

Reef Credit Standard



ecomarkets
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Version Control

Reef Credit Standard Version 2.1

Version Number	Author	Change	Date Approved
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Contact

Eco-Markets Australia, as the administrator of the Reef Credit Scheme www.eco-markets.org.au

Acknowledgements

The Reef Credit Scheme was conceived in response to the emerging consensus that a market-mechanism to incentivise water quality improvements in the Great Barrier Reef (the Reef) catchment area was urgently needed. In 2017, natural resource management organisations, Terrain NRM and NQ Dry Tropics partnered with GreenCollar, an environmental markets investor, to guide the development of the Reef Credit Scheme and serve as the Interim Steering Committee. Advice and assistance was provided by the environmental markets and standard development consultants, Winrock International, and a number of operating water quality market programs, participants and founders, and standard development organisations were also engaged.

The Queensland Government officially launched the Reef Credit Scheme in October 2017 as part of two Reef water quality projects - the Wet Tropics and Burdekin Major Integrated Projects (MIPs) - with the intent to operate in all catchments of the Reef. Members of the Technical Advisory Committee (TAC) have provided feedback and recommendations at all stages of the Reef Credit Standard and Methodology development, as well as on the overall design of the Scheme and subsequent revisions.

Funding to support the development of the Scheme, governance and Registry was provided by the partnership between the Australian Government's Reef Trust, the Great Barrier Reef Foundation, and the Queensland Government.

The Reef Credit Scheme has not been designed to disrupt agricultural production, but rather to recognise, value and support landowners to innovate and adopt best practices to deliver environmental benefits and positively contribute to water quality in the Reef catchment area. To ensure the Scheme delivers the highest standards of environmental and financial integrity, Australia's first independent administrator of environmental markets, Eco-Markets Australia, was established in late 2020. Eco-Markets Australia is governed by a skills-based Board of Directors and the day-to-day administration of the Reef Credit Standard is delegated to the Reef Credit Secretariat (Secretariat).

This document may be cited as the Reef Credit Standard Version 2.1, 1 July 2024.

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1. Introduction

1.1 Reef Credit Standard - objective

The objective of the Reef Credit Standard (the Standard) is to ensure that Reef Credit Projects meet stringent environmental, financial and community integrity conditions to effectively contribute to water quality targets described in the Reef 2050 Water Quality Improvement Plan (2018) and any subsequent revisions to the water quality targets.

To support this objective the Standard sets out the specific rules and requirements that must be satisfied to develop Reef Credit Projects and methodologies; validate, register, monitor, and verify Projects; and issue, track and transfer Reef Credits amongst other matters.

1.2 Governance

Eco-Markets Australia and its Board (the Board) administers the Reef Credit Scheme, and Eco-Markets Australia acts as the Reef Credit Secretariat (Secretariat). The Secretariat is empowered to manage and oversee all aspects of the Scheme with support from the Board and the Technical Advisory Committee.

The Secretariat's role and responsibilities includes:

- Managing or overseeing all Reef Credit Scheme processes and procedures
- Managing the review and approval of Reef Credit Projects, including Validation, registration and Verification
- Managing the review and approval of Reef Credit Scheme methodologies
- Managing the review, maintenance and approval of updates to the Reef Credit Standard
- Issuing, approving and/or updating all Reef Credit documentation
- Issuing guidance and interpretations related to the Reef Credit Scheme
- Maintenance of the Registry, including issue, track and transfer of Reef Credits
- Ensuring the integrity of the Reef Credit Scheme, including conducting reviews of stakeholder grievances
- Making decisions regarding the administration or operation of the Reef Credit Scheme, which may include input from the Technical Advisory Committee and the Board.

The Technical Advisory Committee provides independent expertise on the Methodology application and review process, selection of peer reviewers, compliance matters and related issues.

1.3 Interpretation

Definitions of words used in this document are set out in the Reef Credit Definitions.

The Reef Credit Standard (the Standard) should be read in conjunction with the Reef Credit Guide (the Guide) which provides the rationale and principles underlying the Reef Credit Scheme and is an aid to interpreting the Standard.

The Standard is supported by other documents as follows:

- Reef Credit Guide
- Reef Credit Project Application and Crediting Procedure
- Reef Credit Methodology Application and Review Procedure
- Reef Credit Definitions
- Tool for the Demonstration and Assessment of Additionality in Reef Credit Projects (Reef Credit Additionality Tool)
- Reef Credit Fee Schedule (Fee Schedule)
- Reef Credit Verifier Application Procedure
- Reef Credit Claims Guidance
- Reef Credit Pipeline Listing Procedure

- Reef Credit Stakeholder Grievance Procedure
- Reef Credit Dispute Resolution Procedure
- Best Practice Guidance (forthcoming)
- Forms and templates.

All documents and general communication materials are available on the Eco-Markets Australia website.

