



# Method Rules

**RULES FOR THE DEVELOPMENT AND  
ACCREDITATION OF ENVIRONMENTAL  
CONDITION MONITORING METHODS**

**V1.0**

**DECEMBER 2023**

## VERSION CONTROL

<b>Current version</b>	Accounting for Nature® Method Rules Version 1.0 (December 2023) Approved for release by: Accounting for Nature Ltd
<b>Previous version</b>	This is the first version that now incorporates and supersedes the following standalone Guidance Documents: <ul style="list-style-type: none"><li>- Guidelines for Setting Condition Targets (Version 1 – December 2021)</li><li>- Guidelines for Determining Confidence Levels (Version 1.3 – May 2021)</li><li>- Guidelines for Hindcasting Environmental Condition (Version 1.0 – December 2021)</li><li>- Guidelines for Reference Benchmarking (Version 1.0 – December 2021).</li></ul>
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### ACKNOWLEDGEMENT

From 2008 to 2018, the Wentworth Group of Concerned Scientists developed the Accounting for Nature® model. The model sought to establish a practical, affordable, and scientifically robust methodology for creating a common unit of measurement to describe the condition of environmental assets and measure any change in the condition of those assets over a period of time.

From December 2018, the Wentworth Group will not take part in any further development of, or application or implementation of, the Accounting for Nature model. This will be undertaken by AfN. The Wentworth Group is not responsible for the use of or implementation of the Accounting for Nature® model or any associated services provided by AfN.

## CONSULTATION AND REVIEW

AfN is committed to the development, review and implementation of a comprehensive Framework that directly impacts Users' credibility, effectiveness, and impact of Accounting for Nature® Certified Environmental Accounts.

To help achieve this, stakeholders are invited to provide feedback on the **Accounting for Nature® Method Rules** during a review period, which will commence on 14 December 2023 and conclude on 15 June 2024.

This six-month timeframe allows stakeholders to review the document and submit their feedback. The feedback obtained during this period will be considered for potential revisions and improvements to ensure the effectiveness and relevance of the Method development and accreditation process.

All stakeholders are requested to submit their feedback via email to [feedback@accountingfornature.org](mailto:feedback@accountingfornature.org).

## KEY DOCUMENTS, DEFINITIONS & FEES

All documents under the **Accounting for Nature® Framework**, including the **Accounting for Nature® Glossary**, and the **Accounting for Nature® Fee Schedule** are available to download from the Key Documents page on the AfN Website: <https://www.accountingfornature.org/key-documents>.

## Contents

<b>Key terms</b> .....	<b>6</b>
<b>1 Introduction</b> .....	<b>9</b>
1.1 Purpose .....	9
1.2 What is a Method?.....	9
1.3 Overview of process .....	11
<b>2 Preparing to develop a Method</b> .....	<b>12</b>
2.1 Method Notification.....	12
2.2 Method development assistance and feedback options.....	12
2.2.1 <i>Method Brief</i> .....	12
2.2.2 <i>Method Development Workshop</i> .....	13
2.2.3 <i>Technical Assistance</i> .....	13
<b>3 Method Development</b> .....	<b>14</b>
3.1 Scope .....	14
3.1.1 <i>Environmental Asset</i> .....	14
3.1.2 <i>Realm and Biome/Functional Ecosystem Group</i> .....	14
3.1.3 <i>Geographical application</i> .....	15
3.1.4 <i>Scale and area range</i> .....	15
3.1.5 <i>Accuracy Level</i> .....	16
<i>How the Accuracy Level of a Method is assessed</i> .....	19
<i>How Accuracy Levels will be refined over time</i> .....	19
3.1.6 <i>Reporting Period</i> .....	19
3.1.7 <i>Assessment Type</i> .....	20
3.1.8 <i>Expertise Required</i> .....	20
3.1.9 <i>Purpose</i> .....	20
3.1.10 <i>Existing data</i> .....	20
3.2 Data Collection Plan.....	20
3.2.1 <i>Stratification</i> .....	20
3.2.2 <i>Sampling location and intensity</i> .....	22
3.2.3 <i>Timing</i> .....	22
3.2.4 <i>Frequency</i> .....	22
3.3 Reference Benchmarks .....	22
3.3.1 <i>What is a Reference Benchmark?</i> .....	22
3.3.2 <i>How to determine Reference Benchmarks</i> .....	23
3.4 Data Collection .....	23
3.4.1 <i>Indicators</i> .....	23
3.4.2 <i>Indicator Measurement</i> .....	24
3.5 Scoring.....	24
3.5.1 <i>Indicator Condition scoring</i> .....	24
3.5.2 <i>Econd® scoring</i> .....	25
3.6 Worked Example .....	26
3.7 Record keeping .....	26
<b>4 AfN Technical Review process</b> .....	<b>27</b>
4.1 AfN Technical Review .....	27

4.2	Eligibility requirements.....	27
4.3	Method Review Application Form.....	27
4.4	AfN Technical Review Outcome.....	28
<b>5</b>	<b>Scientific Review process.....</b>	<b>29</b>
5.1	Eligibility requirements.....	29
5.2	Independent Science Committee Review.....	29
5.2.1	<i>Independent Science Committee Meetings.....</i>	<i>29</i>
5.2.2	<i>Independent Science Committee Decisions.....</i>	<i>29</i>
<b>6</b>	<b>Accreditation process.....</b>	<b>31</b>
6.1	Method finalisation.....	31
6.2	Accounting for Nature® Accreditation.....	31
6.3	Method Catalogue.....	33
6.3.1	<i>Method Licencing.....</i>	<i>33</i>
6.3.2	<i>Embargo Period.....</i>	<i>34</i>
6.4	Accreditation duration and review.....	34
6.4.1	<i>New Method status.....</i>	<i>34</i>
6.4.2	<i>Accreditation duration.....</i>	<i>34</i>
6.4.3	<i>Review of Accredited Methods.....</i>	<i>35</i>
6.4.4	<i>Method versions.....</i>	<i>35</i>
<b>7</b>	<b>Update process.....</b>	<b>36</b>
7.1	Minor corrections/updates.....	36
7.2	Major corrections/updates.....	36
<b>8</b>	<b>Method Variation process.....</b>	<b>37</b>
8.1	Method Variation definition.....	37
8.2	Method Variation review and approval.....	37
8.3	Method Variation – Method Catalogue.....	37
<b>9</b>	<b>Claims relating to Method Development and Accreditation.....</b>	<b>38</b>
9.1	Example claims.....	38
9.1.1	<i>Methods in development.....</i>	<i>38</i>
9.1.2	<i>Accredited Methods.....</i>	<i>38</i>
9.2	Use of the Trustmark.....	38
<b>10</b>	<b>Feedback process.....</b>	<b>39</b>
10.1	Feedback process.....	39
10.2	Complaint process.....	39
	<b>Appendix A –Statistical theory underpinning Accuracy Levels.....</b>	<b>40</b>
	<b>Appendix B – Assessment Type: Attribute the cause of change in condition.....</b>	<b>42</b>
	<b>Appendix C – Reference Benchmarks.....</b>	<b>45</b>
	<b>Appendix D – Using models in Methods.....</b>	<b>49</b>
	<b>Appendix E. Method Author Declaration.....</b>	<b>50</b>
	<b>Appendix F – Clauses for Method Authors to include in Method Licence Agreement.....</b>	<b>51</b>

# Key terms

The key terms below are referenced throughout this document. For a full glossary of Accounting for Nature® terms, please see the **Accounting for Nature®** [Glossary](#).

Term	Document definition
Accredited Method ('Method')	An Accounting for Nature® Accredited Method provides detailed instructions on how to measure the Condition of a specific Environmental Asset, at a particular Accuracy Level, at a particular Scale, and to support a specific Purpose and/or Claim. The Independent Science Committee is responsible for reviewing the science in Methods and recommending to the AfN Executive whether it should be accredited for use under the Framework. All Asset Accounts must be prepared in accordance with an Accredited Method nominated at the time of registering an Environmental Account with AfN.
Accuracy Level	Accuracy Levels describe the accuracy of a Method and the resulting Econd® in terms of how accurately it is expected to represent the Condition (and change in Condition) of an Environmental Asset. The Framework supports three Accuracy Levels – very high (95%), high (90%) and moderate (80%).
Counterfactual Analysis	Counterfactual Analysis is an optional technique used by Proponents who want to credibly attribute a change in environmental Condition to a specific management activity, intervention, or other variable. It often involves identifying either real or modelled scenarios.
Econd®	The Econd®, short for 'environmental <u>condition</u> index', is the core metric in all Asset Accounts. It is an index between 0 and 100, where 100 represents the Condition of an Environmental Asset in its undegraded (natural or best-on-offer) state – its 'Reference Benchmark'. The Econd® index is unique to the Accounting for Nature® Framework. The term "Econd" is trademarked.
Embargo Period	An Embargo Period describes the period for which the Method Author has opted to restrict access to a new Method to other parties (including other Proponents). The maximum Embargo Period is three years, and during this time, Proponents may request to view and/or use the Method subject to an NDA.
Environmental Account	An Environmental Account is a single registered environmental accounting project that reports on the Condition of one or more Environmental Assets. Environmental Accounts are comprised of individual Environmental Asset Accounts. Under the Framework, an Environmental Account includes all Environmental Account data and the Information Statement.

Term	Document definition
Environmental Asset	Environmental Assets are any biophysical feature in nature that can be measured within the three Realms <sup>1</sup> of land, ocean, and freshwater or the three transition Realms (land/ocean, freshwater/ocean, land/freshwater). Environmental Assets can be specific, such as an individual fauna species, or broad such as a group of fauna species or an ecosystem. Environmental assets generally fall into one of the following Asset Classes: fauna, vegetation, soil, water, and ecosystems.
Environmental Asset Account ('Asset Account')	Environmental Accounts can be comprised of one or multiple Environmental Asset Accounts. An Asset Account individually reflects the condition of one Environmental Asset as specified by a single Accredited Method.
Independent Science Committee ('ISC')	The Independent Science Committee is a technical body that meets regularly to review and provide advice/recommendations on the suitability of Methods and relevant Guidelines for use under the Accounting for Nature <sup>®</sup> Framework.
Indicator Condition Score ('ICS')	An Econd <sup>®</sup> is constructed using a set of measurable Indicators that together represent the condition of an Environmental Asset. Each Indicator is scored separately to produce an Indicator Condition Score (ICS). The ICS is an index between 0 and 100, where 100 describes the Reference Benchmark of the particular indicator. ICS are then combined to calculate the Econd <sup>®</sup> .
Indicators	Indicators are quantifiable measures that are used to estimate the Condition of an Environmental Asset at a point in time. Indicators are specified and explained in Accredited Method(s). When aggregated appropriately, Indicators represent the Condition of an Environmental Asset.
Method Author	A Method Author is the entity responsible for writing a Method. It can be a single person, group of people, organisation, or group of organisations.
Method Brief	A Method brief provides an overview of all key components of a Method without the Method Author writing the Method in full detail. A brief may be provided to the whole ISC or a part of the ISC, either in or out of session
Method Variant/ Method Variation	A Method Variation involves a third-party creating a variant version of an existing Method that is tailored to a specific application of the Method but has the same Accuracy Level as the original Method.
New Method	Once accredited, a Method is listed in the Method Catalogue as a 'New Method'. A New Method indicates that a Method has been reviewed and accredited for use under the Framework but hasn't been used yet to develop a Certified Environmental Account. Once the Method has been used for a Certified Environmental Account, it is no longer listed as a 'New Method'.

