The BAI would establish two classes of biodiversity project characteristics:

- 1. Standard biodiversity project characteristics
  - required to be described by every method
  - are either fixed (will not change due to the project) or variable (will change due to the project, where applicable)
- 2. Method specific biodiversity project characteristics
  - determined by the method where this is relevant to describing specific outcomes and benefits for projects under that method.

The BAI would require that methods consistently identify and describe biodiversity project characteristics.

# 2.5.4.1 Standard biodiversity project characteristics - fixed

The BAI would require that methods include provisions for projects to include information on a set of standard (fixed) biodiversity project characteristics, which are:

- the reference system types in the project area selected from a global ecosystem typology, as defined by the method
- the reference system types in the project area selected from a relevant, nationally consistent ecosystem typology or classification system, as defined by the method
- the reference ecosystem type/s
- the tenure and Indigenous tenure of the project area.

These provisions would be addressed in the method through project registration (s45(1)(b)). The method should provide for this information to be included in the entry in the biodiversity market register for the project (s45(1)(c)).

# 2.5.4.2 Standard biodiversity project characteristics - variable

The BAI would require methods include provisions for projects to assess the state of the project area for a standard set of variable biodiversity project characteristics:

- a) ecosystem condition
- b) removal of threats
- c) commitment to protection of biodiversity
- d) capability of the project area to support threatened species
- e) culturally significant entities (with appropriate consent)

These provisions would be addressed in the method through project registration (s45(1)(b)), and the content of the project plan (if applicable).

# 2.5.5 Assessing change in standard biodiversity project characteristics

## 2.5.5.1 Biodiversity project characteristic assessment conditions and requirements

Methods will set provisions about how assess change in standard biodiversity project characteristics. These provisions would be addressed in the method as follows:

- the conditions for registration of a project (s 45(1)(b)), and the content of the project plan (if applicable)
- requirements for the measurement or assessment of the enhancement of biodiversity. This could be at least for biodiversity project reports (s45(3)(c)), applications for biodiversity certificates (s45(1)(d)(i)) and/or requirements to monitor the project (s45(3)(f).

### 2.5.5.2 Ecosystem condition

The BAI would require methods to set provisions for projects to:

- assess ecosystem condition (as defined) for the project area compared to the reference ecosystems,
- determine an aggregate ecosystem condition measure for the project, as specified by the method, using a quantitative score or rating system; and
- report and publish the project ecosystem condition.

### 2.5.5.3 Removal of threats

The BAI would establish the 'removal of threats' as a biodiversity project characteristic to assess and communicate the outcomes of targeted activities to address threats to biodiversity in the project area.

Where the proposed method activities would lead to a measurable and genuine change in the threats in the project area, the BAI would require methods to set provisions for projects to:

- assess the level of risk that threats pose in the project area compared to the absence of those threats measure the starting state of relevant threats, and monitor and forecast changes in the state of the threat in response to project activities, as determined by the method
- assess the project status using a rating system, specified by the method, that places quantitative values or qualitative descriptions for each threat indicator on a scale where:
  - the lowest value represents where threats that are placing significant ongoing impacts, and
  - the highest value is a situation where the impacts of threats are, insofar as is reasonably in control of the proponent, effectively absent
- report and publish the assessment against the rating system, as required by the method.

Where the proposed method activities would not lead to a measurable and genuine change in the impacts of threats in the project area, the biodiversity assessment instrument would require methods to set provisions for projects to report and publish a 'not applicable' assessment.

## 2.5.5.4 Commitment to protection of biodiversity

The BAI would establish 'commitment to protection of biodiversity' as a biodiversity project characteristic to assess and communicate a commitment to protect, conserve and effectively manage and the project area for conservation.

Where a proposed method includes activities that would lead to a measurable and genuine change in the level of commitment to protection in the project area, the BAI would require methods to set provisions for projects to:

- assess the level of commitment to protection in the project area and its change due to project activities
- describe the starting state and forecast anticipated change in indicators of commitment to protection, as determined by the method
- assess the project status and change using a rating system, specified by the method, that places quantitative values or qualitative descriptions for each indicator on a scale where:
  - o the lowest value represents no protection, and
  - o the highest value reflects the highest level of protection
- report and publish the assessment against the rating system, as required by the method.

Where the proposed method activities would not lead to a measurable and genuine change in commitment to protection, the BAI would require methods to set provisions for projects to report the starting state of the project on the rating scale, but a 'not applicable' assessment for change due to the project.

# 2.5.5.5 Capability of the area to support threatened species

The BAI would establish 'capability of the area to support threatened species' as a biodiversity project characteristic to assess and communicate benefits for threatened species (including listed migratory species) due to the project activities.