1.4 Version

1. This is version 2.1 of the Standard.
2. The Standard version 2.1 will apply from 1 July 2024 and replaces earlier versions of the Standard.
3. Projects are validated and registered against the version of the Standard that applies at the time the Project Application is lodged with the Registry.
4. Projects must comply with the rules and requirements of the most current version of the Standard for the remainder of the monitoring period.
5. Reef Credits generated by a Project are not tagged against specific versions of the Standard.

2. Scope and application

2.1 Scope

The scope of the Reef Credit Scheme covers Projects that achieve water quality improvements in the Great Barrier Reef catchment area.

2.2 Reef Credit base unit and conversion factors

1. A Reef Credit is a quantified and verified amount of Pollutant that has been prevented from entering the Great Barrier Reef.
2. A Reef Credit is equal to an amount of Pollutant reduction verified during a Monitoring Period measured in kilograms and converted into Reef Credits by applying the relevant conversion factors set out in Schedule 1.
3. The conversion factors represent the relative value of Pollutant reduction derived from the Reef-wide catchment pollution reduction targets described in the Reef 2050 Water Quality Improvement Plan (2018). The conversion factors will be periodically amended by the Secretariat to reflect changes to the Pollutant reduction targets.
4. The Secretariat will notify Project Proponents of any changes to the relative value of Pollutant reduction targets by means of direct notification and publishing the new values on the Eco-Markets Australia website.
5. Projects must update the conversion factors at least every five (5) years or at the start of each Crediting Period, whichever comes first.

2.3 Voluntary and compliance markets

Reef Credits may be used to meet water quality improvement commitments in a voluntary or compliance market subject to, in the case of a compliance market, the relevant regulatory agency or agencies accepting Reef Credits as a means to satisfy the compliance obligation.

3. Project Rules

3.1 General eligibility requirements

A Reef Credit Project must meet minimum eligibility requirements as described in Section 3.1 to be validated under the Standard and relevant Reef Credit Methodology.

3.1.1 Minimum standards for Project Proponents

A Reef Credit Project must have a Project Proponent. A Project Proponent must:

1. Be an Australian resident, body corporate, company or organisation.
2. Comply with any applicable legislation, regulation, codes of conduct or best practice guidance issued by the Secretariat.
3. Pass the fit and proper person test.

3.1.2 Approved Reef Credit Methodology

A Reef Credit Project must use a Reef Credit Methodology (Methodology) approved by the Secretariat in accordance with the Standard. Projects shall apply a Methodology in full, including the complete application of any tools or modules referred to by the Methodology. The list of approved methodologies is available on the Eco-Markets Australia website.

3.1.3 Positive List and Negative List

1. The Secretariat shall maintain a Positive List and Negative List of Reef Credit Project activities.
2. The Positive List and Negative List of Project activities are set out in Schedule 2.
3. The Positive List identifies activities that are eligible to participate in the Reef Credit Scheme and the Negative List identifies activities that are ineligible.
4. Not all activities listed on the Positive List will have a corresponding approved Methodology. To undertake an activity on the Positive List that does not currently have a Methodology, a Methodology must be first developed and approved for use under the Standard.
5. The Positive List and Negative List may be expanded by the Secretariat. Any additions to the Positive List or Negative List must undergo a 30-day public consultation process, unless the Project activity being added to the Positive List relates to a Methodology already approved for use under the Standard by the Secretariat.
6. Where a Methodology has been approved by the Secretariat for use under the Standard, the activities are deemed as accepted additions to the Positive List.

3.2 Reef Credit Project requirements

3.2.1 Project Start Date

1. The Project Start Date is the date on which the Reef Credit Project activities commenced.
2. Where a Project Start Date precedes Validation and registration, the Project must be validated and registered within 3 years of the Project Start Date.
3. Where Validation and registration precede a Project Start Date, Project activities must commence within 3 years of Validation and registration.

3.2.2 Crediting Period

1. All Reef Credit Projects must have a Crediting Period. The duration of the Crediting Period must be specified and justified in the Methodology and shall not be more than twenty-five (25) years.
2. At the end of a Project's Crediting Period, the Project Proponent may apply to the Secretariat to renew its Crediting Period. When renewing its Crediting Period, the Project must re-assess the Baseline Scenario and apply the most recent version of the applicable Methodology.
3. The Project is required to demonstrate Additionality at the start of each Crediting Period.
4. If a Project's Crediting Period is not renewed the Project will no longer be eligible to generate further Reef Credits.
5. A Crediting Period starts on the Project Start Date, or in the case of projects requiring civil works, the earlier of either;
 - i. the Date of Practical Completion of the civil works, or
 - ii. two (2) years after the Project Start Date.
6. Verification of monitoring periods cannot occur until the project is validated and registered by the Secretariat (see Section 3.5.3).

3.2.3 Project location and Project site

1. The Reef Credit Project must be within the boundaries of the Great Barrier Reef catchment area as described in the Reef 2050 Water Quality Improvement Plan (2018).
2. The Reef Credit Project site must be identified by a shape file(s) describing the extent of the Project Area. If the Project has multiple sites, then these must be included in the shape file(s).