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<sup>1</sup> IUCN Global Ecosystem Typology

Term	Document definition
Realms <sup>2</sup>	Realms describe the major components of the biosphere that differ fundamentally in ecosystem organisation and function: terrestrial, freshwater, marine, and or the three transition realms (land/ocean, freshwater/ocean, land/freshwater).
Reference Condition Benchmark ('Reference Benchmark')	<p>A Reference Benchmark is a scientific estimate of an Environmental Asset in its undegraded (natural, undegraded, or best possible/best on offer) state. There are two main types of Reference Benchmarks that are used under the Accounting for Nature<sup>®</sup> Framework:</p> <ul style="list-style-type: none"> <li>• Dynamic Reference Benchmark: a series of values that represents the natural variation in the undegraded Condition of a given Indicator.</li> <li>• Static Reference Benchmark: a single value (or range) that represents the undegraded Condition of a given Indicator.</li> </ul>
Reporting Period	A Reporting Period describes the reporting timeframe for which an Asset Account is developed (from less than a year, up to five years; and as an average across multiple years). It describes the period of time in which the data was collected to underpin the calculation of the Econd <sup>®</sup> .
Sub-asset	Some Environmental Assets can be further categorised into 'Sub-asset's that describe the different 'types' within the Environmental Asset. For example, soil orders within the soil asset, or vegetation classes within a vegetation asset.

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<sup>2</sup> IUCN Global Ecosystem Typology



# 1 Introduction

## 1.1 Purpose

This document outlines the rules and processes associated with the development, accreditation, update, and use of Methods under the Accounting for Nature® Framework. It also provides guidance and discussion on key concepts that Method Authors must consider for the Method to be eligible for accreditation under the Framework. This document should be read in conjunction with the **Accounting for Nature® Standard**, which includes a description of key concepts and the criteria for Method development and accreditation and the **Accounting for Nature® Environmental Account Rules**.

## 1.2 What is a Method?

The Accounting for Nature® Framework ('the Framework') provides a system for measuring, verifying, certifying, and publicly reporting Environmental Condition Accounts ('Environmental Accounts') as shown below in Figure 1.

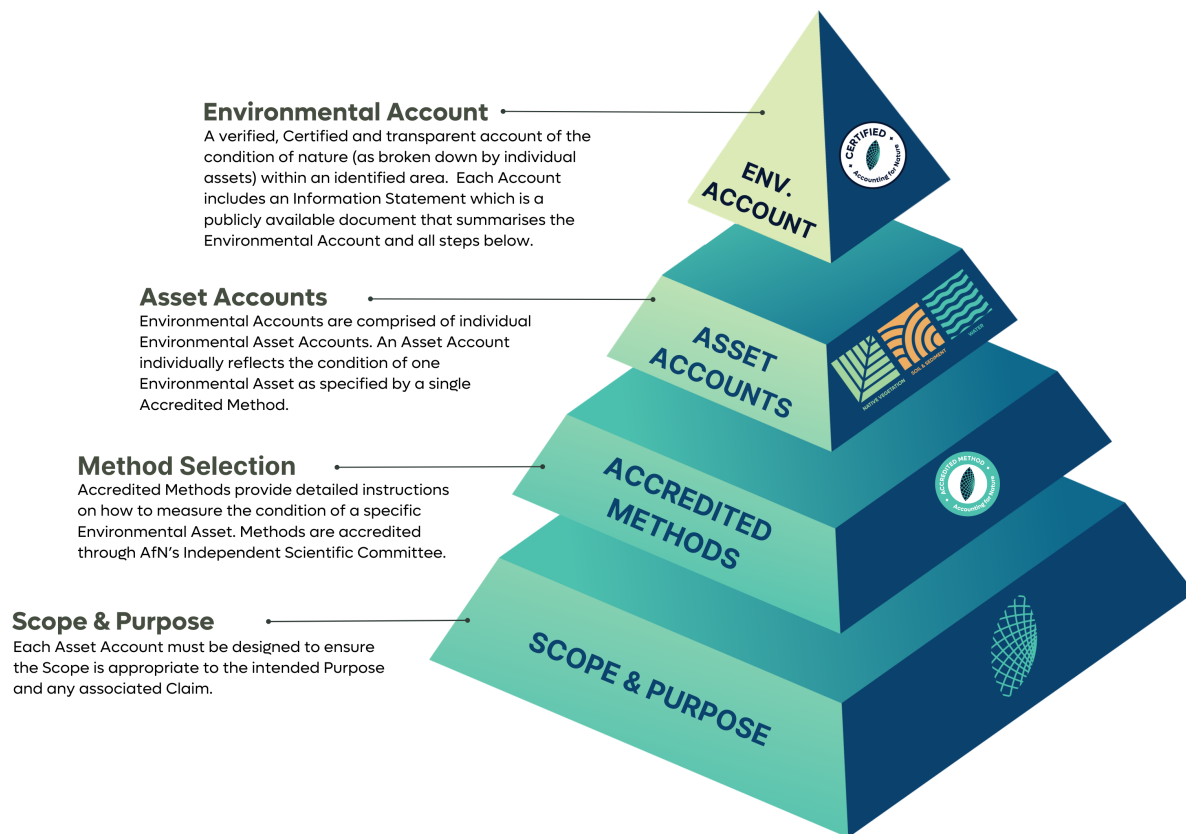


Figure 1 Overview of Accounting for Nature® Framework of hierarchy of elements

Environmental Accounts are comprised of individual Environmental Asset Accounts ('Asset Accounts'), for example, an Asset Account for a grassland and an Asset Account for a fauna species. Asset Accounts report the Environmental Condition for a particular Environmental Asset and are developed following an Accounting for Nature® Accredited Method ('Method'). This ensures that all Asset Accounts are scientifically robust and accurately represent the condition of an Environmental Asset.

An Environmental Asset is any biophysical feature in nature that can be measured within the three Realms<sup>3</sup> of land, ocean, and freshwater or the three transition realms (land/ocean, freshwater/ocean, land/freshwater). Environmental Assets can be specific, such as an individual fauna species, or broad, such as a group of fauna species or an ecosystem. Environmental Assets generally fall into one of the following Asset Classes that comprise broad components of the environment and are used for reporting and aggregation purposes: fauna, vegetation, soil/sediment, water, ecosystems, and microorganisms.

Methods are an essential component of the Framework as they provide specific detailed instructions on how to measure and monitor the condition of a specific Environmental Asset in a consistent and comparable way.

Methods may be developed for a specific region, ecosystem, or biome and are designed to be applied at a specific spatial scale and Accuracy Level.

Each Method outlines a specific set of measurable Indicators that together represent the Condition of the Environmental Asset. Each Indicator is scored separately to produce an Indicator Condition Score ('ICS'). The ICS is an index between 0 and 100, where 100 describes the reference state of the indicator. ICSs are combined to calculate the Econd<sup>®</sup> (or environmental condition index).

The Econd<sup>®</sup> is the core metric used in all Asset Accounts unique to the Accounting for Nature<sup>®</sup> Framework. The Econd<sup>®</sup> is an index between 0 and 100, where 100 represents the Condition of an Environmental Asset in its undegraded (natural or best-on-offer) state. It allows the condition of different Environmental Assets in different places, measured at different times and scales, to be easily understood, compared, and communicated.

By repeatedly implementing a Method, the trend in the condition of an Environmental Asset can be assessed and clearly communicated via the Environmental Account.

All Methods must be accredited under the Framework before use. As a part of the accreditation process, all Methods are reviewed by the Independent Science Committee ('ISC', or 'Committee'), which ultimately recommends to Accounting for Nature Ltd ('AfN') whether the Method is suitable for accreditation under the Framework.

**Note:** Accredited Methods can only be used for creating Accounting for Nature<sup>®</sup> Environmental Accounts to be certified under the Accounting for Nature<sup>®</sup> Framework and Methods alone cannot be used to make Claims about environmental condition. Claims about environmental condition may only be made using a Certified Environmental Account. Refer to Section 9 on Method-related Claims.

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<sup>3</sup> IUCN Global Ecosystem Typology

### 1.3 Overview of process

This document offers guidance to potential Method Authors on the process of developing a Method and achieving accreditation under the Framework. Figure 1 summarises the six-step process, which is discussed in detail throughout this document.



Figure 2. Overview of Method development and accreditation process, and the relevant sections within this document.

## 2 Preparing to develop a Method

Prior to commencing the development of a Method, there are several resources and options (explained below) to provide a foundational understanding of the Framework and support Method Authors in writing a Method.

**Note.** A Method can be authored by one or multiple individuals/entities. Where a Method is authored by an entity or numerous individuals/entities, a Key Contact must be nominated for all Method-related communication and enquiries.

### 2.1 Method Notification

Before writing a Method, a Method Author must complete a Method Notification Form<sup>4</sup>. The Method Notification Form is designed to help AfN understand what is being proposed and provide initial advice on whether it is appropriate to progress to the Method development stage. It is also important for AfN to ensure the ISC has the required expertise to review the Method; in some cases, additional scientific experts may be required to join the Committee to assist with the review.

The Method Notification includes the following information:

- a description of the Environmental Asset and where the Method will be able to be applied;
- a broad summary of the proposed approach and target Accuracy Level (and any supporting studies, fieldwork, pilots, etc.);
- the estimated timeline for development;
- who is involved in writing the Method;
- whether the Authors consent to the Method being listed in the Method catalogue as 'in development' and are open to receiving queries from potential future users; and
- whether the Authors are open to collaboration on the Method.

### 2.2 Method development assistance and feedback options

AfN offers several options to assist Method Authors in developing a Method and to receive preliminary feedback. Each option is discussed below; the associated fees can be found in the **Accounting for Nature**® [Fee Schedule](#).

#### 2.2.1 Method Brief

A Method Brief provides an overview of all key components of a Method without the Method Author writing the Method in full detail. A Method Brief may be provided to the whole ISC or a part of the ISC, either in or out of session.

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<sup>4</sup> In development. When available the form can be found on the AfN Website. Please email [methods@accountingfornature.org](mailto:methods@accountingfornature.org) in the meantime.

A Method Brief should include details on the following:

- a description of the Environmental Asset;
- the geographical application;
- the target Accuracy Level, with a brief justification;
- the approach to stratification and data collection plan;
- the Indicators and how they will be measured;
- an overview of how Reference Benchmarks will be determined and their availability (if relying on existing/published data); and
- a description of the proposed approach to ICS and Econd<sup>®</sup> scoring (e.g. using any existing formulas or developing own).

Method Authors are encouraged to include discussion points in the Method Brief to highlight elements of the proposed Method that they may request the ISC to provide specific feedback on.

Feedback on a Method Brief is subject to the availability of ISC Members. However, feedback will typically be returned within 20 business days if reviewed out of session or within 10 business days if reviewed in session.

## **2.2.2 Method Development Workshop**

A Method Development Workshop allows Method Authors to discuss their proposed Method with relevant ISC members to receive preliminary feedback and guidance. Method Development Workshops generally take 60 to 90 minutes and are conducted online with two to three relevant ISC members (including the Chair) and the Method Author(s). Method Authors are requested to draft key discussion points for the meeting to ensure a smooth and efficient workshop. A Method Development Workshop can be tailored to suit the Method Author's needs and conducted before, after, or separately from a Method Brief.

## **2.2.3 Technical Assistance**

AfN can provide technical assistance to Method Authors – each Method is entitled to three free hours of technical assistance. Additional assistance beyond this is charged hourly (per 15-minute increments). Alternatively, the Method Author may purchase a package of eight or more technical assistance hours at a discounted rate.

Technical assistance can be used broadly, such as for reviewing, providing advice via email, and additional meetings (beyond an initial 30-minute introductory call).

AfN can provide advice on how to meet the Method criteria, in particular:

- Accuracy Levels;
- Stratification approaches;
- Indicator requirements;
- Indicator Condition Score calculations; and
- Econd<sup>®</sup> calculations.

In some cases, AfN may consult an external specialist as part of the provision of AfN technical assistance. Where the Method Author is seeking more specialised scientific assistance, AfN may be able to recommend suitable external specialists for the Method Author to contact directly.

## 3 Method Development

When a Method Author is ready to commence writing their Method, they are encouraged to consult the relevant criteria in the **Accounting for Nature® Standard**.

When AfN receives a Method notification, AfN will provide the Method Authors with a working Method template.

Methods are generally comprised of the following key elements:

- the Scope;
- Data Collection Plan;
- Reference Benchmarks;
- data collection and analysis;
- scoring;
- worked example; and
- checklist to guide audit and verification of Asset Accounts.

If a Method Author is unsure if one of the above-listed elements is relevant to their Environmental Asset/Method or needs assistance, they are encouraged to contact [methods@accountingfornature.org](mailto:methods@accountingfornature.org).