Where the proposed method activities would lead to assessable or measurable change in the capability of the area to support threatened species, the BAI would require methods to set provisions for projects to:

- assess the potential for the project activities to improve the capability of the area for threatened species, compared to the starting state of the project
- assess the starting state and forecast anticipated change in indicators of the capability of the project area to support threatened species, as determined by the method
- assess the project status and change using a rating system, specified by the method, that places quantitative values or qualitative descriptions for each indicator on a scale where:
  - the lowest value represents no capacity for the project area to support threatened species, and
  - the highest value reflects a high capacity and confidence in the project area to support threatened species
- report and publish the assessment against the rating system, as required by the method.

Where the proposed method activities would not lead to a measurable and genuine change in the capability of the area to support threatened species, the BAI would require methods to set provisions for projects to report and publish a 'not applicable' assessment.

## 2.5.5.6 Culturally significant entities

The BAI would establish 'culturally significant entities' as a biodiversity project characteristic to assess and communicate biocultural outcomes.

Where relevant requirements established in the 'First Nations knowledge, values and data' section are met, the BAI would allow methods to set provisions for applicable projects to:

- describe the biocultural outcome/s to be delivered by the project based on one or more culturally significant entities,
- identify biocultural indicators to measure and assess change to the respective culturally significant entities biodiversity project characteristic,
- determine steps that must be undertaken to assess or measure the change in the biocultural indicator/s
- establish a process for the culturally appropriate verification of biocultural outcomes.

# 2.5.5.7 Method specific biodiversity project characteristics

The BAI would allow methods to set provisions for projects to measure change in other biodiversity project characteristics.

# 2.6 Monitoring, measuring and assessing biodiversity outcomes at the project area

# 2.6.1 Identifying biodiversity outcomes and measuring change in biodiversity project characteristics

The BAI would require methods to set provisions for projects:

- to meet conditions and requirements so that projects consistent with the method would be 'likely' to achieve the biodiversity outcome
- to include as part of project information, and to publish:
  - o a forecast of the biodiversity outcome from the project
  - o evidence that the project is likely to deliver the biodiversity outcome.
- to specify the time over which this outcome would be delivered
- to forecast the biodiversity outcome by describing the expected change in the indicators identified for standard and method-specific biodiversity project characteristics:
  - the approach to describing change in biodiversity project characteristics would be set by the method, consistent with 'Assessing change in standard biodiversity project characteristics' section.
- when describing the forecasting of the change in indicators identified to describe biodiversity project characteristics, specify the values or levels that the project should demonstrate:
  - to achieve its intended outcome
  - o to be considered 'likely' to achieve the biodiversity outcome
- to include as part of project information submitted to the Clean Energy Regulator at relevant points, evidence that the value or level has been achieved for the project to be considered 'likely' to achieve the biodiversity outcome, or that the biodiversity outcome has been achieved.

These provisions would be addressed in the method as follows:

- conditions for registration of a biodiversity project (s 45(1)(b)), and the content of the project plan (if applicable)
- conditions that must be met for a biodiversity certificate to be issued (s45(1)(e))

The BAI would require methods to:

• include the following text in reporting requirements (s45 (3)(c)) and the application for a biodiversity certificate (45(1)(d)(i)): evidence that the value or level has been achieved for the project to be considered 'likely' to achieve the biodiversity outcome, or that the biodiversity outcome has been achieved.

The method should provide for information on status and change of biodiversity project characteristics to be included in the entry in the biodiversity market register for the project (s45(1)(c)).

# 2.6.2 Site assessment and monitoring requirements

The BAI would require methods to set provisions for projects to:

- undertake monitoring to inform ongoing reporting, including requirements for more comprehensive and accurate monitoring and in-field assessment where risks are higher
- undertake an appropriately comprehensive site assessment, which may include an in-field assessment, to provide evidence for the application for certificate issuance.
- develop ongoing monitoring plans that are consistent with monitoring protocols developed by the method.
- where projects are on land where there are statutory First Nations rights and interest holders
  who would have an interest in, or connection to, the project (whole or part), consult with any
  First Nations rights and interest holders in advance of planning or undertaking monitoring
  activities.

The BAI would require methods to set provisions that projects may:

• use an alternative monitoring protocol, provided that projects provide a rationale, or demonstrate that the alternative protocol meets the required standard.

These provisions would be addressed in the method as follows:

- the conditions for registration of a biodiversity project (s 45(1)(b)), and the content of the project plan (if applicable)
- requirements for the measurement or assessment of the enhancement of biodiversity. This could be at least for biodiversity project reports (s45(3)(c)), applications for biodiversity certificates (s45(1)(d)(i)) and/or requirements to monitor the project (s45(3)(f)).

# 2.7 Assessing and describing broader biodiversity benefits

The BAI would require methods to set provisions for projects to:

 assess how the biodiversity outcome from the project would benefit the broader landscape and seascape, using an approach determined by the method, or report a 'not applicable' assessment at project registration.