3.2.4 Project Application

1. The Project Application includes all the requirements set out in this Section 3.2 and defines the Project's Pollutant reduction activities and the expected Pollutant reduction.
2. The Project Proponent shall use the Project Application Template.
3. All information in the Project Application shall normally be available to the public, though certain information may be protected where the Secretariat is satisfied that such information is commercially sensitive. The Project Proponent is responsible for requesting the protection of such information.
4. The Project Application shall specify the relevant Methodology under which the Reef Credit Project will be undertaken.

3.2.5 Legal right and Consent process

1. The Project Proponent must demonstrate it has the legal right to carry out the Project on the Project site, and a lawful right to be issued all Reef Credits that may be created as a result of the Project.
2. The Project Proponent must obtain all relevant consents and other relevant and material regulatory approvals and permits as it reasonably determines are required to undertake the Project.
3. The legal right to carry out the Project on or for the sites or assets included in the Project must exist at the Project Start Date. If at any time the legal right to carry out the Project ceases, the Project Proponent must advise the Secretariat and the Project may be ineligible to generate Reef Credits while the legal right to carry out the Project is not maintained.
4. In the event that the Project Proponent fails to maintain any necessary consents, approvals or permits and/or fails or ceases to have the legal right to carry out the Project the Project Proponent will be in Non-compliance.

3.2.6 Other environmental credits

1. Project Proponents may not claim credit for the same Pollutant reduction under the Reef Credit Scheme and another program.
2. Projects may generate other forms of environmental credits, such as biodiversity, carbon or renewable energy certificates which must be additional to the Reef Credit.
3. Projects must adhere to the rules and requirements of each Scheme.
4. Projects may generate Reef Credits through more than one Reef Credit Methodology on the same land, provided all eligibility requirements are satisfied.

3.2.7 Projects with multiple activities

1. Reef Credit Projects may include multiple activities where the Methodology applied to the Project allows more than one activity and/or where Projects apply more than one Methodology.
2. Where more than one Methodology is applied to a Project with multiple activities:
 - a. Each Project activity shall be specified separately in the Project Application, referencing the relevant Methodology; and
 - b. All criteria set out in the applied methodologies in relation to applicability, Additionality, determination of Baseline Scenario and reduction of Pollutant shall be applied separately to each Project activity.

3.2.8 Additionality

The Project must meet the following criteria for Additionality:

1. Additionality of the Project activity must be demonstrated according to the approved Methodology.
2. The Project Proponent must show that the Pollutant reductions are not required to be carried out by or under a law of the Commonwealth or Queensland Governments.
3. The Reef Credit Project must generate Pollutant reductions over and above reductions that would have occurred without the Reef Credit Project.
4. Where a Pollutant reduction has already been funded under a different scheme or program at the same Project site, a Reef Credit Project may still be undertaken either concurrently or consecutively, however Reef Credits may only be issued for Pollutant reduction that is additional to that already paid for. The calculation of the baseline must take into account Pollutant reductions already accounted for in programs other than the Reef Credit Scheme.

3.2.9 Safeguards

1. A Project Proponent must identify and comply with all relevant laws and regulations related to activities on land or in water courses. This may include, but not be limited to consultation processes that are required by law or regulation.
2. Project Proponents must demonstrate how any applicable Stakeholder consultation and feedback was taken into account in the Project's design prior to Project Validation and registration. As part of the consultation, Project Proponents are required to share information about the Stakeholder Grievance Procedure with stakeholders.

3.2.10 Permanence

1. If a Project generates Reef Credits through the sequestration of a Pollutant within the landscape, the Project Proponent must conduct a Risk of Reversal Assessment, and if Pollutant sequestration generated by Reef Credit Projects carries the Risk of Reversal, adequate

safeguards must be in place to ensure Pollutant sequestrations are monitored and maintained for the entire Permanence Period.

2. Where there is a Risk of Reversal, the Risk of Reversal Assessment Tool must be used to calculate the Risk of Reversal Buffer and a corresponding number of Pollutant reductions will be deducted from the verified Pollutant reductions and issued as Reef Credits into the Buffer Account. The Verifier will evaluate whether the Risk of Reversal Assessment Tool was correctly conducted and applied.
3. Reef Credits withheld as a part of the Risk of Reversal Buffer calculation will be maintained by the Secretariat in a Buffer Account and used to mitigate against future Reversals across the Reef Credit Scheme.
4. In the event of a Reversal, the Project Proponent must notify the Secretariat within 30 days of becoming aware of such an event of:
 - a. the nature of the Reversal;
 - b. actions proposed to remedy the effects of the Reversal.
5. The Project Proponent must quantify the amount of Pollutant reduction reversed prior to the Verification of the monitoring period.
6. Once the Secretariat has been notified of a Reversal it will cancel a corresponding number of Reef Credits from the Buffer Account.
7. If a Reversal was caused by Non-Compliance, the requirements dealing with Non-Compliance will apply.