### 3.1 Scope

The Scope of a Method broadly provides information on how the Method is designed and how and where it can be applied.

#### 3.1.1 Environmental Asset

Methods must specify what Environmental Asset the Method is designed for. An Environmental Asset can be any biophysical feature in nature that can be measured. It can be specific, such as an individual fauna species, or broad, such as vegetation. Environmental Assets are classified into one of the following Environmental Asset Classes: ecosystem, vegetation, fauna, soil, water, or microorganism. These categories are used for reporting and aggregation purposes.

#### 3.1.2 Realm and Biome/Functional Ecosystem Group

The Framework adopts the IUCN Global Ecosystem Typology<sup>5</sup> for the classification hierarchy of the environment. Methods, therefore, must also describe in which realm(s) the Method can be applied: land, ocean, and/or freshwater and/or one of the three transition realms (land/ocean, freshwater/ocean, land/freshwater).

Methods should also describe the specific biome(s) and/or functional ecosystem group(s) in which the Method can be applied (e.g., rainforests).

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<sup>5</sup> <https://www.iucn.org/resources/conservation-tool/iucn-global-ecosystem-typology>

### 3.1.3 Geographical application

Methods can be designed for a specific Environmental Asset within a specific geography, which should be clearly explained. Methods can be restricted in their geographical application due to bioregional/ecological reasons or the availability and specificity of existing data required by a Method. Where the latter, the Method should highlight whether it is ecologically appropriate to be applied in other geographies, noting that the specific data sources referenced in the Method will likely differ.

### 3.1.4 Scale and area range

The Scale describes the spatial resolution to which the Method can be applied, which is clearly defined as an area range (typically in hectares). This information guides the selection of Methods for use in Environmental Accounts, ensuring compatibility with the desired Environmental Account Boundary.

Importantly, the area range over which a Method can be applied tends to impact the data collection techniques of a Method. Methods designed to be applied over smaller areas tend to rely more on direct sampling techniques. Meanwhile, Methods intended to be applied over larger areas, such as regional-scale, tend to rely on more indirect estimation techniques (although this is not always true).

For example, a project/property-scale Method that relies on field samples may be suitable to use on areas up to 10,000 ha; a project/property-scale Method that integrates remote sensing technology with field samples may be applied on areas from 10,000 ha up to 100 000 ha, and a regional-scale Method that relies on remote sensing and expert elicitation may be suitable for areas greater than 100,000 ha.

AfN assigns the Scale category of an Environmental Account at Registration, but the following categories must be considered by Method Authors when designing a Method. The Scale categories are defined below:

- **Aggregate-scale:** can apply to any of the below Scales to describe a single Environmental Account that covers multiple projects and/or properties or multiple regions, applying the same Methods across the same Reporting Periods (e.g., aggregate of projects or aggregate of properties). A single entity or group of collaborative entities must manage all areas within an aggregate-scale.
- **Project-scale:** is a defined area that forms part of a single property and is managed for a specific project/outcome. For example, a carbon offset project or a conservation/restoration project.
- **Property-scale:** is defined as a specific continuous area delineated by legal boundaries of ownership (for example, in Australia, Lot/Cadastral Boundaries) comprised of one or multiple land uses.
- **Regional-scale:** is a defined continuous geographical area typically larger than individual towns or cities but smaller than national or global contexts. It is generally defined by the characterisation of specific geographical, ecological, socio-political, or administrative boundaries, where the land within is typically owned and directly managed by various entities. Regional-scale areas include local governments, catchments, biogeographic regions, and sub-national jurisdictions.

### 3.1.5 Accuracy Level

The Accounting for Nature® Framework outlines three Accuracy Levels that describe the expected accuracy of an Accounting for Nature® Accredited Method and the resulting Econd® of the Asset Account. Each Accuracy Level is suited to a different Purpose, end-use or Claim. End-uses such as monetisation, unitisation and green claims typically require Asset Accounts developed at a higher Accuracy Level than Asset Accounts created to inform management decisions or demonstrate environmental outcomes.

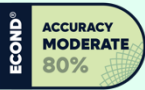


Accuracy Levels are important because they:

- describe in a simple manner how accurate a Method is at measuring the Condition of an Environmental Asset; and
- enable Proponents and Stakeholders to easily assess and compare the robustness of different Methods to determine which is most appropriate for a particular Purpose.

The three Accuracy Levels under the Framework are described in Table 1 on the following page.



Table 1 Overview of Accuracy levels.

Accuracy Level	Description	Typical Purposes	Implementation	Measurement type <sup>3</sup>
	A moderate accuracy Method is <i>likely</i> <sup>1</sup> to have moderate accuracy (≥80%) when measuring the condition of an Environmental Asset.	<ul style="list-style-type: none"> <li>• Informing Management Decisions;</li> <li>• Due Diligence;</li> <li>• Demonstrate environmental outcomes;</li> <li>• Product labelling;</li> <li>• Access to Markets.</li> </ul>	<p>Typically utilises on any combination of the below:</p> <ul style="list-style-type: none"> <li>• Rapid assessments;</li> <li>• Broader stratification;</li> <li>• Fewer sample sites;</li> <li>• Fewer indicators.</li> </ul>	<p>Direct (at any scale)</p> <p>Indirect (at regional-scale)</p>
	A high accuracy Method is <i>likely</i> <sup>1</sup> to have high accuracy (≥90%) when measuring the condition of an Environmental Asset.	<ul style="list-style-type: none"> <li>• Monetisation (green bonds, sustainability link loans);</li> <li>• Unitisation (Nature credits, carbon plus environmental co-benefits)<sup>2</sup>;</li> </ul>	<p>Typically utilises any combination of the below:</p> <ul style="list-style-type: none"> <li>• More comprehensive assessments;</li> <li>• More granular stratification;</li> </ul>	Direct
	A very high accuracy Method is <i>likely</i> <sup>1</sup> to have very high accuracy (≥95%) when measuring the condition of an Environmental Asset.	<ul style="list-style-type: none"> <li>• Green claims (“nature-positive”, “sustainable” etc).</li> </ul>	<ul style="list-style-type: none"> <li>• More sample sites;</li> <li>• More indicators.</li> </ul>	

<sup>1</sup>‘likely’ refers to 95% confidence in the accuracy level. For example, there is 95% confidence that a Moderate Accuracy Method is 80% accurate, and there is 95% confidence that a Very High Accuracy method is 95% accurate.

<sup>2</sup> Required Accuracy Levels for the issuance of credits will be set by the credit-issuing standard. 80% accuracy may be considered if the Methods use direct measurement.

<sup>3</sup> Indirect measurement refers to the estimated or modelled value for an indicator or Econd<sup>®</sup> and often doesn't rely on direct measurement.

A Method may be developed for a single Accuracy Level or include specific provisions for multiple Accuracy Levels. The Accuracy Level of a Method is typically based on any combination of the factors described in Table 2 below.

Table 2. Factors that influence Accuracy Levels.

Factor	Description
Set of indicators	Typically, Methods with higher Accuracy Levels have a more comprehensive set of indicators, while Methods with lower accuracy have few indicators. The more comprehensive the set of indicators, the higher the accuracy in the assessment of the condition of the environmental asset, provided that the indicators are relevant, independent, and, when aggregated, appropriately represent the Condition of the Environmental Asset per the Accuracy level.
How each indicator is measured	Methods with higher accuracy levels tend to rely on more detailed assessment/measurement techniques, leading to more accurate results. In comparison, Methods with Lower Accuracy Levels tend to rely on more cost-effective rapid techniques.
The sample size	Methods with higher Accuracy Levels tend to require a higher number of sample sites than Methods with lower Accuracy Levels. A higher number of sample sites produces a more comprehensive dataset that is expected to be of higher accuracy.
The sample design (e.g. stratification)	Methods with higher Accuracy Levels tend to require more granular and accurate stratification of the Asset Account Area, compared to lower Accuracy Level Methods, which are more flexible in the stratification. Higher Accuracy Stratification can often be achieved through combining more granular mapping sources, confirmed through ground-truthing.
Reference Benchmark Strategy	A Method designed for an Environmental Asset with high natural variability (either in some or all indicators) is likely to be more accurate if it requires Dynamic Reference Benchmarks than Static Reference Benchmarks.

In general, higher Accuracy Methods are often more complex or costly to implement due to increased sample requirements (sample size, techniques, ground-truthing, dynamic reference benchmarks) compared to lower Accuracy Methods which may rely on more cost-effective and rapid techniques. However, as technology improves, the barriers to high-accuracy environmental monitoring techniques are expected to reduce, allowing these techniques to become more accessible, cost-effective, and integrated into Accredited Methods.

When designing a Method for Accreditation under the Framework, Method Authors must consider how the above factors influence their target Accuracy Level. Method Authors can draw on pilot studies, research, expert scientific knowledge, or other sources in their Method to inform their decisions on the above factors. Importantly, each Accuracy Level in a Method must be clearly explained and reasonably justified regarding the above factors.

## How the Accuracy Level of a Method is assessed

The Independent Science Committee (ISC) reviews Methods submitted to AfN for accreditation under the Framework. The role of ISC is to review a Method to determine:

- whether the Method is scientifically rigorous and able to measure the condition of the environment and detect change over time; and
- whether it can do so at the stated and intended accuracy level.

Importantly, the ISC also review a Method within the context of its intended purpose and end-use.

In reviewing a Method, the ISC relies on a combination of their collective expert knowledge, skills, judgement, and expertise that draws on years of experience as scientific professionals. This review approach allows flexibility in the assessment and accreditation process to accommodate diverse and innovative Methods.

Once the ISC are confident that a Method meets the above requirements, then they recommend the Method for accreditation by the AfN Executive.

## How Accuracy Levels will be refined over time

As more Environmental Accounts are developed, an ever-growing database of environmental data will be collected in accordance with Accredited Methods. This data will be reviewed at regular intervals and used to refine the Accuracy Levels of Methods as required.

### 3.1.6 Reporting Period

A Reporting Period describes the timeframe for which the data to underpin an Econd<sup>®</sup> of an Asset Account is collected (from less than one (1) year up to five (5) years).

A Method must include a description of the length of Reporting Periods that the Method can be used to support, which is heavily dependent on the type of Environmental Asset and indicators. For example, an Asset that experiences rapid change over time may not be suitable for a multi-year Reporting Period. In contrast, Assets that experience slower change, such as soil, may be more appropriate for longer Reporting Periods.

Multi-year Reporting Periods may also be appropriate for Methods that can be applied over large areas. For example, when applied over large areas, collecting all required data in a single season in a single year may be challenging. As such, collecting data in the same season over two consecutive years might be more appropriate and feasible.

The Reporting Period that a Method supports must be appropriate for the intended Purpose of the resulting Environmental Accounts.

### 3.1.7 Assessment Type

Under the Accounting for Nature® Framework, an Environmental Account can be developed as one of the following Assessment Types:

- point-in-time condition assessment;
- change in condition over time; or
- attribute the cause of change in condition.

All Methods, by default, support the point in time and change over time Assessment Types. However, Methods must include additional requirements if they are to be used for Environmental Accounts that aim to attribute the cause of change in condition.

Refer to Appendix B for more information on Methods developed for this Assessment Type.

### 3.1.8 Expertise Required

Methods must include a description of the expertise required to implement the Method or components of the Method. This can differ depending on the Accuracy Level and the overall complexity of the Method. Method implementation may be restricted to suitably qualified persons (such as Accredited Asset Experts in a related field, or external specialists), which will be checked as part of the Registration and Certification processes for a resulting Environmental Account.

### 3.1.9 Purpose

A Method must clearly describe what Environmental Account Purpose(s) the Method can be used to support (if and where relevant). Environmental Accounts can be developed for various Purposes (refer to **Accounting for Nature® [Environmental Account Development and Certification Rules](#)**), and a specific Purpose might require a unique approach to monitoring the environment.

### 3.1.10 Existing data

When designing a Method, Method Authors are encouraged to consider if there is existing data that they want to be able to include and be Certified in an Environmental Account (refer to Section 5 in **Accounting for Nature® [Environmental Account Development and Certification Rules](#)**).