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Where applicable, these provisions would be addressed in the method as follows:

- the conditions for registration of a biodiversity project (s45(1)(b)), and the content of the project plan (if applicable)
- requirements for the measurement or assessment of the enhancement of biodiversity. This could be at least for of biodiversity project reports (s45(3)(c)) and applications for biodiversity certificates (s45(1)(d)(i))

If applicable, the method should provide for this information to be included in the entry in the biodiversity market register for the project (s45(1)(c)).

# 2.8 Data suitability and sharing requirements

The BAI would require that methods must include provisions for projects to:

- collect on-site ecological data consistent with a well-documented monitoring standard, and identify a suitable standard
- share and supply project level data on biodiversity and its management in a standard format
- allow flexibility for the culturally appropriate collection, interpretation, application and governance of that data.

The BAI would allow methods to include provisions for projects to:

 meet minimum requirements for the quality and management of data, information and expertise that informs project planning and project implementation.

These provisions would be addressed in the method through project registration (s45(1)(b)).

# **PART 3: Supporting Information**

# **Intent of Part 3**

This document is information and guidance that would support the interpretation and implementation of the BAI.

# 3.1 Definitions for key terms and concepts

MERIT is an online monitoring, evaluation, reporting and improvement tool available for natural resource management grant recipients. It was developed in collaboration with the Atlas of Living Australia for simple and complete project records and for showing direct links between project activities and contributions to Australia's biodiversity conservation work. The MERIT schema could be used as a starting point, along with other typologies being explored by the department, but would need further consideration to ensure it is fit for purpose for the scope of the market. This could include consideration of First Nations participation, the typologies underpinning the EKS, and alignment with the Australian Carbon Credit Units scheme (ACCU scheme).

# 3.2 First Nations knowledge, values and data

# 3.2.1 Interpretations

Biocultural diversity and biocultural knowledge will be interpreted as below, with definitions drawn from the Conference of the Parties to the Convention on Biological Diversity glossary of relevant key terms and concepts within the context of article 8(j) and related provisions (cbd.int) (2018).

**Biocultural diversity** is considered as biological diversity and cultural diversity and the links between them.

**Biocultural knowledge** is the term for First Nations knowledge and values when describing biodiversity for the purpose of the Nature Repair Market scheme (considering cultural priorities, values and Indigenous ecological knowledge). Project development could be informed by biocultural knowledge when:

- identifying and describing biodiversity project characteristics (i.e. characteristics that reflect healthy Country for culturally significant entities), and
- identifying and describing indicators/measures to track those biodiversity project characteristics, and
- describing a biodiversity outcome (i.e. biocultural outcome), and
- describing biodiversity in a starting state, reference ecosystem, or counterfactual scenario.

# 3.2.2 Describing biodiversity

The approach in the BAI aims to increase the use of biocultural knowledge in how the protection or enhancement of biodiversity is achieved and described nationwide.

Projects that include or are informed by First Nations knowledge and values in relation to biodiversity (biocultural knowledge), can only do so with appropriate Indigenous Cultural Intellectual Property (ICIP) consent. This may occur to:

- demonstrate culturally informed project design, and/or
- deliver a biocultural outcome.

It is expected that there would be additional requirements for projects that include or are informed by First Nations knowledge and values to demonstrate culturally informed project design. This would include that at the point of project registration, a project must:

- provide evidence that they have obtained the appropriate attribution for, or ICIP consent for use of, the knowledge (in consultation and agreement with the custodian of the knowledge)
- demonstrate culturally appropriate approaches for the collection, interpretation, application and governance of data that is collected or maintained as a record that is
  - o ICIP, and
  - is supported by evidence of the agreed ICIP consent from the custodian of that knowledge.

In projects where the proponent is not the custodian of that knowledge, this must be accompanied by the ICIP consent for use of the knowledge.

Consent could be evidenced in a knowledge sharing agreement outlining the terms and conditions for the use of biocultural knowledge when implementing project activities, describing bicultural outcomes, or making claims in relation to a project.

The approach in the BAI enables First Nations people to inform project design from a First Nations perspective. This is through the description, identification, measurement and verification of project biocultural outcomes, based on Indigenous knowledge and priorities.

It is expected that this is enabled by:

- the requirement for non-First Nations proponents to obtain ICIP consent for use of biocultural knowledge in the project design, implementation, and description of project outcomes
  - that has been obtained following the principes of free, prior and informed consent
  - that is evidenced by knowledge sharing (e.g. ICIP) agreements provided at project registration, and
- methods requiring projects to reference Indigenous-led or co-designed frameworks that support the identification of biocultural values and indicators of biodiversity project characteristics
  - for example, cultural values-based monitoring frameworks such as the <u>Strong</u>
     <u>Peoples Strong Country framework</u>
- the requirement for projects to nominate a process to verify biocultural outcomes, that is culturally appropriate, consistent with available guidance that will be developed over time
  - the process and level of detail for the verification of biocultural outcomes is recommended to be based on existing Indigenous-led, peer-to-peer verification standards which may include varying levels (i.e. tiers) of prescription. This flexibility would enable project-specific application to suit different circumstances and cultural priorities or needs.