For example: if a Project Proponent considers the risks posed by a Natural Disturbance Event and takes appropriate steps to mitigate the risk, but an unforeseen Natural Disturbance Event causes a Reversal of Pollutant reductions credited under the Reef Credit Scheme, this would not be considered a Non-Compliance event. However, if a Project Proponent deliberately or negligently allows a Reversal to occur, this would be considered a Non-Compliance event.

3.2.11 Leakage

1. The Project Proponent must identify and assess any potential sources of Leakage within the Great Barrier Reef catchment area in accordance with an approved Methodology.

For example: a Methodology does not need to account for activity shifting Leakage if activities are shifted to areas outside the Great Barrier Reef catchment area; and does not need to account for market effects Leakage if it determines market effects predominantly occur outside the Great Barrier Reef catchment area and that any market effects Leakage within the Great Barrier Reef catchment area are sufficiently minor to be disregarded.

3.3 Baseline Scenario

The Project Proponent shall calculate Reef Credits generated using an approved Methodology.

1. A Project must have a Baseline Scenario.
2. A Project must describe the Project Baseline Scenario in accordance with the requirements of the relevant Methodology.
3. The assumptions and values used to develop the Baseline Scenario must be explained, supported by credible references¹, and demonstrably conservative to ensure there is no over estimation of water quality improvements.

¹ Peer reviewed literature or government reports should be provided as a credible reference where possible. Where such sources are not available, credible references can include other reports, articles, news articles, and primary research.

4. At the conclusion of the Crediting Period, the Baseline Scenario must be reviewed and updated if the Project is to continue.

3.4 Calculation of Pollutant reductions

1. The Project Proponent must calculate Pollutant amounts and proposed reductions for each source of Pollutant for both the Project scenario and the Baseline Scenario.
2. The Net Pollutant Reduction to be achieved by the Project must be calculated in kilograms in accordance with the applied Methodology.
3. Pollutant reductions must be converted to Reef Credit units in accordance with the procedure described in Section 2.2.

3.5 Monitoring

3.5.1 Monitoring

A Project Proponent must have a system to obtain and record all necessary information required to measure and report Pollutant reductions and any Reversals in accordance with the applicable Methodology for the entirety of the Crediting Period and Permanence Period. Reef Credits are verified and issued based on the information contained in a Monitoring Report.

3.5.2 Record keeping requirements

1. Project records must be retained by the Project Proponent during and for seven (7) years after the end of the Crediting Period or Permanence Period if there is a Risk of Reversal.
2. The Project Proponent must make available to the Secretariat and Verifiers all Project documentation and Project data as required under the Methodology for which the Reef Credit Project has been registered.

3.5.3 Monitoring Period

1. The Monitoring Period is a period of time specified in the Methodology over which Pollutant reductions and Permanence are monitored and calculated. There will be multiple consecutive Monitoring Periods during the Crediting Period and Permanence Period for a Project.
2. The first Monitoring Period commences on the Project Start Date or the date the project is validated and registered by the Secretariat (whichever is earlier),
3. Verification of Monitoring Periods cannot occur until the project is validated and registered by the Secretariat.
4. All subsequent Monitoring Periods commence on the day after the end date of the most recent previous Monitoring Period.
5. A Methodology may have different monitoring requirements during the Crediting Period and Permanence Period.

3.5.4 Monitoring Report

1. The Monitoring Report describes all the information and data required for the monitoring of Pollutant reductions in accordance with the relevant Methodology.
2. The Monitoring Report must include the calculation of Pollutant reductions or Reversals that have occurred within the Monitoring Period in accordance with Section 3.5 of the Standard and the relevant Methodology.

3.6 Validation and registration

A proposed Reef Credit Project must be validated against the Standard and the chosen Methodology to be registered as a Reef Credit Project.

3.6.1 Validation process

1. The Project Proponent must apply to the Secretariat for Validation of the proposed Project against the requirements of the Standard and applicable Methodology eligibility criteria.
2. The Project Application (which shall include all the requirements set out in Section 3.2) must be submitted to the Secretariat for Validation purposes.
3. The associated documentation will be reviewed by the Secretariat for completeness and compliance with the eligibility criteria.
4. The Secretariat will charge a fee to cover administration costs for processing each Project Application for Validation, known as the Validation and registration Fee as set out in the Fee Schedule.
5. The Secretariat will validate the Project if it has satisfied all Project requirements in accordance with the Standard and Methodology eligibility criteria.
6. If the Project has been validated, the Secretariat will approve the Project and the Project will be listed in the Registry in accordance with Section 3.6.2 Registration.
7. Only the Project Proponent may initiate the Validation and registration process.
8. Further details on the Validation and registration process are found in the Project Application and Crediting Procedure.

3.6.2 Registration

1. A Project that has been validated in accordance with Section 3.6.1 of this Standard will be registered in the Registry.
2. All registered Projects will be listed on the Registry and available for the public to search. Summary information, including details of the Project Proponent, Project location (Reef catchment), Methodology, and Reef Credits issued and retired in relation to registered Projects will be available on the Registry accessible on the Eco-Markets Australia website subject to any information reasonably being regarded as commercial-in-confidence or of a sensitive nature.
3. Further details on the Project Validation and registration process are found in the Project Application and Crediting Procedure.