## 3.2 Data Collection Plan

A Data Collection Plan details how, where and when data should be collected. Methods must provide detailed instructions on how to develop a Data Collection Plan for an Environmental Account and should include the following elements (where relevant).

### 3.2.1 Stratification

Typically, a Method will provide instructions on how to stratify an accounting area into 'Assessment Units,' which represent relatively homogenous areas from which samples are taken. Assessment Units are often generated by considering the land-use/management actions/broad condition state and the sub-types of the environmental asset, i.e., the sub-asset (e.g., vegetation communities or soil types). Figure 3 shows an example of the stratification process.

To ensure consistency, Methods should generally recommend (where relevant) that sub-asset mapping stays the same for the lifetime of an Account. However, changed land use, management actions, or broad condition states may result in new stratification.

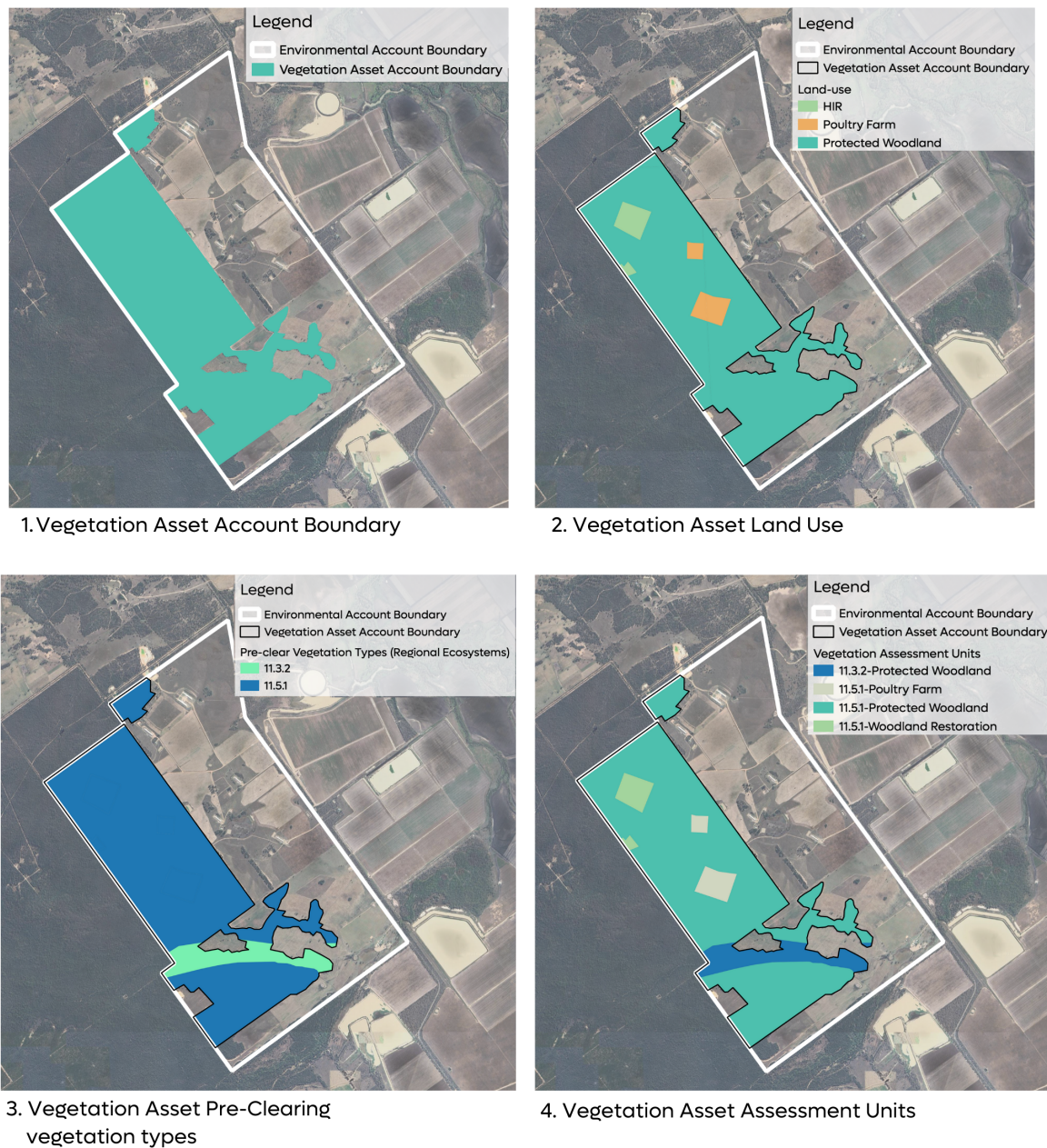


Figure 3: Example of stratification into Assessment Units for a vegetation asset. For vegetation, the Assessment Units are typically determined by intersecting pre-clear vegetation classes and land-use types.

### 3.2.2 Sampling location and intensity

For field-based sampling, a Method must specify how sample sites should be **located** within Assessment Units (e.g., random, random stratified, representative, etc.). A Method must also provide instructions on the number of samples required for each Accuracy Level (e.g., how many samples per ha per Assessment Unit).

Importantly, a Method must also guide the selection of Local Reference Sites if it is an appropriate option for the specific Method and Environmental Asset (refer to Section 3.3 and Appendix B for more information).

### 3.2.3 Timing

A Method must describe how often data collection is required and if (and when) there is any repeat sampling for a single Reporting Period. Some Methods may prescribe repeat sampling within a single Reporting Period; this is particularly important for Environmental Assets with high variability and stochasticity (e.g., water, fauna, and other assets that move). Where this is appropriate, the Method should provide guidance on the recommended timing and frequency of repeat sampling and any important considerations.

To ensure time-series consistency, Methods should discuss the relevance of seasonality and, where appropriate, provide recommendations on the best season/conditions to sample (e.g., spring or end of dry season).

The **Accounting for Nature**<sup>®</sup> [Standard](#) provides criteria on Time Series Consistency in Section 7.2.3.

### 3.2.4 Frequency

Methods should recommend the appropriate frequency at which to develop subsequent Asset Accounts.

## 3.3 Reference Benchmarks

A Method must provide clear guidance (and, where appropriate, options) on determining the Reference Benchmarks for an Environmental Asset.

### 3.3.1 What is a Reference Benchmark?

A Reference Benchmark is a scientific estimate of an Environmental Asset in its undegraded (natural or best possible/best on offer) state. When defining a Reference Benchmark, it can be useful to consider what the state of the Environmental Asset would be in the absence of any impacts/degradation. How a Reference Benchmark is defined will differ depending on the location, the asset type, and, on occasion, the management history of a site (e.g., a site where the use has fundamentally changed a site, such as a mine site).

Two main types of Reference Benchmarks are used under the Accounting for Nature<sup>®</sup> Framework and discussed in more detail in Appendix C:

- **Static Reference Benchmark:** a single value (or range) representing the undegraded Condition of a given Indicator.
- **Dynamic Reference Benchmark:** a series of values representing the natural variation in the undegraded Condition of a given Indicator.

Methods should guide whether a Static or Dynamic Reference Benchmark is most appropriate for the Environmental Asset and/or specific indicators. Methods should also highlight the importance of using a consistent Reference Benchmark approach for the lifetime of the Account.

The Reference Benchmark is the 'anchor' that enables condition to be measured and compared and, therefore, should be consistent over time.

**Note:** Method Authors who are designing a Method that can be applied to novel ecosystems are encouraged to contact AfN to discuss their proposed approach to guide the determination of Reference Benchmarks.

### 3.3.2 How to determine Reference Benchmarks

There are generally five approaches that Methods can include when guiding how to determine Reference Benchmark values (either Static or Dynamic):

- existing records;
- observation at local reference condition sites;
- models that estimate the undegraded condition of the environmental asset;
- expert opinion; and
- a combination of the above options.

Each of the above approaches is discussed in more detail in [Appendix C](#).

It is important to note that depending on the Environmental Asset, Reference Benchmark values must be directly comparable (or translatable/scalable) with the measured values and represent the same indicators.

Using the same sampling technique is particularly important for indicators not estimated as a percentage, such as species richness. This is because the measured values of these indicators tend to be influenced by the sampling technique (i.e., plot size). For example, the species richness in a 10-metre quadrat differs from that in a 1-metre quadrat. Similarly, for birds, species richness after 5 minutes of searching is different from that measured after a 20-minute search. In contrast, the percentage cover of vegetation over a 50-metre and 100-metre transect is generally comparable with a scaling factor.

## 3.4 Data Collection

A Method must clearly explain how to collect the appropriate data to estimate the condition of an Environmental Asset.

### 3.4.1 Indicators

A Method must contain a relevant and appropriately comprehensive set of Indicators to measure the Condition of the Environmental Asset. The Indicators and the techniques to measure these must be appropriate for the Method's chosen Accuracy Level(s). The Indicators should be independent and, when aggregated, appropriately represent the Condition of the Environmental Asset. The indicators should be selected to represent the quantity and quality of the Environmental Asset.

### 3.4.2 Indicator Measurement

A Method must also include detailed instructions on the techniques and experience required to measure each indicator. Indicators may be measured in several different ways, including, but not limited to:

- field measurement by an expert;
- field sample collection, followed by laboratory analysis;
- deployment of field technology, such as wildlife cameras or acoustic monitors, followed by analysis of results (either by a person or automated analysis);
- other remote sensing, such as drones;
- desktop analyses, such as spatial analysis; or
- computational analysis (refer to Appendix D on Methods that include Models).

## 3.5 Scoring

For an Econd<sup>®</sup> to be calculated, a Method must first provide detailed instructions on how to score each Indicator and aggregate those scores into the final Econd<sup>®</sup>. Refer to Figure 5 for a worked example of ICS and Econd<sup>®</sup> scoring.

### 3.5.1 Indicator Condition scoring

A Method must provide specific instructions (typically formulas) on how to calculate the Indicator Condition Score (ICS) for each Indicator. ICS are calculated using specific equations or rules that reflect the relationship of the indicator's measured value with the indicator's Reference Benchmark value (refer to Figure 4 for example ICS relationships from AfN-METHOD-NV-06). ICS scoring is generally based on the level of departure (%) of the measured Indicator from the Reference Benchmark value for that Indicator.

The ICS is a number between 0 and 100, where 100 represents the Reference Benchmark value for the indicator, and 0 represents an Indicator that is expected to be present that is either absent or fully degraded.