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- o for example, a peer-to-peer First Nations verification framework, such as, the Aboriginal Carbon Foundation Core Benefits Framework, or
- a culturally appropriate verification approach developed in consultation with relevant First Nations representatives, and
- evidence of the First Nations verification process undertaken must be provided to the Regulator.

Note: It is not expected that the Clean Energy Regulator would assess or verify biocultural outcomes. Rather, the Clean Energy Regulator would assess that if a biocultural outcome were included in an application for certificate issuance, that application must demonstrate that the proponent has undergone a culturally appropriate, Indigenous-led verification process in relation to those biocultural outcomes.

# 3.2.3 Culturally informed project design – cultural integrity

Consistency with Indigenous knowledge and values relating to biodiversity and cultural heritage, when measuring or assessing biodiversity, is central to one of the biodiversity integrity standards (paragraph 57(1)(e)(ii)). Addressing this standard could be interpreted and communicated by measures relating to cultural integrity and culturally informed project design.

Projects could demonstrate culturally informed project design by:

 including in the project plan flexibility to adapt and respond to support cultural protocols related to management and monitoring activities (including when related to access to land or sea).

Culturally informed project design would be administered through project plans which allow for project-level decision making and implementation. This allows for:

- First Nations proponents to inform their project design and delivery based on their own cultural knowledge and values,
- other types of proponents to voluntarily align with best-practice standards for working with Indigenous peoples in land and sea management, such as the <u>Our Knowledge Our Way in</u> caring for Country Guideline,
- the flexibility to facilitate project-specific application and adaptive management to support cultural protocols related to land and sea management and monitoring activities,
  - for example, activities or actions that result from early and ongoing communication with people on-Country to inform project delivery, would be provided and updated in a project plan. This could include a forward engagement plan or commitment between the proponent and the First Nations rights, interest or knowledge holder or custodian.
  - the collection, protection and sharing of data that is generated from a project to be flexible to suit cultural priorities and needs, relative to different methods and project activities for example, a method could require a data management plan that is consistent with guidance material.
    - examples include the Data Sovereignty Readiness Assessment and Evaluation
       Toolkit Lowitja Institute, <u>FAIR Guiding Principles and CARE Principles for</u>
       <u>Indigenous Data Governance</u>, and (when finalised) First Nations

considerations under the National Environmental Standard for Data and Information.

The conditions and requirements described above would be complemented by a suite of guidance based on existing resources, in consultation with First Nations representatives. The extent to which a project engages with and is informed by First Nations knowledge and values could be recognised and reflected by a cultural integrity framework. This could signal the extent of Indigenous engagement, participation, governance and culturally informed project design in the biodiversity project.

The intent is to continue to work with First Nations people to develop the appropriate guidance material to elevate and support the participation of First Nations people in the scheme.

# 3.3 Considering climate change

Potential climate change impacts should be considered as part of the method development process. This may include that:

- appropriate and evidence-based project-level responses to climate change impacts are supported through transparent consideration of the short, medium and long-term impacts of climate change that are likely to occur to ecosystems and areas covered by the method
- the potential impacts of climate change are transparently considered when making estimates, projections or assumptions and establishing conditions and requirements
  - examples are establishing counterfactuals, reference ecosystems and projections of change in biodiversity project characteristics
- where methods have provisions for projects to make assumptions, estimates or calculations that would be materially affected by climate change, these provisions should:
  - be informed by fit-for-purpose climate change scenarios consistent with current national guidance
  - explicitly consider the impact of extremes in climate variables as well as average outcomes.
- method design and guidance supports projects to identify if the project area may be subject
  to a particular climate change risk that may have a material impact on the likelihood of the
  project achieving its outcomes, and the identification of appropriate response actions.

Examples of areas with which may be subject to a particular climate change impact that may impact on the likelihood of the project achieving the biodiversity outcome include:

- areas subject to coastal inundation
- ecosystems and species on the north and western edge of their 'climate envelope'

Examples of responses that address the risks of particular climate change impacts through project design or management include:

- establishing a reference ecosystem that is adjusted for the foreseeable impacts of climate change, with consideration appropriate evidence
- developing provisions that relate to the selection of species for revegetation that allow for a reflection of the changing climate.

# 3.3.1 Insights from the Ecological Knowledge System

The EKS is a partnership between CSIRO and the Australian Government to establish a transparent and authoritative source of information and biodiversity assessment capability for the Nature Repair Market.

Key areas of future development include how to incorporate information about likely futures under climate change. This includes developing and trialling expert elicitation and scenario-based approaches to incorporating recent and future climate change impacts in state and transition models.

# 3.4 Certainty and confidence

Confidence is an important consideration in the evaluation of method and activity outcomes, identifying reference state, estimating climate change impacts, and selecting a project counterfactual.

For key measurements, assessments, estimates and projections included in the method, the method development process should include:

- an evaluation of confidence through considering the type, amount, quality, and consistency of evidence; and
- if available, a quantified uncertainty for measurements or projections.