3.7 Verification and Reef Credit issuance

A Project that has been registered as a Reef Credit Project may apply to the Secretariat for Verification of a Monitoring Report and issuance of Reef Credits at the end of each Reef Credit Project Monitoring Period. This is a two-step process, Step 1- Verification and Step 2-Issuance.

Reef Credits will not be issued for Pollutant reductions arising from management actions that have not been verified in accordance with the requirements for Verification under the Standard and applicable methodologies.

To apply for Reef Credit issuance the Project Proponent must submit to the Secretariat:

- a. An Application for Certification and issuance of Reef Credits;
- b. One or more Monitoring Reports covering the period over which Reef Credits are requested to be issued; and
- c. A Verification Report provided by a qualified and independent third-party Verifier approved by the Secretariat.

3.7.1 Verification Process

1. An approved Verifier shall review the Project and all Monitoring Reports since the last Verification to assess Pollutant reduction claims.

2. The Project Proponent must choose a Verifier from the list of approved Verifiers published on the Eco-Markets Australia website.
3. The Project Proponent must notify the Secretariat of the chosen Verifier to undertake Verification services for the Project Monitoring Period, prior to Verification services commencing, by submitting a Verifier Nomination Form to the Secretariat.
4. The Project Proponent will enter a contract directly with the Verifier for their Verification services.
5. The Verifier must include a declaration that no conflict of interest exists in relation to the Verification services.
6. The Verifier must confirm that the accredited Team Leader and any nominated subject matter experts have not undertaken more than 5 consecutive monitoring periods for a Project.
7. The Verifier will confirm whether:
 - a. the Standard and applicable Methodology has been followed accurately and completely;
 - b. appropriate documentation and recording keeping including Monitoring Reports is in place;
 - c. the amount of Reef Credits estimated for a Project since the last Verification is accurate;
 - d. the Risk of Reversal Assessment and Risk of Reversal Buffer have been conducted correctly (if applicable); and
 - e. if this is the first Monitoring Report for the first Monitoring Period, then the Verifier must also assess all documentation required as part of the Validation process.
8. The Project Proponent must submit the Verification Report to the Secretariat.
9. The Verification Report must contain a summary of Verification activities, an opinion by the Verifier on the Reef Credit estimates, and a log of corrective actions, clarifications, and findings.
10. The Secretariat will review the Verification Report and, if satisfied, the accompanying Monitoring Reports will be confirmed as verified.
11. Further details on the Verification process are found in the Project Application and Crediting Procedure.

3.7.2 Level of assurance

1. The Verifier shall select samples of data and information to be verified to provide a reasonable level of assurance and to meet the materiality requirements of the specific Project.
2. The level of assurance shall be reasonable, with respect to material errors, omissions and misrepresentations, for Verification.
3. A discrepancy between the claimed and realised Pollutant reductions of less than 10% shall be considered immaterial for the purposes of Verification.
4. If a Verifier's estimate is within the required level of accuracy, the Project Proponent's calculation of Reef Credits in the Monitoring Report will be used to determine Reef Credit quantities.
5. If the Verifier's estimate exceeds the acceptable degree of discrepancy (10%) between the claimed and realised Pollutant reductions, the Verifier and the Project Proponent may:
 - a. agree on the revised Reef Credit quantities recommended by the Verifier; or
 - b. refer the issue to the Secretariat under the Stakeholder Grievance Procedure.

3.7.3 Reef Credit issuance

The Secretariat will complete a final review of verified Reef Credit estimates and all Project documentation, and if satisfied that the relevant requirements are met, will certify the number of Reef Credits to be issued.

1. The Secretariat will notify the Project Proponent when certification is complete.
2. The Project Proponent may request Reef Credit issuance as part of the Verification and certification or after Verification and certification are complete.
3. Each Reef Credit issued on the Registry is assigned a unique serial number.
4. Project activities will only be credited after a source of Pollutant has been verified to be reduced.
5. The Secretariat will charge a fee to cover administration costs for each Reef Credit issued to the Project Proponent as set out in the Fee Schedule.
6. The verified Reef Credits shall be issued into the Registry Account of the Project Proponent upon payment of the Reef Credit issuance Fee.
7. A Reef Credit will remain valid for five (5) years after the date the Reef Credit was issued. Further details on the issuance processes are found in the Project Application and Crediting Procedure.

3.8 Tracking and transfer of Reef Credits

3.8.1 Tracking and transfer of Reef Credits

1. Reef Credits may be transferred between Registry Accounts following the Project Application and Crediting Procedure.
2. The transfer and retirement of each Reef Credit is tracked on the Registry.
3. The Secretariat will collect information on the prices Reef Credits are transacted on the Registry, and periodically make summary information publicly available.