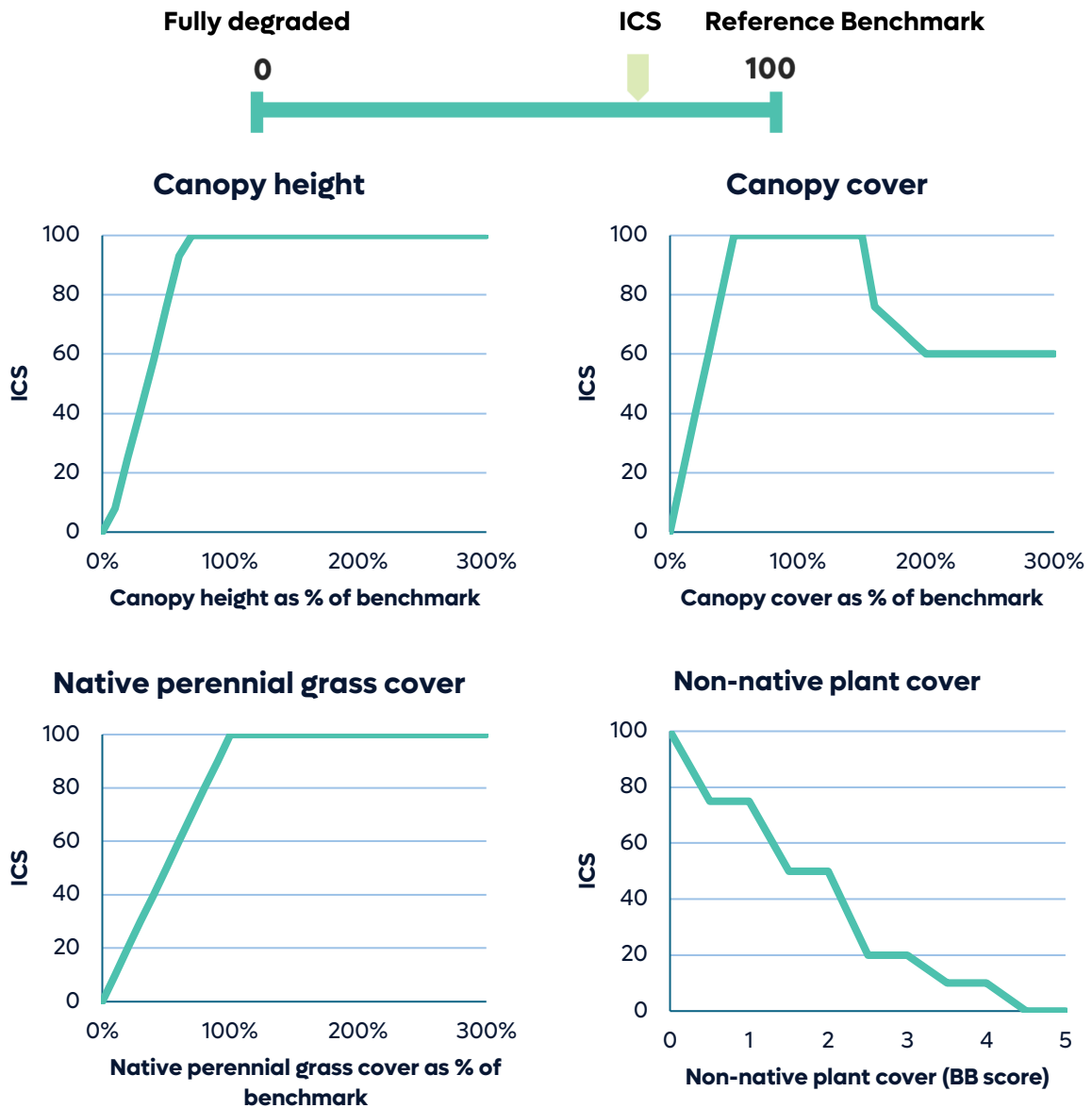


Figure 4. Example ICS relationships from AfN-METHOD-NV-06.

### 3.5.2 Econd® scoring

A Method must provide specific instructions on how to calculate the Econd®. The Econd® is typically calculated by aggregating the individual ICS, often using the average. A Method may include weightings for each indicator or indicator group where appropriate.

Often, the Econd® will be calculated at multiple levels within an Account, for example – Assessment Unit Econd®, Sub-asset Econd®, and Asset Econd®. Some Methods also calculate a site-level Econd®. The aggregation of an Assessment Unit Econd® should most often use area or length-weighted averages unless another approach is deemed more appropriate.

### 3.6 Worked Example

A Method must include a worked example (see Figure 5 below) to demonstrate how the Indicators are combined into an Econd®. Ideally, the worked example can also act as an Asset Account Template for Proponents implementing the Method.

Stratification	Area (ha)	Area Weighting	Indicator	Reference Benchmark	Average Measure	Indicator Condition Score (ICS)	Econd®		
Vegetation Asset	2,580	100%					62		
Regional Ecosystem 11.5.1	809	31%					57		
RE 11.5.1 - Grazing	760	94%	Composition	Configuration - site context (%)	100	50	50	57	55
				Tree canopy height (m)	20	20	100		
				Sub-canopy canopy height (m)	9	7	100		
				Tree canopy cover (%)	25	5	40		
				Sub-canopy cover (%)	20	5	50		
				Native shrub cover (%)	6	1	33		
				Non-native plant cover (BB Score)	0	4	10		
				Native perennial grass cover (%)	23	80	100		
				Litter cover (%)	45	10	22		
RE 11.5.1 - Protected woodland	49	6%	Composition	Configuration - site context (%)	100	81	81	89	87
				Tree canopy height (m)	20	19	100		
				Sub-canopy canopy height (m)	9	8	100		
				Tree canopy cover (%)	25	20	100		
				Sub-canopy cover (%)	20	16	100		
				Native shrub cover (%)	6	8	100		
				Non-native plant cover (BB Score)	0	2	50		
				Native perennial grass cover (%)	23	18	76		
				Litter cover (%)	45	39	86		
Regional Ecosystem 11.3.2	1,171	45%					76		
RE 11.3.2 - Protected woodland	1,171	100%	Composition	Configuration - site context (%)	100	74	74	76	76
				Tree canopy height (m)	18	17	100		
				Sub-canopy canopy height (m)	0	0	NA		
				Tree canopy cover (%)	40	29	100		
				Sub-canopy cover (%)	0	0	NA		
				Native shrub cover (%)	2	1	50		
				Non-native plant cover (BB Score)	0	1	75		
				Native perennial grass cover (%)	35	22	63		
				Litter cover (%)	30	21	70		
Regional Ecosystem 11.4.4	600	23%					42		
RE 11.4.4 - Protected grassland	500	83%	Composition	Configuration - site context (%)	100	52	52	50	51
				Tree canopy height (m)	0	0	NA		
				Sub-canopy canopy height (m)	0	0	NA		
				Tree canopy cover (%)	0	0	NA		
				Sub-canopy cover (%)	0	0	NA		
				Native shrub cover (%)	0	3	60		
				Non-native plant cover (BB Score)	0	2	50		
				Native perennial grass cover (%)	50	22	44		
				Litter cover (%)	21	10	48		
RE11.4.4 - Intensive Cropping	100	17%	NA	NA	NA	NA	0		

INDICATOR WEIGHTING FOR ECOND®	
Configuration	25%
Composition	75%

Figure 5 Worked example for a native vegetation method showing Econd® scores are calculated at different levels within an Asset Account and are aggregated using **area-weighted averages**.

### 3.7 Record keeping

When writing a Method, Method Authors must include designated output boxes for each step of the Method. These output boxes should describe the key outputs generated for each step within the Method, and these outputs should be summarised into an 'audit checklist' attached as an Appendix to the Method.

The output of each step of a Method and a description of how that output was generated is required for the Environmental Account audit and certification. It is used to confirm that a Method has been followed correctly.

## 4 AfN Technical Review process

### 4.1 AfN Technical Review

All Methods must be submitted to AfN for a Technical Review before proceeding to the Scientific Review. The Technical Review is designed to ensure the Method meets the administrative requirements as defined by the **Accounting for Nature® Standard** and the Rules outlined in this document. A Technical Review must be successfully completed prior to submission to the ISC for scientific review.

### 4.2 Eligibility requirements

For a Method submission (i.e. a Method Brief, full Method, Method update, or Method variation<sup>6</sup>) to be eligible for review by AfN, the following requirements must be satisfied.

- 1) The Method must be prepared in accordance with the Method criteria in the **Accounting for Nature® Standard**, with additional consideration given to any relevant Method Guidelines.
- 2) A 'Method Review Application Form' must be completed, with the completed Method attached for review.

### 4.3 Method Review Application Form

When submitting a Method for an AfN Technical Review, the **Method Review Application Form**<sup>7</sup> must be completed along with the Method submission. This form requires Method Authors to nominate the type of review they are requesting i.e. Method Brief (Section 2.2.2), Full Method, Method update (Section 7), or Minor Method Variation (Section 8). Using this form, Method Authors also nominate whether the Method will have an embargo period (refer to Section 6.3.2) and whether the Method will be licenced (refer to Section 6.3.1).

The form includes the following key Declarations (refer to [Appendix E](#) for the complete Declaration text):

- the Method Authors have independently developed the Method and/or have secured all rights to use and disclose the Method;
- the Method is sufficiently unique from other Accredited Methods; and
- if the Method is licenced, it is the Method Author's responsibility to set and enforce the fee (refer to Section 6.3.1).

Submitting a completed Method Review Application Form to AfN establishes an agreement between the Method Author and AfN, which grants AfN a non-exclusive, royalty-free licence to offer the use of the Method, once accredited, to third-parties for the purpose of creating Certified Environmental Accounts under the Accounting for Nature® Framework. In signing the form, the Method Authors accept that the specific Method accredited by AfN can only be used to create an Environmental Account for

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<sup>6</sup> See section 7.

<sup>7</sup> Available on request from [methods@accountingfornature.org](mailto:methods@accountingfornature.org).

Certification by AfN and not for making a public claim about environmental condition, supporting credits, etc.

By signing the Form, the Method Authors agree and acknowledge that once the Method is accredited, anyone wanting to use the Method to develop an Environmental Account that is to be used to underpin/evidence the issuance of nature credits, link to carbon credits, or make public claims (such as “Nature Positive”), will need to apply to AfN before the Certified Environmental Account can be used to support such Purposes.

#### 4.4 AfN Technical Review Outcome

AfN will complete a Technical Review within 15 business days of receiving the Method.

Upon completion of a Technical Review, AfN has the following options:

- recommend the Method progress to the Scientific Review;
- recommend the Method progress to the Scientific Review, subject to minor changes;
- not recommend the Method progress to the Scientific Review.

If AfN chooses not to recommend a Method to progress to the Scientific Review, detailed feedback will be provided. AfN can work with the Method author to ensure all feedback has been appropriately incorporated. Once the feedback is incorporated, the Method must be resubmitted for a Technical Review before progressing to the Scientific Review.

**Note.** Where resubmissions are required, the Method Author must track changes in the old version and/or provide a detailed summary of the changes since the last submission.

# 5 Scientific Review process

## 5.1 Eligibility requirements

The following requirements must be satisfied for a Method submission (i.e. a Method Brief, full Method, Method update, or Method variation) to be eligible for review by the ISC.

- 1) The Method must be prepared in accordance with the Method Criteria in the **Accounting for Nature® Standard**, with additional consideration given to any relevant Method Guidelines.
- 2) The Method must have a successful Technical Review by AfN.
- 3) The 'Method Review Application Form' must be updated (if required).
- 4) The Method must be sent to AfN at least 15 business days before the next ISC meeting<sup>8</sup>.

## 5.2 Independent Science Committee Review

### 5.2.1 Independent Science Committee Meetings

The ISC functions in accordance with the ISC Terms of Reference<sup>9</sup>. ISC meetings are held as required<sup>10</sup> and generally occur every three months. Before each meeting, an agenda is prepared by AfN, which includes the Methods, Method Updates, Minor Method Variations, and Method Briefs that will be reviewed at that meeting, along with any other technical matters AfN wishes to seek advice on.

Method Authors are invited to join the meeting for the discussion of their Method, to answer any questions the ISC may have, and to provide further explanation or justification for elements in the Method. AfN will liaise with the Method Author to finalise the agenda and invite the Method Author to the meeting.

The ISC is provided at least 10 business days to review a Method before an ISC Meeting. Please get in touch with [methods@accountingfornature.org](mailto:methods@accountingfornature.org) for the next ISC Meeting date<sup>11</sup>.

### 5.2.2 Independent Science Committee Decisions

The ISC assess the Method in the context of its scientific rigour and the **Method Criteria** in the **Accounting for Nature® Standard**. ISC Members review the Method in detail before the meeting, discuss the Method in the meeting with attending members, and then reach a decision on the official recommendation to AfN. Decisions and recommendations are made by consensus at each ISC meeting, where possible. A majority decision will be sought if a consensus cannot be reached.

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<sup>8</sup> contact AfN for ISC meeting dates.

<sup>9</sup> Available upon request (currently undergoing review and update).

<sup>10</sup> Depending on Methods being reviewed, ISC meetings may be organised based on the realm and/or asset classes of Methods, with a quorum of appropriate members invited to attend.

<sup>11</sup> contact AfN for upcoming ISC meeting dates.

The ISC has the following options when reviewing a Method:

- recommend the Method for accreditation;
- recommend the Method for accreditation, subject to minor changes without a final review;
- recommend the Method for accreditation, subject to minor changes with a final out-of-session review; or
- not recommend the Method for accreditation.

If the ISC choose not to recommend a Method for accreditation, they will provide comprehensive feedback for the Method Authors to consider. Method Authors are encouraged to resubmit the Method for a subsequent review after incorporating the ISC's feedback.

**Note.** Where a resubmission is required, the Method Author must track changes in the old version and/or provide a detailed summary of the changes since the last submission.