The evaluation of confidence and uncertainty would support the setting of conditions and requirements for projects so that they are likely to achieve their outcomes, including:

- eligible projects and activities
- timing of certificate issuance
- length of the activity period
- comprehensiveness of monitoring
- conservativeness of projections
- commitments to adaptive management.

# 3.5 Establishing how to measure change in project biodiversity

# 3.5.1 Starting state assessment

The method development process should describe the confidence associated with the starting state assessment requirements, based on the comprehensiveness of the in-field site assessment and the amount and quality of the evidence and information required. This includes how the starting state assessment considers inherent variability.

The site assessment requirements should be tailored to address risks, for example those associated with the ecosystems, their status, and activities covered by the method.

The method would specify the types of information needed to inform the assessment of starting state, tailored as relevant to the needs of the method. Examples include species survey, soil survey, spatial, remote, time series, expertise, Indigenous expertise, oral histories, seasonal calendars.

Requirements for the assessment and reporting of historic drivers of change should be designed to:

- identify historic and recent drivers that may have a significant impact on project activities and outcome. An example is a past use that introduced a big nutrient load to the project area, making it unsuitable for native plant species without treatment.
- consider the privacy of existing and previous landholders.

# 3.5.2 Identifying reference ecosystems

The process for identifying and describing reference ecosystems in the project area could vary depending on the method, the existing state and condition of the project area, the quality of available mapping and descriptive information, and access to historic information on the project area. The reference ecosystem informs project design by:

- providing an understanding of the scarcity or representativeness of the project area ecosystem(s), when assessed alongside current and pre-industrialisation conservation status information and current and historic distribution of ecosystem types
- informing the identification of suitable project activities.

The intent of the BAI is not to restrict the approach to identifying reference ecosystems. Rather, it sets the expectation for an evidence-based and transparent approach that enables appropriate approaches for projects with different scenarios, ecosystems and histories. This reflects the importance of the reference ecosystem in ensuring that project activities are appropriate, and for communicating and tracking project process.

The BAI describes the reference ecosystem as a set of measurable indicators that characterise it (e.g. canopy height, recruitment, hollow-bearing trees, weed cover, large-bodied fish biomass). Indicators are determined by the method. As a minimum, they should include measures of composition, structure and function. Each indicator has a benchmark value that reflects the reference state for the ecosystem. These benchmarks should capture ecosystem variability and dynamics.

# 3.5.2.1 Considerations for identifying reference ecosystems

Reference ecosystems may be based on the natural, undegraded historical condition (pre-industrialisation) of the project area. Information to build an understanding of the 'historic' reference ecosystem may include available ecosystem and vegetation mapping, historic records, a minimally or undegraded contemporary condition, historic records, Indigenous knowledge, and other local knowledge.

Reference ecosystems may be 'adjusted' to consider the impact of factors such as hydrologic, topographic or climatic changes, or the need to respond to climate change risks in the future. Particularly in marine environments, reference ecosystems may be adjusted where the project objective is to engineer an ecosystem in a context or state different to historic references. Ideally, changes from the historic reference ecosystem should be justified against a set of principles (e.g. maintenance of good ecosystem function, evolutionary adaptive ability, minimising species extinction, maintenance of evolutionary character).

There are different approaches to establishing reference ecosystems for restoration across the country, including the use of an existing physical site or sites that can be assessed, or modelled scenarios informed by expert opinion and/or historical information. Methods need to clearly define how the reference ecosystem(s) are established for the project site, ensuring that reference ecosystem variability and dynamics are appropriately captured.

Projects should rarely identify the reference ecosystem based only on available ecosystem mapping.

- Ecosystem and vegetation maps provide a guide.
- Mapping likely needs to be verified as part of site assessment (in field or high-resolution aerial photographs), and/or knowledge from the landholder or manager.

# 3.5.3 Establishing counterfactual scenarios

The BAI would require that as part of the method development process, methods must provide evidence to support the counterfactual scenario requirements established by the method. The method must also stipulate the certainty and confidence provided by that evidence.

Methods may specify a counterfactual or set requirements and assumptions for projects to determine a counterfactual specific to the project.

Examples of conditions and requirements for determining counterfactual scenarios include:

- That counterfactual scenarios:
  - o should be described at the time of project registration
  - should be described for key biodiversity project characteristics, and/or indicators of biodiversity project characteristics, as relevant to the method
  - are representative of the period over which the biodiversity outcome is expected to be achieved, and/or the permanence period (if applicable)
  - o considers the potential uncertainty due to climate change impacts
  - o considers the risk of a change in land ownership.
- Assessment or projection of change compared to the counterfactual should occur:
  - at project registration
  - at project reporting, where the Rule or the method may require that the project reports on its condition before or after a certificate is issued. The report should include an assessment of the relative state of the counterfactual to the starting state and reference ecosystem
  - at application for certificate issuance in addition to any requirements relating to an application for certificate issuance, the application should include an assessment of the condition at the time of certificate issuance relative to the starting state, the biodiversity outcome, the reference ecosystem and the counterfactual.