3.8.2 Reef Credit Retirement

1. A Reef Credit must be retired within the Registry to claim a water quality improvement.
2. A Reef Credit must be retired at the earlier of either:
 - a) The holder of a Reef Credit making a claim to the water quality improvement associated with that Reef Credit, where such a claim may be made on their own behalf or on behalf of a third party; or
 - b) Five (5) years after the date the Reef Credit was issued.
3. Once Reef Credits are retired, the Registry will move the retired Reef Credits into a Retirement Account.
4. Reef Credits in the Retirement Account cannot be transferred or used to claim any further water quality improvements irrespective of whether such a claim was made on the credits prior to Retirement.
5. For the avoidance of doubt, all the requirements contained in this section 3.8.2 apply retroactively to any Reef Credits issued under Version 2.0 of the Reef Credit Standard.
6. Further details on Reef Credit Retirement process are found in the Project Application and Crediting Procedure.

4. Methodology requirements

4.1 General

1. Approved methodologies are published on the Eco-Markets Australia website.
2. All new methodologies submitted for approval under the Reef Credit Scheme will be subject to scientific peer review and public consultation.
3. Methodologies may use direct measurement and/or modelling approaches to estimate Pollutant reduction.
4. Methodologies must be founded on a comparative assessment of the Business As Usual scenario and the alternatives to determine the Baseline Scenario. This must include an assessment of the barriers to implementation of the proposed Methodology activities.
5. Methodologies must be consistent with the principles of the Reef Credit Scheme as described in the Guide and the rules as described in the Standard including clearly stating the assumptions, parameters and procedures used to estimate the baseline, justify the Crediting Period, estimate Leakage, assess Risk of Reversal and calculate the Risk of Reversal Buffer and the Pollutant reduction. The assumptions and parameters used to develop a Methodology must be supported by credible references.²
6. Methodologies must take into account any uncertainty and make an appropriate confidence deduction (correction factor).
7. Where methodologies use models to determine Pollutant reduction the following principles must be adhered to:
 - a. Models should be publicly available from a reputable and recognised source;
 - b. Model parameters should be determined based upon studies by appropriately qualified experts;
 - c. Models should be tested by appropriately qualified organisations or experts;
 - d. If a model is used by the Queensland or Australian Governments for a public policy purpose associated with the Great Barrier Reef the model does not need to be peer reviewed. In all other cases models should be peer reviewed;
 - e. Where known and quantified, sources of model uncertainty should be identified and taken into consideration;
 - f. Models should apply conservative factors to discount for uncertainty;
 - g. Where models use discount or other default factors in the calculation of Pollutant reduction the data used to establish the factor must be provided; and
 - h. Models must be relevant to the location and parameters needed for the relevant Methodology.
8. Methodologies must include sufficient information to allow readers to reach the same conclusion on the effectiveness of the Methodology as the Validation and Verification bodies in the Methodology Application and Review Procedure.
9. Only methodologies that comply with the Standard and the Guide and have been approved by the Secretariat may be used for a Reef Credit Project.

4.2 Applicability conditions

The Methodology must describe the conditions under which the Methodology can (and cannot) be applied.

4.3 Additionality

The Methodology shall establish procedures for the demonstration and assessment of Additionality based upon the general requirements set out below.

1. Methodologies shall use a Performance Benchmark or activity level standard to determine Additionality. Methodologies developed under the Reef Credit Scheme shall meet these requirements by doing one of the following:
 - a. Referencing and requiring the use of an appropriate Additionality Tool that has been approved under the Reef Credit Scheme; or
 - b. Develop a full and detailed procedure for demonstrating and assessing Additionality directly within the Methodology; or
 - c. Using a separate tool, which shall be approved via the Methodology Application and Review Procedure.
2. Methodologies may adopt any of the following approaches to the assessment of Additionality:
 - a. Implementation barriers (investment barrier, technology barrier or institutional barriers)
 - b. Common Practice; or
 - c. Performance Benchmark.

4.4 Project Area

1. The Methodology will establish criteria and procedures to describe the Project Area and duration and identify and assess Pollutant reductions relevant to the Project Baseline Scenario and Project scenarios.
2. The Project Area must be described and identified using geospatial mapping, and water quality improvements within the Project Area shall be calculated in accordance with the Methodology.

4.5 Baseline Scenario

1. The Baseline Scenario for the Project must be determined in accordance with the requirements set out in the Methodology applied to the Project, and the choice of Baseline Scenario must be reasonable.
2. Methodologies shall establish criteria and procedures to identify Baseline Scenarios and determine the most plausible scenario, taking into account the following:
 - a. The identified Pollutant sources, sinks and reservoirs;
 - b. Data availability, reliability and limitations;
 - c. Existing and alternative Project types, activities, land use practices and technologies providing equivalent type and level of activity of products or services to the Project;
 - d. Other relevant information concerning present or future conditions, such as legislative, technical, economic, socio-cultural, environmental, geographic, site specific and temporal assumptions or projections.