## 6 Accreditation process

### 6.1 Method finalisation

Once a Method has been recommended by the ISC to be Accredited, AfN will work with the Method Author to 'finalise' the Method. This may involve another read-through to ensure terminology is accurate and consistent with the Framework and that the document is formatted in a logical and easy-to-follow way.

Where a Method is recommended for Accreditation, subject to changes, it is the Method Authors' responsibility to incorporate the requested changes and work with AfN to have them reviewed by the ISC, if necessary. Once the changes have been incorporated (and, where relevant, reviewed again by the ISC), the Method is considered 'finalised'.

As part of the finalisation process, AfN will confirm the Method Author's preferences for the Method regarding embargo and licencing and will also confirm listing details for the Method Catalogue (refer to Section 5.3).

### 6.2 Accounting for Nature® Accreditation

Once the ISC has recommended a Method for accreditation and the Method has been finalised, the AfN Executive decide whether to formally accredit the Method for use under the Framework. This decision is based on the following:

- the advice and recommendation provided by the Independent Science Committee;
- the criteria in the Standard;
- the Method document itself; and
- any other relevant information.

The AfN Executive has the following options when deciding whether to accredit the Method:

- accredit the Method for use under the Framework;
- reject the Method;
- request further information from the Method Author before making a final decision; or
- seek the input of the AfN Board and Audit & Risk Committee.

If the AfN Executive intends to reject a Method that has been recommended for accreditation by the Independent Science Committee, it must provide reasons to the Method Author and invite them to respond prior to formally rejecting the Method. The Method Author may respond by revising the Method as required and/or providing further information. If the Method is revised, it may be required to undergo another review by the ISC.

Proponents are invited to review the **Accounting for Nature® [Complaints Process](#)** for further options if they are not satisfied with the outcome of the review process.

Once the AfN Executive accredits a Method, the Method Authors will be notified of successful accreditation via an official Method accreditation letter, which includes the following:

- a confirmation that the Method has been successfully accredited for use under the Accounting for Nature® Framework;
- a notification to the Method Authors that the Accredited Method is categorised as a 'New Method' until an Environmental Account has been successfully Certified using the Method;
- a notification to the Method Authors of the 'Method ID', e.g. V001<sup>12</sup>. Method IDs are based on the Asset Class (refer to Table 3);
- a confirmation that the Method is listed in the Method Catalogue (and whether it is licenced and/or embargoed);
- a request for permission for AfN to promote the Method via AfN's communication channels; and
- a discussion on how to incorporate any updates to the Method in the future.

Method Authors will also be issued a formal Accreditation Certificate recognising that their Method is accredited under the Framework.

*Table 3. Method ID Asset Class codes.*

Asset Class	Method ID Code
Vegetation	V
Soil & Sediment	S
Water	W
Fauna	F
Ecosystem	E
Microorganism	M

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<sup>12</sup> Method IDs will be gradually updated. Superseded Method IDs translate directly to new IDs (i.e. superseded ID: AfN-METHOD-NV-01 is the same as current ID: V001)



## 6.3 Method Catalogue

All Accredited Methods are listed in the [Method Catalogue](#). Potential Proponents and stakeholders can use the Method Catalogue to browse available Methods.

The Method Catalogue provides an overview of each Method, including:

- Method title & ID;
- whether it is a 'New' Method – indicating that it has not yet been used for a Certified Environmental Account (refer to Section 5.4.1);
- Environmental Asset;
- geographical application;
- scales at which it can be used;
- summary;
- Accuracy Levels;
- data collection techniques;
- stratification approach;
- Indicators;
- expertise required to implement the Method;
- whether the Method is Licenced or Open access (refer to section 5.3.1);
- whether the Method has an Embargo Period (refer to section 5.3.2); and
- button to Request to view (for embargoed Methods) or Download (for Methods not under embargo) the full Method.

### 6.3.1 Method Licencing

Method Authors have the option to license the use of their Method<sup>13</sup> for a fee to help recover costs associated with the development of a Method. When a Method Author chooses to licence their method, they are required to set the licence fee, and it is the Method Author's responsibility to enforce the licence fee via a Method Licence Agreement (refer to Appendix F for AfN-related clauses to include in a Method Licence Agreement).

Proponents wishing to use a licenced Method for a Registered Environmental Account must contact the Method Author directly to negotiate and pay the fee. If a Proponent is wanting to register two separate Environmental Accounts using the same licenced Method for both, they will need to pay two licence fees or negotiate with the Method Author. At registration, AfN will require written confirmation from the Proponent and Method Author that the Method Licence Fee has been paid.

If the Method Author does not choose to license the Method, it will be free to download and use by anyone without seeking formal authorisation.

Method Authors may choose to change whether their Method is licensed at any time by informing [methods@accountingfornature.org](mailto:methods@accountingfornature.org).

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<sup>13</sup> "Use of a Method" refers to a Registration Application for a new Environmental Account that uses the Method.

**Note:** Proponents are required to pay the licence fee to the Method Author only when registering the use of a Method for an Environmental Account. If the Licenced Method is also under Embargo, no fee is required to be paid by Proponents wishing to view it.

### 6.3.2 Embargo Period

Method Authors may opt to restrict access to their Method to other parties (including other Proponents) for up to three (3) years from the date of the Method's accreditation. This option exists for Method Authors who wish to test and refine the Method before making it available for broader use.

Embargoed Methods will be listed in the Method Catalogue but not directly downloadable. Any party wishing to view or use the Method must make a request to AfN via [methods@accountingfornature.org](mailto:methods@accountingfornature.org) or the Method Catalogue. AfN will then pass the request on and seek permission from the Method Author(s). If the Method Author(s) agrees to share the Method, AfN will require a Non-Disclosure Agreement (NDA) to be signed by the requesting party before the Method is shared via a secure, password-protected link for up to a month.

Subsequently, if the party would like to use the embargoed Method for a registered account, it must seek further permission from the Method Author via AfN.

#### Release from embargo

AfN will contact a Method Author one (1) month before a Method is due to be released from embargo to notify the Method Author that the Method embargo end date is approaching. The Method Author may use this time to make any required updates/corrections to the Method before the Method is released from the embargo.

Once a Method is released from the embargo, it will be available to download from the Method Catalogue.

## 6.4 Accreditation duration and review

### 6.4.1 New Method status

Once accredited, a Method is listed in the Method Catalogue as a 'New Method'. A New Method indicates that a Method has been reviewed and accredited for use under the Framework but hasn't yet been used to develop a Certified Environmental Account.

Once a Method has been successfully used to develop a Certified Environmental Account, AfN will request feedback from the Environmental Account Proponent on the Method. The feedback will be passed onto the Method Author(s) for consideration and, where required, integrated into an updated version of the Method (which may require additional review by the ISC). Once this process is complete, the Method will no longer be listed as a New Method in the Method Catalogue.

### 6.4.2 Accreditation duration

Methods accredited for use under the Framework are available until they are updated, revoked by the AfN Executive, or if the Method Author requests the Method be removed.

### **6.4.3 Review of Accredited Methods**

AfN is committed to continual improvement, and therefore, a Method will be internally reviewed by AfN after at least five Certified Environmental Accounts have been developed using the Method. As a result of the review, AfN may discuss with the Method Author whether any updates are appropriate to improve/enhance the Method (noting that updates may require review by the ISC). As more Environmental Accounts are developed with Accredited Methods, the data collected will be used to refine Methods over time (particularly regarding what indicators are crucial and what Accuracy Level is appropriate).

The ISC may also request to undertake an additional review of any accredited Method at any time.

### **6.4.4 Method versions**

The version of a Method is included in the Method ID. Decimal increments in the version number indicate a minor update/correction, whereas whole number increments indicate a major update in the Method. Updates will be listed in the version control section of the Method to ensure readers understand what changes have been made since initial development and whether they constituted minor or major updates.

# 7 Update process

## 7.1 Minor corrections/updates

The Method Author can update an Accredited Method to correct minor errors and typographical mistakes. Depending on the update, the minor update/ correction may require review by the ISC. However, at a minimum, all minor updates/corrections must be approved by AfN and are denoted by an increase in the decimal version number of the Method (e.g. F001v1.5 to F001v1.6).

## 7.2 Major corrections/updates

Any update that materially affects the Method, its perceived or actual integrity, or compliance with the requirements in the Standard must be re-assessed by the ISC before its approval for use. Major updates typically include modifying the Method's stratification, indicators, data collection, or scoring approach. Major updates, therefore, require formal review by the ISC. Occasionally, major updates may be reviewed out of session by relevant ISC members. Major updates are denoted by an increase in the whole Method version number (e.g. F001v1.5 to F001v2.0).

## 8 Method Variation process

### 8.1 Method Variation definition

A Method Variation involves a third-party creating a variant version of an existing Method tailored to a specific application of the Method but has the same Accuracy Level as the original Method. Method Variations cannot be created for Licenced Methods. However, third parties may consult with the Author of a licenced Method to collaborate on an update.

A Method Variation may seek to create a unique variant of the Method that includes:

- the **addition** of novel indicators;
- the **swapping** of indicators with similar but slightly different indicators; or
- **altered technique or technology** used to measure or gather data for an indicator (with the same or better level of precision).

Any material deviations from the original Method (i.e., proposing the variant be a different Accuracy Level) require creating a unique Method and cannot be considered a Method Variation. Material changes may include:

- a reduction in sampling intensity;
- swapping of indicators with significantly different indicators; or
- the removal of indicators.

### 8.2 Method Variation review and approval

A Method Variation must be reviewed by the ISC and subsequently accredited by the AfN Executive following the processes outlined in Section 3.

A Method Variation must include the following information:

- summary of the proposed variation;
- justification of the proposed variation;
- explanation of how the new Indicator Condition Score(s) will be calculated; and,
- explanation of how the changes will be incorporated into the Econd<sup>®</sup> calculation.

Any party considering submitting a Method Variation must first contact AfN to discuss their proposed variant and any associated fees, as each Method Variation is assessed on a case-by-case basis. For all proposed Method Variations, AfN will contact the Method Author to notify them of the proposed variation and seek any input from the authors.

An Environmental Account developed with an approved Method Variation must clearly note this in the Information Statement when referring to the Method(s) used.

### 8.3 Method Variation – Method Catalogue

Any Method Variation will be added as an Appendix to the original Accredited Method. Where an Accredited Method has multiple Method Variations, they will be titled sequentially, starting from '1'. Where the original Method is under embargo, the same embargo period will apply to the Method Variation. When referring to the use of a Method Variation, Proponents must use the following format: "V001 (Var 1)".

## 9 Claims relating to Method Development and Accreditation

The following section outlines the rules associated with making Claims regarding Method Development and Accreditation and using the Accredited Method Trustmark.

### 9.1 Example claims

Method Authors are permitted to make claims regarding their development of a Method, and the Accreditation of a Method, as per the **Accounting for Nature**® [Claims Rules](#).

#### 9.1.1 Methods in development

Authors are permitted to make claims regarding their commitment to developing a Method for Accreditation by AfN. Authors may use the following example claim as guidance when formulating their own claims.

“We are working with Accounting for Nature to have our [NAME OF METHOD] accredited by Accounting for Nature as a scientifically robust Method to measure the condition of [ENVIRONMENTAL ASSET].”

#### 9.1.2 Accredited Methods

Authors are also permitted to make claims regarding the successful Accreditation of their Method by AfN. Authors may use the following example claims for guidance when formulating their own claims.

“[NAME OF METHOD] has been accredited by Accounting for Nature as a scientifically robust Method to measure the condition of [ENVIRONMENTAL ASSET] and guide the development of Accounting for Nature® Certified Environmental Accounts.”

**Important:** If a Method Author is unsure whether their Claims and/or associated material comply with the above requirements, they are encouraged to contact AfN via [methods@accountingfornature.org](mailto:methods@accountingfornature.org).

### 9.2 Use of the Trustmark

Once a Method is accredited, Method Authors will be given access to the Accredited Method Trustmark. They have permission to use the Accredited Method Trustmark (see right) as per the **Accounting for Nature**® [Claims Rules](#) only while active accreditation is maintained.