Examples of consistent and transparent terminology for counterfactual scenarios includes:

- Consistent descriptions, for example:
  - o if they are 'static' (remaining at the starting state)
  - if they are dynamic (declining or improving from the starting state) or other (relative to something else)
- Transparency in the extent to which the counterfactual can be tailored to the project
  - how project-specific information (for example, from the starting state assessment)
     should be used to determine the counterfactual, and any limitations to the assumptions made at the project level.

# 3.5.4 Identifying biodiversity project characteristics

All methods are expected to require projects to report on the standard biodiversity project characteristics. This could provide a set of information to support market participants to understand the features of the project and the project area, the focus of the project and to support comparison between projects.

Where the characteristic represents an outcome that is not a focus of the method, projects may provide a 'not applicable' assessment for the characteristic. This makes it clear that that the characteristic has not been assessed by the method or project.

Note that the Nature Repair Market Rules will set requirements to describe the project area. The biodiversity assessment instrument would set requirements for how the biodiversity in the project area is described.

The standard (fixed) biodiversity project characteristics are intended to provide a description of the project using standard classifications that are consistent across Australia. Where possible, these should be aligned with, or mapped to, international classifications.

The global ecosystem typology could be IUCN Global Ecosystem Typology level 3.

Nationally consistent ecosystem typology or classification systems include:

- the reference National Vegetation Information System vegetation type/s
- the Ramsar Classification System for Wetland Type
- the Interim Australian National Aquatic Ecosystem (ANAE) Classification Framework
- the Parks Australia Natural Values typology to define Australian marine ecosystems

The information on the reference ecosystem could draw on the EKS, or classifications in jurisdictional frameworks, for example Victoria's Ecological Vegetation Classes, or Queensland's Regional Ecosystem classification and mapping. This would enable the project plan to draw on available regional and local information and expertise.

Available maps showing the distribution of reference ecosystem/s may provide insight for the development of descriptions of biodiversity project characteristics. However, course resolution maps, such as those intended for global or national-level reporting, should not be used as the basis for identifying reference ecosystem/s at project scales. Coarse-scale maps may also only identify the dominant ecosystem, which may be different to the ecosystems identified for mapping and management at the project level.

**For the standard (variable) biodiversity project characteristics**, the BAI sets parameters for a standardised way of assessing and communicating change in these characteristics. These include the condition or state, as well as reflecting the quality of the evidence informing the assessment (where relevant).

# 3.5.5 Assessing change in standard biodiversity project characteristics 3.5.5.1 Ecosystem condition

Ecosystem condition is described drawing on a selection of indicators, as determined by the method.

• indicators should represent (as a minimum) structure, function, composition

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- a benchmark value for each indicator is determined based on the reference state of the ecosystem
- the status of each indicator is measured against that benchmark
- indicators may include
  - attributes of vegetation condition
  - o assessment of habitat for native fauna, or fauna

As a minimum, indicators for ecosystem condition should consider structure, function and composition, as interpreted below:

- Composition (of an ecosystem) is the array and relative proportion of taxa within an
  ecosystem e.g. the presence/abundance of key species, the diversity of relevant species
  groups.
- Structure (of an ecosystem) is the physical organisation of an ecosystem.
- Function (of an ecosystem) is the collective term for the roles that arise from interactions among living and non-living components of ecosystems.

Examples of ways to measure project area ecosystem condition may include frameworks developed by States and Territories (e.g. Queensland's BioCondition), or the TERN EMSA 'condition' module. These each measure attributes that reflect the structure, function and composition of the project area.

### 3.5.5.2 Removal of threats

This characteristic would focus on assessing a reduction in the impacts of threats that are not adequately assessed by the indicators chosen to inform the ecosystem condition assessment. For example, weeds and grazing by feral herbivores could be monitored through the ecosystem condition assessment by assessing vegetation condition. It is expected that addressing these threats would generally require targeted activity and monitoring.

Activity to address threats should be appropriate to the project area. Evidence from the starting state assessment should be used to demonstrate that there is a clear link between the planned activities to address threats impacts, and positive outcomes for targeted biodiversity in the project area.

The presence of threats in reference ecosystem may be a relevant benchmark for the higher assessment ratings for the removal of threats, putting the status and change of the project in the context of other projects and methods.

# 3.5.5.3 Commitment to protection of biodiversity

This characteristic would focus on describing the outcomes from activities that lead to greater protection of the biodiversity on the project area. These activities may lead indirectly to improvement or enhancement of biodiversity, rather than being pro-active on-ground management activities. The intent is to be able to provide a clear indication to buyers of the change in the commitment to protection due to the project, by assessing both the starting level of protection, and the change that the project would bring about.