4.6 Quantification of Pollutant reductions

1. The Methodology shall establish criteria and procedures to quantify Pollutant loads separately for the Project scenario and Baseline Scenario.
2. The Methodology will provide a procedure to quantify the Pollutant reduction by determining the net change in Pollutant loads through deduction of the Baseline Scenario from the Project scenario.
3. For the purposes of 4.6.1 the Methodology must identify all sources and sinks of the relevant Pollutant source within the Project Area and must either:

- a. Provide a mechanism for quantifying changes within each source or sink; or
- b. If a source or sink is excluded from the procedures for quantification provide explanation as to why it is conservative to do so.

4.7 Project Leakage

The Methodology must include procedures to identify the risk of Project Leakage and provide a method for accounting in the calculation of Reef Credits the deduction as a result of project Leakage within the Great Barrier Reef catchment area.

4.8 Approval of new methodologies

1. Any Project Proponent, Stakeholder, or Person may develop and submit a new Methodology to the Secretariat and must follow the procedures set out in the Methodology Application and Review Procedure.
2. Methodologies must be written in accordance with the Methodology Template for any activity that will lead to Pollutant reduction that is not on the Negative List (Schedule 2).
3. Methodology applications may be rejected by the Secretariat at its discretion if the Methodology is not considered to be consistent with the Guide and Reef Credit Principles.
4. New methodologies will be subjected to scientific peer review followed by a thirty (30) day public consultation process.
5. Peer reviewers will be appointed by the Secretariat to ensure methodologies are theoretically rigorous, scientifically robust and practically workable. At the end of the public consultation process, the Methodology Developer will need to respond to the peer review and public consultation comments before making a final application to the Secretariat for Methodology approval.
6. The Secretariat can utilise the Technical Advisory Committee to provide specialist input to this process.
7. Methodologies that successfully complete this process will be made available to all prospective Project Proponents on the Eco-Markets Australia website.

4.9 Revising Reef Credit methodologies

1. Reef Credit methodologies may be periodically reviewed or revised as follows:
 - a. Minor errors or corrections may be made at the discretion of the Secretariat.
 - b. Minor revisions, which shall be subject to review by the Secretariat and a 30-day public consultation period.
 - c. Major revisions, which shall follow the same review and approval process described for new methodologies.
2. The Secretariat must be consulted on the scope of any proposed revisions and will determine if a revision constitutes a minor error or correction, a minor revision, or a major revision.
3. Revisions to approved Reef Credit methodologies may be initiated by a Methodology Developer, the Secretariat or a third-party.
4. Responsibility for bearing the costs of revisions are as follows:
 - a. when initiated by a Methodology Developer, costs will be met by the Methodology Developer;
 - b. when initiated by the Secretariat, costs will be met by the Secretariat;
 - c. when initiated by a third-party, costs will be met by the third-party, except where the Secretariat at its discretion determines otherwise on a case-by-case basis.

5. A Project Proponent may elect to use an older version of an approved Methodology if they submit a Project for Validation within 90 days of an updated version of the Methodology being approved.

5. Registry

5.1 General

1. The Registry is administered by the Secretariat.
2. The Secretariat is responsible for:
 - a. Registration of Reef Credit Projects;
 - b. Reef Credit issuance, including ensuring Reef Credits issued are in accordance with the Standard;
 - c. Holding, transferring and retiring Reef Credits;
 - d. Recording transaction prices and periodically making summary information available to the public to support market transparency;
 - e. Maintaining records of Reef Credit legal ownership.

5.2 Registry operation

1. Project Proponents must apply to open a Registry Account with the Registry.
2. Any other Person may open a Registry Account if they meet the following requirements:
 - a. Be an Australian resident or body corporate;
 - b. Comply with any applicable legislation, regulation, codes of conduct or best practice guidance issued by the Secretariat; and
 - c. Pass the fit and proper person test.
3. Reef Credit Project information is available on the Registry located on the Eco-Markets Australia website subject to commercial-in-confidence considerations.
4. Further details on the operation and procedures related to the Registry are found in the Project Application and Crediting Procedure.

6. Requirements for approved Verifiers

6.1 General approval requirements

Verifiers must be approved by the Secretariat before they are eligible to conduct Verification activities.

1. To become an approved Verifier, the Verifier must meet the requirements set out in this section and apply to the Secretariat by completing the Verifier Application Form (Attachment 1 of the Reef Credit Verifier Application Procedure).
2. Verifiers must be approved by the Secretariat.
3. Verifiers must work in a credible, independent, non-discriminatory, and transparent manner, complying with applicable laws.
4. Accredited Team Leaders and any nominated subject matter experts of approved Verifiers must not provide Verification services to a Project Proponent for more than five (5) consecutive Monitoring Periods for a project.
5. Approval as a Verifier is valid for ten (10) years after which the Verifier must reapply to the Secretariat for approval.