Method Authors **are only permitted** to use the Accredited Method Trustmark and/or make claims that are directly related to their specific Methods Accreditation status under the Accounting for Nature® Framework.

Method Authors **are not permitted** to use the Trustmark or make any Claims that might mislead the public into thinking any other Method, Environmental Account, tool, data platform, technology, project, product, individual or company has been accredited or certified by AfN. Further, The Trustmark must not be altered and must retain its scale and legibility.



# 10 Feedback process

## 10.1 Feedback process

Proponents may provide feedback<sup>14</sup> to AfN at any stage of the Method Development Process. Where feedback is provided on the process or services offered by AfN, AfN will review and, where appropriate, adopt the feedback in future versions of this document.

AfN welcomes feedback on Methods, particularly from Proponents who have used the Method to develop an Environmental Account. Where feedback is provided to AfN specific to a Method, AfN will pass the feedback onto the Method Authors. Proponents are also welcome to provide feedback directly to the Method Authors.

When Method Authors receive feedback, they are responsible for considering the feedback and deciding whether the Method requires updating. In some instances, AfN may require feedback to be incorporated into a Method where it materially improves or corrects a Method.

## 10.2 Complaint process

To ensure the integrity of the Accounting for Nature<sup>®</sup> Framework and Certification system, Accounting for Nature Ltd ('AfN') has developed procedures to welcome, investigate, and resolve complaints and appeals.

Proponents are invited to review the **Accounting for Nature<sup>®</sup> Complaints Process** for further options if they are not satisfied with the outcome of the Method development and Accreditation process.

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<sup>14</sup> The Method Feedback Form is in development and will be added to the [AfN website](#).

# Appendix A –Statistical theory underpinning Accuracy Levels



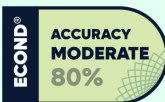
## Expected margin of error associated with Accuracy Levels

Each Method differs in its specific approach to measuring environmental condition, including aspects such as the sampling plan, intensity, selection of indicators, and the methods used to measure and score each indicator. These elements collectively influence the measurement and sampling errors associated with the respective Method, subsequently determining the Accuracy Level, which is represented as 80%, 90%, and 95%.

As a result, the Accuracy Levels are based on the statistical theory that there is a 95% chance that the true Econd<sup>®</sup> is within two standard errors of the measured Econd<sup>®</sup>. For example, in the case of a 95% Accuracy Level, the standard error of the Method is expected to be 2.5, meaning that when the Method is applied, there is expected to be a 95% chance that the true Econd<sup>®</sup> is within 5 units (i.e. 2.5\*2) of the measured Econd<sup>®</sup>. Refer to the table below for the expected error margins associated with Accuracy Levels.

**Important:** As noted in section 1.2, many factors influence the accuracy of a Method and the associated Environmental Asset Account. As more data is collected, AfN is committed to reviewing and refining the Accuracy levels, including more specific calculations of the margin of error. Therefore, the values in the table below provide reliable **guidance but only strict thresholds once** an Accuracy Level is noted to have been confirmed through the review of environmental data collected using that Method.

Proponents implementing a Method are encouraged to calculate and communicate the standard error and variation within results.

Accuracy Level	Econd <sup>®</sup> Accuracy (and expected error margins)
	Methods with very high (95%) accuracy are expected to have a 95% chance that the true Econd <sup>®</sup> score is within $\pm 5$ of the measured Econd <sup>®</sup> .
	Methods with high (90%) accuracy are expected to have a 95% chance that the true Econd <sup>®</sup> score is within $\pm 10$ of the measured Econd <sup>®</sup> .
	Methods with moderate (80%) accuracy are expected to have a 95% chance that the true Econd <sup>®</sup> score is within $\pm 20$ of the measured Econd <sup>®</sup> .



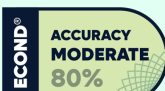


## How Accuracy Levels influence the identification of significant changes

In statistical theory, an estimate of change is considered statistically significant (at the 95 % confidence interval) if it is greater than 1.96 x 'SE of the change'. The 'SE of the change' ( $SE(x-y)$ ) can be calculated using the following formula (where x and y represent the SE of the reporting periods being compared):

$$SE(x - y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

Refer to the table below for the expected change detection thresholds associated with Accuracy Levels. However, as noted in section 1.2, several factors influence the accuracy of a Method. Therefore, as time series data is established, Proponents will be encouraged to conduct time-series analysis to determine significant changes over time.

Accuracy Level	Estimated Standard Error	Statistical Significance of Change in Econd <sup>®</sup>
	2.5	A change in Econd <sup>®</sup> of $\geq 7$ is expected to be considered significant for very high (95%) accuracy Methods.
	5	A change in Econd <sup>®</sup> of $\geq 14$ is expected to be considered significant for high (90%) accuracy Methods.
	10	A change in Econd <sup>®</sup> of $\geq 28$ is expected to be considered significant for moderate (80%) accuracy Methods.

## Appendix B – Assessment Type: Attribute the cause of change in condition

Under the Accounting for Nature® Framework, Proponents may elect to attribute change in environmental condition (as estimated by the EconD®) to a particular management activity, intervention, or other variable. This approach is required if a Proponent wants to make a public claim about how a specific management activity, intervention (or other variable) has directly influenced the condition of an Environmental Asset (e.g. weed removal, feral animal control, etc.).

Counterfactual Analysis is a common technique (a well-known counterfactual approach is BACI – Before, After, Control, Impact) used to attribute change to a specific cause or intervention. The ‘counterfactual’ refers to what would have happened without the intervention (for example, a particular management activity), often referred to as a ‘business as usual’ (BAU) scenario. The attribution of change to a specific intervention is then understood by comparing what was observed to have happened **with** the intervention to what would be expected **without** the intervention (the counterfactual).

As such, Methods can be designed to include specific provisions for how to attribute the change in condition to management activities, such as by using physical control areas. Counterfactual Analysis can also be modelled through a scenario-based approach; refer to **Appendix C** on using Models in Methods.

A Method can be designed to include additional sampling requirements to establish paired ‘control’ areas (these are ‘counterfactual’ areas that do not experience the specific management activities or intervention) and ‘intervention/management’ areas (these are areas that experience the intervention or management action).

To be effective, the ‘control’ areas need to be the same in all regards (asset, sub-asset, and broad condition status/land-use) to their paired ‘intervention/management’ areas, with the one exception that the control areas are not to experience the management actions/interventions. To ensure this, the Method must require a baseline survey (ideally multiple) before establishing the ‘control’ and ‘intervention/management’ areas to ensure they are comparable. Based on the Environmental Asset and its context, Methods should guide on using multiple baseline surveys to improve the likelihood that unknown drivers are captured, as they may not be identified in a single survey (for example, one site might have a pest infestation that is not detected in the single survey, or there may be hysteresis effects that might cause underlying differences over time). Various more rigorous approaches can be used to ensure control sites and management/intervention sites are directly comparable. However, these are generally much more time and resource-intensive, such as monitoring baseline conditions over time to ensure they are genuinely comparative<sup>15</sup>.

Having the ‘control’ and ‘intervention/management’ areas directly comparable allows the ‘control’ areas to account for natural variations, such as short-term changes in weather, and longer-term changes, such as landscape fragmentation and climate change. Methods should include the same data collection approach (sampling intensity,

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<sup>15</sup> More information here: <https://www.waterquality.gov.au/anz-guidelines/monitoring/study-design/study-type>

timing frequency) within the 'control' and 'intervention/management' areas. Methods should emphasise that timing is critical when measuring the 'control' and 'intervention/management' areas. When measured at the same time (or as close as practically possible), any change in environmental condition can be directly and confidently attributed to the management actions or intervention (as opposed to other unknown effects, such as weather, that may otherwise be inferred to cause changes without the use of a control site).

When guiding on establishing 'control' and 'management/intervention' sites, the 'control' areas may be located within the account boundaries or as close as possible to the account. Where included within the accounting boundary, the 'control' areas should be incorporated into the account design during the stratification step. Individual assessment units can be further stratified into 'control' and 'intervention/management' assessment units. However, it is noted that this may come at a cost in that the control sites must not experience the specific intervention or management activity and, therefore, might result in lower condition scores and have flow-on effects to surrounding areas (for example, the control areas may become reservoirs for invasive species, depending on what the management activity/intervention is).

### 10.3 Models to establish counterfactual scenarios

Methods can also include models to establish counterfactual scenarios, particularly where it is not feasible, practical or within available resources for a Proponent to establish physical control areas. This is particularly likely for account areas that have experienced a management regime over a significant period, resulting in good overall environmental condition (as indicated by a high Econd<sup>®</sup>). For accounts like these, it may not be practical to designate physical control areas (areas that do not experience the ongoing management regime) because the absence of management activities would potentially lower the overall condition of the control areas – which, while working as a counterfactual, is a negative outcome for environmental condition.

In such circumstances, the Proponent can model scenarios with less rigorous management regimes to understand what conditions would have been like without their ongoing management. Any modelled scenario would need to clearly outline all assumptions of causal relationships using locally relevant data and empirical research, where available, and highlight all limitations of the chosen approach.

If a proponent chooses counterfactual modelling, the approach, analysis, and any resulting counterfactual claims may be reviewed by the standing Accounting for Nature<sup>®</sup> Technical Advisors and/or the Independent Science Committee.

### Box 1 – Difference between Control Areas and Dynamic Reference Benchmarks.

'Control' areas are not to be confused with Dynamic Reference Benchmarks, even though both take into account natural variation. The difference is that control areas are able to determine whether specific management actions are having an impact on the current environmental condition of an asset (i.e. the current condition of an asset could be degraded to some degree), whereas Dynamic Reference Benchmarks is used to explain the natural ecosystem dynamics of an asset in its **best possible** reference state. Refer to [Appendix C](#) for more information on Dynamic Reference Benchmarks.

As a very simple example, a restoration project (with only one underlying vegetation type) has just been established, and the Proponent aims to claim that regular watering (i.e. the management activity/intervention) is having a positive impact on vegetation condition compared to no regular watering (the counterfactual or business as usual). In order to have suitable evidence to substantiate this claim, the environmental account must include the following:

- a **local reference area** (if seeking a dynamic reference benchmark) that is considered to be in the best possible condition and represents the underlying vegetation type of the restoration area in its 'mature' state.
- a **'control' area** that encompasses an area of the restoration planting that has the same underlying vegetation type as the local reference area and is not receiving regular watering (but compared to the 'intervention/management' area, is the same 'age' and is managed the same in all other aspects).
- an **'intervention/management' area** that encompasses an area of the restoration planting that has the same underlying vegetation type as the local reference area and is receiving regular watering (but compared to the 'control' area, is the same 'age' and is managed the same in all other aspects).

By ensuring the 'control' area and 'intervention/management' area are the same 'age' and managed the same in all other regards, the Proponent is able to confidently attribute any difference in condition to the regular watering. Both the 'control' and 'intervention/management' areas are benchmarked against the local dynamic reference area.

# Appendix C – Reference Benchmarks

## What is a Reference Benchmark?

A Reference Benchmark is a scientific estimate of an Environmental Asset in its undegraded (natural, functional, or best possible/best on offer) state. When defining a Reference Benchmark, it can be useful to consider the state of the Environmental Asset in the absence of any impacts/degradation. How a Reference Benchmark is defined will differ depending on the location, the asset type, and, on occasion, the management history of a site (e.g., a mine site).

Two main types of Reference Benchmarks are used under the Accounting for Nature® Framework:

- **Static Reference Benchmark:** a single value (or range) representing the undegraded Condition of a given Indicator.
- **Dynamic Reference Benchmark:** a series of values representing the natural variation in the undegraded Condition of a given Indicator.

Methods should guide whether a Static or Dynamic Reference Benchmark is most appropriate for the Environmental Asset and/or specific indicators. Methods should also highlight the importance of using a consistent Reference Benchmark approach for the lifetime of the Account.

The Reference Benchmark is the ‘anchor’ that enables condition to be measured and compared and, therefore, should be consistent over time.