For example, a market project with a 100-year permanence period would deliver more of the 'protection benefit' if it is on an area with no current protection commitment, rather than on an area where there is already an existing legal protection mechanism in place.

The intent of the rating scale would be to put the status and change of the project in the context of other projects, and broader biodiversity and management outcomes. High levels of protection should align with the requirements for Protected Areas in Australia's Strategy for the National Reserve System, and Conserved Areas consistent with the National Other Effective area-based Conservation Measures Framework, including projects with a permanence period of 100 years.

Indicators of a commitment to improve protection that could be considered include:

- the duration and nature of any legal protection or security
- the extent to which legally permissible activities that could negatively impact biodiversity on the project area e.g. prevention of grazing by feral herbivores, firewood removal
- the management arrangements in place
- the monitoring and compliance measures in place
- the extent of the project's contribution to comprehensiveness, adequacy and representativeness
- First Nations governance and cultural authority, recognising and respecting that cultural
  protocols are important. This would consider who is doing the land management, and the
  cultural practices and customs that are enabled through Indigenous governance and
  management.

### 3.5.5.4 Capability of the project area to support threatened species

This characteristic would focus on the potential benefits of the project to specific threatened species, or types of threatened species that would be benefited in a similar way.

For species that benefit from general ecosystem management, the benefits may be linked to other activities focused on improving ecosystem condition. Other species may only benefit from specifically targeted activities.

For the purposes of the BAI, 'threatened species' is an inclusive term that covers species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), including listed migratory species or species listed under the relevant jurisdictions State or Territory legislation. Indicators of benefits for threatened species that could be considered are:

- The level of evidence that threatened species would be likely to visit or be present at the site over the life of the project, for example:
  - o verified species records on site, and monitoring of populations over time
  - o recent, local verified records in nearby habitat
  - o older records, or records with a lower level of verification (verified citizen science)
  - o habitat suitability mapping and assessment, and functional connectivity
- Species status, considering IUCN, EPBC Act and state and territory listings
  - o Critical, Endangered, Threatened, of conservation concern, least concern
- How project outcomes would benefit the species
  - whether the project outcomes could enhance the ability of the site to support the species (or group of species), for example, its foraging habitat, roosting habitat, breeding habitat, or dispersal habitat.
  - o whether the project could reduce threats specific to that species.

## 3.5.5.5 Culturally significant entities

This characteristic requires appropriate First Nations' ICIP consent to be obtained and evidenced. The nature of the characteristics would be determined as part of the First Nations engagement process for the method or project.

The culturally significant entities characteristic:

- enables First Nations people to inform project design from a First Nations perspective. This is through the description, identification, measurement and verification of project biocultural outcomes, based on Indigenous knowledge, values and priorities
- is intended to assess and communicate improvements, for example, to the extent, condition, function and biocultural value of a priority species and/or entity from an Indigenous biocultural diversity perspective.

If projects include or are informed by First Nations knowledge and values to deliver a biocultural outcome through the culturally significant entities biodiversity project characteristic, to be consistent with the biodiversity assessment instrument it is expected that they:

- nominate that the project intends to deliver a biocultural outcome through the culturally significant entities biodiversity project characteristic.
- provide evidence that they have obtained the appropriate attribution for, or ICIP consent for use of, the knowledge (in consultation and agreement with the custodian of the knowledge)
- provide details of the project's approach to describing the culturally significant entities biodiversity project characteristic.

If projects include or are informed by First Nations knowledge and values to deliver a biocultural outcome through the culturally significant entities biodiversity project characteristic, information provided to the Clean Energy Regulator that includes or is informed by that knowledge must be:

- supported by evidence of consent for the use of the First Nations knowledge and values in the description of the biodiversity outcome, and
- independently verified by First Nations peoples through an Indigenous led or co-designed approach in a transparent arrangement.

# 3.5.5.6 Method specific biodiversity project characteristics

Some methods and projects may be targeted at specific outcomes that are not captured by the standard biodiversity project characteristics, for example enhancing habitat for a particular species. Other examples include:

- changes to physical conditions (e.g. hydrology, physical or chemical characteristics)
- assessment of habitat links and flows within the project area for example, how the project area supports movement of animals (including pollinators) within the project area, including continuity of riparian habitat.

These optional characteristics would provide additional information about biodiversity on the project area and how it is changing.

# 3.6 Monitoring, measuring and assessing biodiversity outcomes at the project area

# 3.6.1 Identifying biodiversity outcomes and measuring change in biodiversity project characteristics

The method development process should provide evidence that the selected indicators and thresholds are suitable and sufficient to demonstrate that outcomes have been, or are likely to be, achieved. Indicators should enable assessment of change that is detectable through estimation and measurement within the project timeframes.