6. If a Verifier violates any of these conditions, the Secretariat, at its discretion, may disqualify and remove a Verifier from the list of approved Verifiers for a period of up to five (5) years.
7. All Verification costs shall be borne by the Project Proponent.
8. Verifiers must have experience and qualifications commensurate with the technical, integrity, independence and operational requirements of Australian environmental markets.
9. In assessing whether a Verifier has sufficient experience the Secretariat will have regard to: whether they can demonstrate they have five (5) years experience in auditing and preparing audit reports; audit team leadership in existing or previous environmental market mechanisms in carbon, biodiversity or water quality including UNFCCC CDM, VCS, CCB, NGER audits, CFI/ERF audits, NSW GGAS or equivalent mechanisms regulated by state, territory and federal departments; and/or whether the applicant is accredited by the Clean Energy Regulator as a Category 2 (Team Leader) Greenhouse and Energy Auditor.

7. Non-compliance

7.1 General

1. A Project Proponent must report any actual or anticipated Non-compliance with a requirement under the Standard within thirty (30) days of detection.
2. Any Person or Stakeholder may report actual or anticipated Non-compliance through the Stakeholder Grievance Procedure.
3. The Secretariat and Technical Advisory Committee will investigate any reported or suspected Non-compliance.
4. If the Secretariat determines the Non-compliance is of a serious nature, the Secretariat may suspend the Project Proponent's account on the Registry while the issue is investigated.
5. If the Secretariat determines a Project or Project Proponent is in Non-compliance and the Non-compliance is not remedied or capable of being remedied within a reasonable period of time, the Secretariat may, in its discretion cancel the Project.

Schedule 1 – Conversion Factors

Pollutant	Target	Load reduction by 2025 (t/kt) per year	Conversion Factor (t)
Dissolved inorganic nitrogen (DIN)	60%	3,594 t	1
Fine Sediment (TSS)	25%	1,935 kt	538
Particulate nitrogen (PN)	20%	3,351 t	Not currently available
Particulate phosphorous (PP)	22%	1,646 t	Not currently available
Pesticide	Not a load-based target	Not a load-based target	Not currently available

Calculated load reductions required to meet the proposed end-of-catchment load reductions by 2025. Calculated from the 2012-2013 anthropogenic baseline Report Card 2015 Source Catchment model outputs. Reductions are expressed as anthropogenic load reductions ².

The conversion factor is calculated by dividing the non-DIN pollutant load reduction (e.g. 1,935,000 t of total suspended sediment or TSS) by the DIN load reduction (3,594 t) = 538 t. The DIN amount or concentration is used as the base unit of measure or reference to create proportional equivalence or relative value (rather than functional equivalence) between pollutants in relation to the targets.

² Brodie, J., Baird, M., Waterhouse, J., Mongin, M., Skerratt, J., Robillot, C., Smith, R., Mann, R., Warne, M., 2017. Development of basin-specific ecologically relevant water quality targets for the Great Barrier Reef. TropWATER Report No. 17/38, James Cook University, Published by the State of Queensland, Brisbane, Australia. 68 pp

Schedule 2 – Positive List and Negative List

Positive List (eligible activities)

- Gully restoration
- Wetland establishment and rehabilitation
- Fertiliser management
- Grazing land management
- Wastewater bioremediation
- Streambank and riparian zone restoration
- Irrigation management
- Urban stormwater management
- Nitrogen use efficiency management.

Negative List (ineligible activities)

Without limitation, the Reef Credit Scheme excludes Projects that:

- Involve planting native [or potentially invasive non-native] species that are not endemic to the bioregion (according to the Queensland flora census), unless it can be demonstrated that they are already widely accepted in the surrounding geographic area; or
- Degrade the condition of native ecosystems; or
- Generate pollution (including but not limited to Pollutants) at any time to provide an inflated baseline for their subsequent removal; or
- Pose significant risk to native flora, native fauna or native regional ecosystems.

Schedule 3 – Risk of Reversal Assessment Tool

Assessment Question	Possible Answer	Response
1. Is the eligible Project the subject of a Permanence Period?	Yes/No	If no, questions 2-5 do not apply. Risk of Reversal Buffer is 0%.
2. Is it <u>possible</u> that a Reversal of Pollutant reduction would occur as a result of a change in management activities?	Yes/No	If yes, determine the probability, Low/Medium or High , in accordance with relevant Methodology. If no, Risk of Reversal Buffer is 0%.
3. It is <u>likely</u> that a Reversal of Pollutant reduction would occur as a result of a change in management activities?	Low/Medium or High	See Risk of Reversal Buffer % Deduction Table
4. Is it <u>possible</u> that a Reversal of Pollutant reduction could occur as a result of natural disturbance events?	Yes/No	If yes, determine the probability, Low/Medium or High , in accordance with relevant Methodology. If no, Risk of Reversal Buffer is 0%.
5. Is it <u>likely</u> that a Reversal of Pollutant reduction could occur as a result of natural disturbance events?	Low/Medium or High	See Risk of Reversal Buffer % Deduction Table

Risk of Reversal Buffer % Deduction

Risk Rating	Risk of Reversal Buffer % Deduction
Low Risk of Reversal	0%
Medium Risk of Reversal	5%
High Risk of Reversal	10%