## Static vs. Dynamic Reference Benchmark

A **Static Reference Benchmark** is a single value (or range) representing the undegraded condition for a given indicator at a single point in time. While they are considerably easier to obtain (i.e. most sources of published benchmarks or a single survey of local reference condition sites), it is often the case that **Static Reference Benchmarks** cannot account for Environmental Assets or Indicators that are particularly sensitive to natural variability. Sources of variability include annual or seasonal fluctuations in rainfall and temporal shifts, such as multi-annual climate oscillations (e.g. El Niño and La Niña). In these circumstances, particularly where an Environmental Account aims to show any long-term changes in environmental conditions, an option is to use Dynamic Reference Benchmarks.

A **Dynamic Reference Benchmark** is similar to the Static Reference Benchmark, but rather than being a single value, the Dynamic Reference Benchmark is typically a series of values that account for small-scale natural variation in a single ecotype/ecosystem. For example, at its simplest, the Reference Benchmark for ground cover is likely to vary between dry and wet seasons. In summary, Dynamic Reference Benchmarks account for the natural variability of a particular asset in a specific ecosystem.

Dynamic Reference Benchmarks add a layer of complexity and increase the resources required to generate an Environmental Account. However, they are instrumental in increasing the confidence that the environmental assets' condition and change in condition account for the natural processes within which those assets and ecosystems evolved. It is up to the Method Author to provide guidance and options on how precise the Dynamic Reference Benchmark should be for a given Environmental Asset and indicator. For example, it could be binary categories (i.e. wet year vs. dry year), it could be several categories (i.e. rainfall categories), or it could be continuous and based on a model.

## How to determine Reference Benchmarks

There are generally five approaches that Methods can include when guiding how to determine Reference Benchmark values (either Static or Dynamic):

- existing records;
- observation at local reference condition sites;
- models that estimate the undegraded condition of the environmental asset;
- expert opinion; and
- a combination of the above options.

It is important to note that depending on the asset, Reference Benchmark values must be directly comparable with the measured values and represent the same indicators. Using the same sampling technique is particularly important for indicators not estimated as a percentage, such as species richness. This is because the measured values of these indicators tend to be influenced by the sampling technique (i.e., plot size). For example, the species richness in a 10 m quadrat differs from that in a 1 m quadrat. Similarly, for birds, species richness after 5 minutes of searching differs from that measured after a 20-minute search. In contrast, the percentage cover of vegetation over a 50 m and 100 m transect generally are comparable.

### Existing records

One option for determining reference benchmarks is to rely on existing records or published values. Existing and published values are often Static Reference Benchmarks developed and reviewed by scientists and minimise the time and effort spent by the Proponent. The key sources for published Reference Benchmark values are from government agencies or in academic literature.

Where Methods prescribe indicators not included in the published benchmark documents, one or a combination of the following three options may be used to determine the Reference Benchmark for the missing indicators:

- observation at local reference condition sites;
- a robust model; or
- expert opinion.

## Observation at local reference condition sites

For some Environmental Assets, it may be appropriate for the Method to encourage the establishment of local 'best on offer' reference condition sites. This option would typically require that local reference sites be identified and confirmed by a suitably qualified person as an appropriate representation or estimate of the Asset/Sub-asset in an undegraded or best possible state. Once identified, the indicators prescribed in the Method must be measured at the local reference condition sites and the account area sites.

Eyre et al. 2017<sup>16</sup> provides guidance on establishing local reference condition sites for native vegetation. However, similar principles apply to other asset types. In general, and where possible, Methods should encourage local reference condition sites to be established as close to the accounting area as possible and meet the following requirements:

- have similar environmental conditions (climate, landscape) to the accounting area;
- have similar terrain conditions (slope) and similar positions in the landscape (e.g. alluvial plain or footslopes);
- comprise the same sub-asset (i.e., vegetation type, soil type, water type, etc.);
- represent undisturbed or unimpacted areas (i.e., no recent significant management changes and limited evidence of historical or recent impacts such as grazing, fire, erosion, dieback, flooding, invasive species or any other asset-specific negative impact);
- be suitably separated from areas of disturbance or edges; and
- where possible, be located in the largest patch available of the undegraded asset.

For robust estimates of Reference Benchmark values, Methods should specify at least three local reference condition sites established per sub-asset, which are independent and suitably spaced from each other.

Local reference condition sites can also be established as either static or dynamic local reference condition sites. For a Static Reference Benchmark, sites can be measured at a single point in time (or over multiple points in time and averaged), and those values should be used for the account's lifetime. For a Dynamic Reference Benchmark, sites should be measured at different specified times to account for and understand the natural variability and dynamics of the asset. The local dynamic reference site could be measured simultaneously every time the Account's target site is measured, or it can be measured periodically under varying climatic/seasonal thresholds.

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<sup>16</sup> Eyre TJ, Kelly AL and Neldner VJ (2017). Method for the Establishment and Survey of Reference Sites for BioCondition. Version 3. Queensland Herbarium, Department of Science, Information Technology and Innovation, Brisbane.

For example, the same local reference condition site can be measured in a wet year (i.e. gather Reference Benchmark indicator values where rainfall exceeds a certain threshold) and a dry year (i.e. gather Reference Benchmark indicator values where rainfall is lower than a certain threshold), and therefore that account could use that same rainfall threshold to determine whether the wet year or dry year Dynamic Reference Benchmark should be used for that Reporting Period.

### **A model that estimates the undegraded condition of the environmental asset**

For some Environmental Assets, an empirical model that estimates the undegraded condition of the environmental asset may be appropriate. For example, species distribution models may help determine the Reference Benchmarks for fauna. Another example is the native woodland bird condition model developed by Fraser et al. (2018)<sup>17</sup>, which incorporates reference condition by giving a condition score between 0 and 1 and, therefore, does not require an explicit list of reference species but instead incorporates reference condition in the model.

Models may also be used to establish Dynamic Reference Benchmarks to explain ecosystem dynamics and estimate how known variables can impact the condition of an indicator, such as the impact of rainfall on ground cover.

Refer to Appendix D on Methods that include Models.

### **Expert opinion on the undegraded condition of the environmental asset**

Where there are no published Reference Benchmarks, and local reference condition sites and robust models are not feasible, expert opinion may be used to determine Reference Benchmarks. Expert<sup>18</sup> opinion may be sourced from an individual or a panel who is experienced and familiar with the chosen assets and sub-assets and can demonstrate their expertise (i.e. publications, field experience, etc.). The expert(s) may form the opinion based on anecdotal observations, extrapolated data from other locations or expert interpretation of incomplete data sets.

It is encouraged that once the expert(s) have established Reference Benchmarks, an independent review of those Reference Benchmarks is conducted to increase confidence in the values. For example, if an experienced ecologist formulated a set of Reference Benchmarks for a specific vegetation type, it is recommended they request the local Herbarium to verify the benchmarks. If expert opinion was used to determine reference benchmarks, then this must be clearly disclosed in the Account's Information Statement along with the qualifications and experience of the expert(s).

A Dynamic Reference Benchmark could also be based on expert opinion where the expert would use their experience to vary static Reference Benchmark values (such as modify published reference values).

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<sup>17</sup>Fraser et al. (2018) Systematic definition of threatened fauna communities is critical to their conservation. Biodiversity research. DOI: 10.1111/ddi.12875

<sup>18</sup> Expert in this context does not refer to an Accounting for Nature<sup>®</sup> Accredited Expert.



## Appendix D – Using models in Methods

To reduce sampling effort and improve the cost-efficiency of environmental monitoring, some Methods may elect to include scientific conceptual or mathematical models.

Where a Method includes a model, it must provide a clear and comprehensive explanation of how the model was constructed, any assumptions associated with it, and how it can be applied. The Method must describe the independent variables that the model draws on and how these are measured and sourced, particularly concerning time-series consistency within a Method.

Importantly, the Method must include instructions on when and how to calibrate the model to the area it is being applied to and regular validation to ensure the model generates accurate and reliable results. As a result, the Method should describe the sources of possible error and bias in the Model, how this can impact the results, and, where possible, how to reduce them.

Finally, the Method should ensure that any Model is applied consistently over time. If the model changes, any impacts on the results due to changes in the model should be able to be quantified. The Method should also ensure that if a model changes, the new model should be applied over previous accounting periods to ensure results are consistent and comparable.

## Appendix E. Method Author Declaration

The below declarations are from the Method Review Application Form. In signing the form, the Method Author (Applicant) Agrees to all Declarations.

In submitting the attached Method to Accounting for Nature Ltd for review by the Independent Science Committee:

- I certify that to the best of my knowledge, all information provided in this application is true and correct and not misleading by inclusion or omission. Should the information I provided in this form change, I will inform AfN Ltd immediately.
- I acknowledge that fees may be payable for the review of a new Method, and I agree to pay such fees as per the Accounting for Nature® Fee Schedule.
- I certify that I am the authorised signatory for the Applicant and authorised to make this declaration on the Applicant's behalf and bind the Applicant.
- I acknowledge that the Applicant grants AfN a non-exclusive, royalty-free licence to offer the use of the Method, once accredited, to third-parties for the purpose of creating Certified Environmental Accounts under the Accounting for Nature® Framework. In doing so, the specific Method accredited by AfN can only be used for the purposes of creating an Environmental Account for Certification by AfN.
- I understand that should I (or a Proponent) wish to use the Method for the purpose of underpinning/evidencing the issuance of nature credits, linking to carbon credits, or make public claims (such as "Nature Positive"), I (or the Proponent) will need to use the Method to first create a Certified Environmental Account. I understand that I (or the Proponent) will need to apply to AfN before the Certified Environmental Account can be used to support such Purposes. I also understand that these Purposes are subject to separate Standards for issuing credits and claims, and that AfN has the discretion to approve (or not) my (or a Proponents) application to use a Certified Environmental Account to support these Purposes.
- I understand that the Applicant will be acknowledged as the Method developer.
- If accredited, I understand that this Method will be listed as an Accredited Method on the Accounting for Nature website via the Accounting for Nature® Method Catalogue. I understand that I can embargo the Method for up to three years (based on the option chosen in Section E) and charge a license fee (based on the option selected in Section E). Once accredited, I understand that third parties may nominate to use the Method when registering an Environmental Account (except during the embargo period nominated in Section E unless the Applicant agrees otherwise in writing) and if the Method is licenced (based on the option selected in Section E) AfN will contact me to confirm that all applicable licence fees have been paid.
- Once accredited, I understand that where the Method is unlicensed, third parties may create a Method Variation for consideration by the ISC and AfN Executive. If approved, the Method Variation will be attached to the Method as an Appendix and available to use in conjunction with the Original Method. I understand that AfN will notify me of any proposed Method Variations.
- Once accredited, I understand that if any updates are made, they may require review by the ISC, and that additional fees may be payable for any updates.
- I warrant that the Applicant (and author(s)) has independently developed the Method and has secured all rights to use and disclose the Method. The Applicant warrants that use of the Method will not infringe the rights of third parties, and the Applicant will indemnify and hold harmless AfN, its officers and employees against any claim arising from a breach of this warranty. Both the Applicant and AfN acknowledge that neither the submission of the Method nor its subsequent licensing constitutes or gives rise to any claim by the Applicant of ownership of any common scientific methods, processes, or other know-how that may be comprised in the Method.

# Appendix F – Clauses for Method Authors to include in Method Licence Agreement

The below clauses must be included in all Accredited Method Licence Agreements:

- The licensing of Accounting for Nature® Accredited Methods between parties (e.g. the Method Developer and Method licensee) for use under the Accounting for Nature® Framework, including negotiating the terms and wording of licensing, is the sole responsibility of those parties. AfN will play no role in the licensing of Accredited Methods between parties.
- In licensing Accredited Method between parties, no representation, warranty, or guarantee, express or implied, is made by AfN that the Method is accurate, current or complete Accredited Data Solution is accurate, current, or complete. Whilst care is taken in the accreditation process, AfN and its officers, employees, agents, advisers and sponsors will not be liable for any errors, omissions, misstatements or mistakes in any information or damages resulting from the use of the Method or any decision made, or action taken in reliance on this information.
- Further, all users of Accredited Methods (including through licensing agreements) agree to indemnify AfN for any liability or damage (legal, financial, brand or otherwise, direct or indirect) arising from or in connection with the use of the Method and any resulting third-party claims brought against AfN.



# Accounting for Nature™

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