Projects would provide information on the following, which would be published:

- a forecast of the value or level to be reached for each indicator of the biodiversity project characteristics (which could include a range), as determined by the method
- a composite forecast value/level for each biodiversity project characteristic, as determined by the method

Where relevant, methods should:

- determine indicators that could help support the estimation and measurement of change that is detectable within the project timeframes
- consider specifying acceptable bounds in indicators
- provide information on how change due to the project would be monitored and measured
- provide information on how the assessment of change due to the project would consider natural variation.

Relevant points for information to be submitted to the Clean Energy Regulator include the project registration application and for certificate issuance. Information could also be included in the project plan.

Evidence that the conditions for certificate issuance have been met should be informed by an appropriately comprehensive site assessment, including in-field monitoring. This evidence should include consideration of how the changes in the biodiversity project characteristics compare to natural variation.

# 3.6.2 Site assessment and monitoring requirements

Monitoring protocols developed by the method should consider to:

- enable assessment of change in relevant biodiversity project characteristics
- be designed to monitor change over time
- be tailored to detect change from the project activities
- be sufficient to inform adaptive management
- be appropriately targeted towards the monitoring of activities and outcomes at different stages of project delivery
- meet requirements, as set out in the biodiversity assessment instrument and method, for data standardisation and sharing
- be appropriate for the method in terms of addressing uncertainty.

Higher risk projects that may require more comprehensive and accurate monitoring and in-field assessment include where:

- the project site is likely to have high biodiversity or biocultural value (e.g. threatened species or cultural sites)
- existing information on the project area is limited or low accuracy
- the proposed management activity is innovative
- confidence in activities leading to outcomes is lower.

To draw on existing expertise and systems, methods should enable alternative monitoring protocols, where it can be demonstrated that the alternative protocol meets the requirements of the method. An alternative protocol may allow for flexibility in monitoring activities to support cultural protocols.

# 3.7 Assessing and describing broader biodiversity benefits

Benefits to the broader landscape and seascape which could include:

- the conservation significance of the ecosystem types in the project area
- regional enhancement in habitat connectivity
- proximity to important biodiversity areas.

If a method includes a requirement for projects to describe a set of standard broader characteristics it should require projects to:

- assess and submit information on these landscape/seascape characteristics at project registration and certificate application
- apply the broader benefit assessment exactly as identified by the method (i.e. no substitution of data sources).

Methods requiring projects to describe a set of standard broader characteristics should draw on data sources or systems that:

- cover the spatial scope of the method
- are likely be maintained or available over the project period enabled by the method.

# 3.8 Data suitability and sharing requirements

It would be expected that as part of the method development process:

- methods demonstrate how data and information used to inform the development and implementation of the method and assess biodiversity outcomes (through incorporation) is appropriate and suitable for the application
- where methods incorporate systems or datasets as evidence and for method implementation, demonstrate that these are likely updated and maintained by a suitable entity for the lifetime of projects under the method.

An example of a well-documented monitoring standard is the Terrestrial Ecosystem Research Network Ecological Monitoring System Australia (EMSA).

Evidence on data quality could be required for example, as part of the project plan.

# **Appendix A: Definitions**

**Counterfactual** is a scenario describing what is likely to have happened in the absence of the project or management action(s).

**Ecosystem condition** is the quality of an ecosystem measured in terms of its abiotic and biotic characteristics. For the purposes of this instrument, ecosystem condition is:

- measured as the difference from, or similarity to, a reference ecosystem
- based on an assessment of indicators representing structure, function and composition against relevant reference ecosystem benchmarks for those indicators, as determined by the methodology.

**Reference ecosystem** represents the condition of an ecosystem in its undegraded state. Quantitative information on the ecosystem is drawn from the reference ecosystem to inform the choice of indicators and their reference values. The state of the reference ecosystem is compared with the present state of the project ecosystem to establish ecosystem condition as departure from (or similarity to) reference values for a chosen set of indicators.

**Starting state** is the status of biodiversity on the project area at the start of the project, based on data, measurement and assumptions. A project starting point characterises the ecological, economic, or social condition of a system. It is considered in relation to important characteristics of an aspirational target and is essential for assessing degree of change.

**Threats** are factors potentially or already causing degradation, damage, destruction or increased risks to native biodiversity.

# Glossary

Term	Definition
ACCU	Australian Carbon Credit Units
ACCU review	Independent Review of Australian Carbon Credit Units
ACCU Scheme	Australian Carbon Credit Units Scheme
ANAE	Australian National Aquatic Ecosystem
BAERG	Biodiversity Assessment Expert Reference Group
BAI	Biodiversity Assessment Instrument
BIS	Biodiversity Integrity Standards
EKS	Ecological Knowledge System
EMSA	Ecological Monitoring Systems Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
FPIC	Free, Prior, Informed Consent
ICIP	Indigenous Cultural Intellectual Property
MERIT schema	Monitoring, evaluation, reporting and improvement tool
NBAS	National Biodiversity Assessment System
SERA	Society for Ecological Restoration Australia
TNFD	Taskforce for Nature-related Financial Disclosure
UN SEEA	UN System of Environmental-Economic Accounting

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